



The Geography of Incarceration in a Gateway City

The Cost and Consequences of High Incarceration Rate Neighborhoods in Worcester

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Why Gateway City Awareness is Vital

The term “Gateway Cities” originated from a 2007 MassINC report describing the imperative to support more geographically balanced economic growth by encouraging reinvestment in urban centers outside of Greater Boston. This set of 11 cities is critical to economic mobility and regional economic development in regions all across the state. For decades, they have struggled to make the change to a new industrial era. In order to build a strong middle class and sustain steady growth across the state, we must pay attention to the health of these communities. From education and housing to transportation and economic development, MassINC research has pointed out a myriad of ways in which state policies are not attuned to their needs. As this research brief demonstrates, criminal justice policy is yet another example. To the extent that relatively low and declining crime rates statewide invite complacency, Gateway Cities will disproportionately shoulder the burden.

I. Introduction

MassINC has written extensively about how concurrent waves of manufacturing decline and suburbanization combined to undermine the strength of the Commonwealth's regional economic centers. But for years our research and writing overlooked the impact of a third adverse trend that gained strength around the same time: "tough-on-crime" criminal justice policies (see sidebar p. 4 for background). A growing body of evidence suggests these policies have been costly for taxpayers, counterproductive for public safety, and an unnecessary drag on the Gateway Cities, which Massachusetts has relied on for generations to provide upward economic mobility for residents.

Recent research from the Federal Reserve Bank of Boston shows tough-on-crime policies have made involvement with the criminal justice system so extensive that it is likely harmful to labor productivity throughout New England. However, this burden is not evenly distributed geographically.¹ Cities have been so disproportionately impacted by these laws that some scholars have described the unintended effect as the "criminalization of urban space."²

In the late 1990s, social scientists began to fear that the rise of imprisonment in high-poverty urban neighborhoods would lead to more crime rather than less. Drawing from decades of sociological research, they had a long list of reasons for why incarceration at high levels could become problematic: when many people experience it, prison becomes normalized and less of a deterrent; low-income households with a breadwinner in prison have difficulty supporting children at home, while also spending money and time assisting their incarcerated family member (the combination of a missing parent and family hardship becomes a recipe for juvenile delinquency); and the movement of people in and out of prison increases transiency in a neighborhood, making it more difficult for residents to get to know and trust one another so that they can lend each other support and work together to address neighborhood problems.³

Researchers have found substantial evidence to support these theories. Recent studies show many urban neighborhoods in the U.S. have reached a tipping point, where incarceration is hindering more than it is helping.⁴ The largest, most rigorous of these studies, commissioned by the National Institute of Justice, examined data from Boston and found that high rates of incarceration were leading to additional crime in the city's most disadvantaged neighborhoods.⁵

Last fall, MassINC and the Boston Indicators Project mapped incarceration in these neighborhoods, revealing visually the impact of incarceration in these communities in a way that this obscure academic research could not.⁶ The report gave leaders in Boston a useful tool for thinking about criminal justice policy and the allocation of public-safety resources to correctional facilities. But it also raised questions about what effect tough-on-crime policies are having on other urban communities in Massachusetts.

This paper examines incarceration in Worcester to better understand the geography of incarceration in a Gateway City context. For an older industrial city, Worcester is especially healthy. The city stands apart from its peers on measures of social and economic well-being, and its neighborhoods are relatively free from the scourge of urban street violence. Despite these best-case conditions, as the data presented below demonstrate, several Worcester neighborhoods are marked by high rates of incarceration.

Policymakers in Massachusetts are currently engaged in an unprecedented effort to find strategies to operate our criminal justice system in a more cost-effective manner, and redirect the savings toward models that decrease crime. Using Worcester as an example, the pages that follow explore the cost and consequences of high incarceration rates on Gateway City neighborhoods, giving leaders vital information to consider, as efforts to craft smart, comprehensive criminal justice reform legislation gain momentum on Beacon Hill.

II. The Geography of Incarceration in Worcester

Upon request, the Worcester County Sheriff's Department provided information on all of the individuals admitted to their correctional facilities between 2009 and 2013. The dataset included 6,680 admissions to the county jail and 2,726 admissions to the Worcester County House of Correction (HOC) over this five-year period (see sidebar: p. 7). In order to understand how incarceration impacts communities in the city, we mapped the address of the residences where these individuals returned to upon their release.

In 2013, there were 1,428 admissions to the county jail and

607 to the House of Correction that led to returns to Worcester neighborhoods.⁹ Those returning from the HOC served an average sentence of 213 days, while those exiting the jail returned after an average of 54 days.

Releases from these admissions are plotted in Map 1. Each blue dot is an HOC release and each red dot is a release from the jail. Returns from these admissions were highly concentrated in the city's central neighborhoods along I-290 to both the east and west. Map 2 plots these returns over the racial/

From Tough on Crime to Justice Reinvestment

Up until the 1980s, prisons in Massachusetts held a small number of offenders, and corrections officials were intensely focused on rehabilitating the few inmates in their custody. As crime rates rose, however, the state quietly began to change course, enacting several mandatory minimum sentencing statutes. When the infamous case of Willie Horton, a convicted felon who committed multiple crimes on a weekend furlough program, became a defining issue in Governor Michael Dukakis's 1988 presidential campaign, the environment changed radically.

Responding to a public that had already been alarmed by the growing crack epidemic, politicians reacted swiftly with increasingly tough sentencing policies. The Legislature quickly passed new mandatory minimum drug laws and a school zone statute, which led to penalty enhancement zones that effectively doubled sentences for those convicted of drug offenses within the vicinity of schools, parks, and playgrounds. The landmark Federal Crime Bill signed by President Bill Clinton in 1994 provided states with monetary incentives to

adopt reforms that led to longer periods of incarceration, and reduced the incentives for prisoners to participate in rehabilitative programming. Massachusetts was quick to comply, passing a "Truth in Sentencing" law.

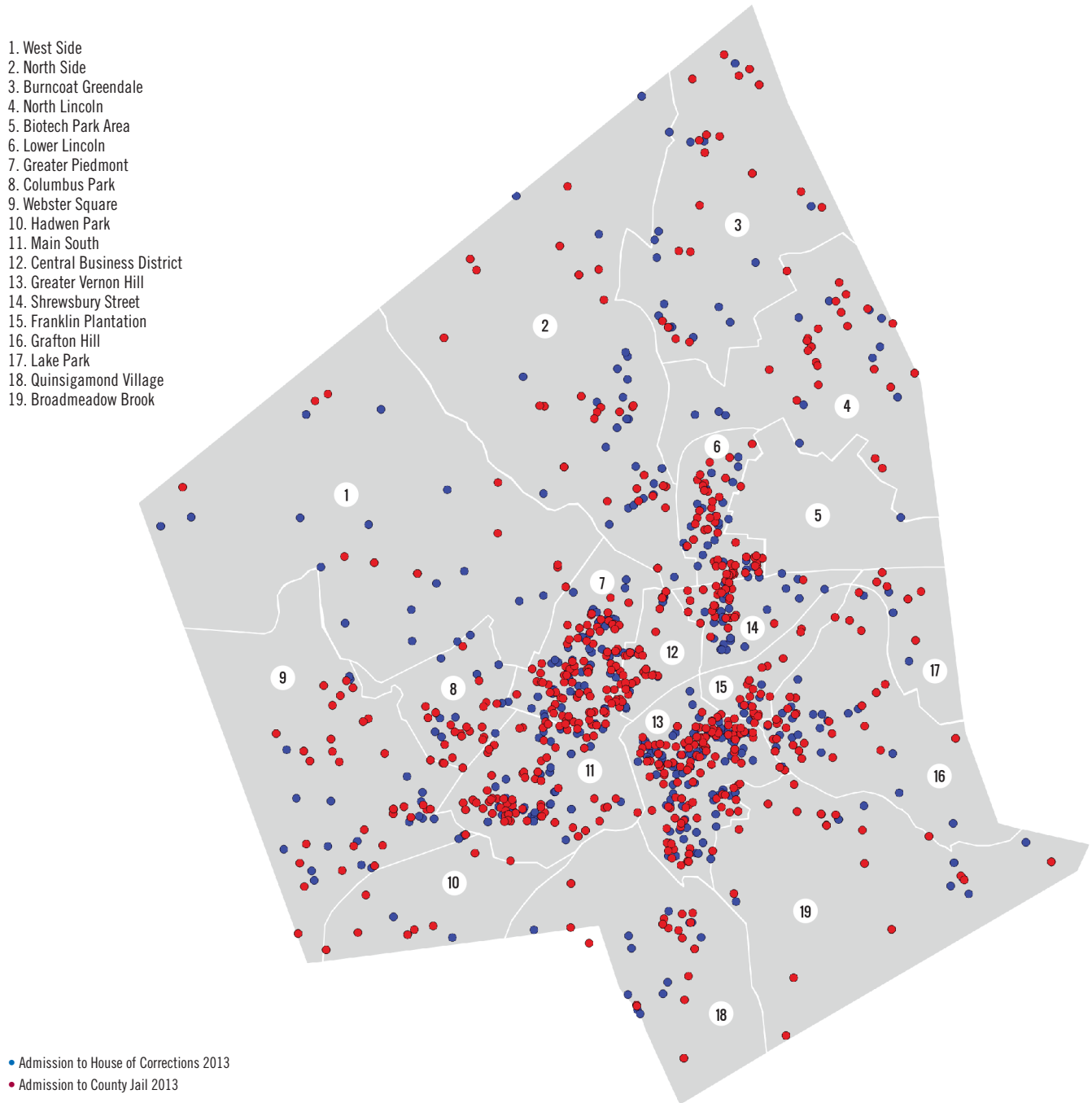
As prisons and jails filled in Massachusetts and leaders began to see how these changes were leading to individuals cycling in and out of prison, many began to call for a new approach. The Romney Administration formed two commissions that made thoughtful recommendations for systemic reform. In 2011, the Legislature assembled the Special Commission to Study the Criminal Justice System, which reached many similar conclusions.

While the state has yet to adopt these comprehensive changes, there has been a pronounced movement away from the criminalization of individuals with substance use disorders. Legislative change eliminated incarceration for hypodermic needle possession in 2006. In 2009, voters decriminalized marijuana possession. In 2012, the Legislature reduced the size of the school zone for

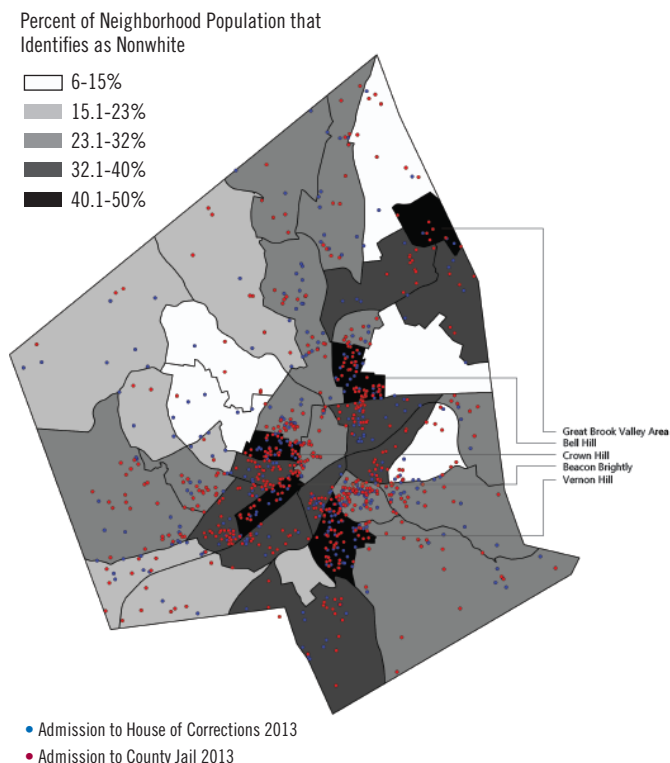
drug distribution offenses, increased the amount of drugs an individual must possess or distribute in order to incur some mandatory-minimum penalties, shortened some minimum sentences, and increased eligibility for parole and earned good time for some offenses.⁷

Last year, Massachusetts became the twenty-fifth state to join the federally-funded Justice Reinvestment Initiative (JRI). Through JRI, public sector leaders across all branches of state government have reviewed the effectiveness of the criminal justice system with technical assistance provided through the private nonprofit Council of State Governments (CSG). This data-driven approach aims to improve public safety by managing individuals in the criminal justice system in a more cost-effective manner, and redirecting the savings toward strategies that hold offenders accountable, decrease crime, and strengthen neighborhoods. The CSG presented recommendations for Massachusetts in February.⁸ The Legislature is currently considering a bill (H.74) filed by Governor Baker to implement these reform proposals.

Map 1: Returns from the Worcester County Jail and House of Correction, 2013 Admissions



Map 2: Returns from the Worcester County Jail and House of Correction by Neighborhood Race/Ethnicity, 2013 Admissions

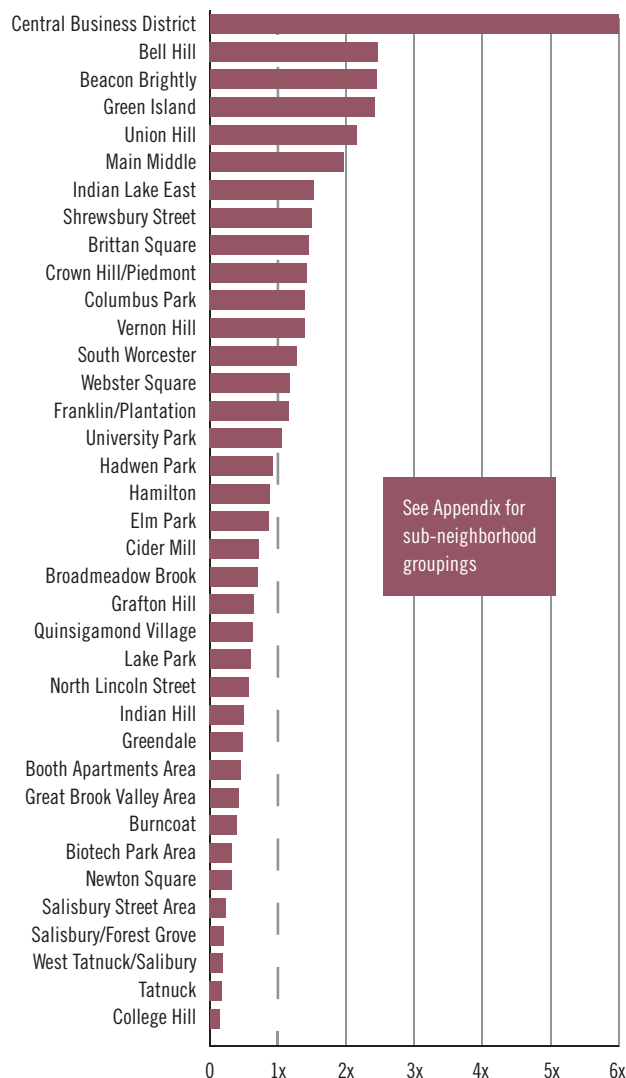


ethnic makeup of each neighborhood to reveal generally higher concentrations of incarceration in communities where a larger percentage of residents are nonwhite.

Figure 1 translates the cluster on this map into a simple of measure of concentration—each neighborhood's share of returns from 2013 admissions relative to its share of Worcester residents. (These ratios are tabulated for the 38 neighborhoods delineated by the City of Worcester. In many instances, these areas are actually smaller sub-neighborhoods within larger more commonly understood neighborhoods.) Neighborhoods with elevated rates extended above the dotted line, which represents the level at which a neighborhood's share of returns equals its share of the population.

The Central Business District stands out most sharply with nearly 8 percent of returns and just over 1 percent of the city's

Figure 1: Neighborhood Share of 2013 Admissions relative to Neighborhood Share of Worcester Residents



population, incarceration is six times more concentrated here than in the community overall. This may be largely a function of downtown shelters. The People in Peril (PIP) shelter, which is no longer operating, received one-quarter of downtown releases from the jail and more than half of all releases to downtown from the House of Correction.

Main South's Beacon Brightly area, the Main Middle section of Greater Piedmont, Lower Lincoln's Bell Hill, and Greater Vernon Hill (Green Island and Union Hill) also stand out

Figure 2: Worcester County House of Correction commitment rate, male residents age 25 to 29, 2009-2015



with disproportionately high shares of returns from 2013 admissions.

Maps 3A and B zoom in on two of these high incarceration rate neighborhoods, providing a better visual perspective of the extent to which they have been affected by the movement of residents in and out of correctional facilities. In Bell Hill and Union Hill, virtually every block has been impacted, and on many streets more than several residents were incarcerated during the course of just one year.

The prevalence of incarceration appears even more intense when viewed over a longer time period. Maps 4A and B show neighborhood detail for releases from the House of Correction for all admissions between 2009 and 2013. While these incarcerations occur over a longer time span, in a way they represent a heavier toll on the neighborhoods compared to the previous map set, because these clusters are entirely comprised of HOC releases, which means each individual faces the challenge of reentry after a longer stay (over 7 months on average), as well as the stigma of a criminal conviction leading to a prison sentence.

Research shows that fathers with young children are particularly likely to be confined to correctional facilities in neighborhoods with high incarceration rates.¹⁰ This problem is less severe in Worcester than in Boston. But in Green Island, Main Middle, and Shrewsbury Street, the incidence of incarceration for this cohort (Figure 2) is still exceptionally high, with about one out of every ten men age 25 to 29 having served an HOC sentence over this five-year period.¹¹

The Structure of Jails and Prisons in Massachusetts and Data Coverage

In Massachusetts, individuals sentenced to up to 30 months in prison serve their time in Houses of Correction, which are administered by county sheriffs. County sheriffs also operate jails, which house nearly all defendants detained while awaiting trial. While most defendants are released pending trial, some individuals are held in jail due to concerns about the danger they pose, their likelihood of appearing for trial, or their inability to make cash bail.

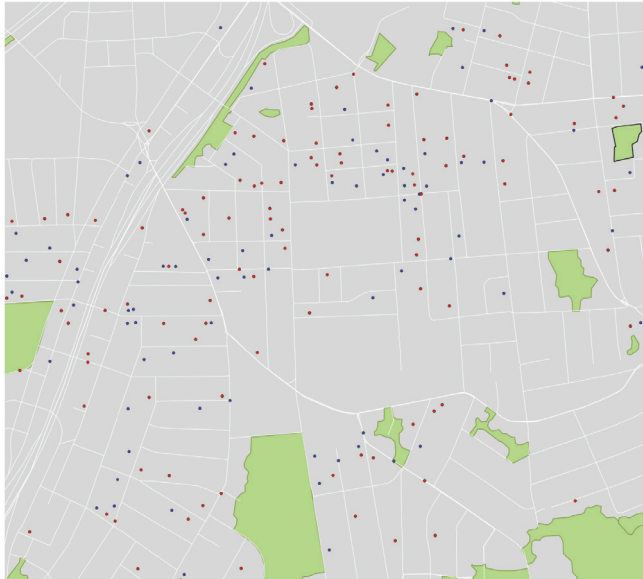
The dual function of county sheriffs—housing both pretrial defendants and those sentenced to a House of Correction for under 30 months—means that corrections is much more of a local undertaking. Throughout the country, individuals serving 12 months or more are generally sent to state prisons farther from their community.

As a matter of practice, the proximity of these facilities to community has many advantages, but in the context of high incarceration rate neighborhoods, it may reinforce the normalization of incarceration as a regular component of life.

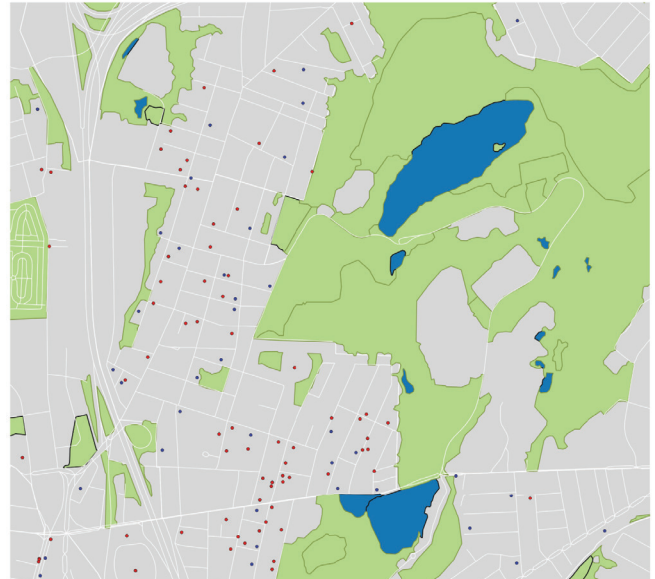
From a data perspective, having data from the Worcester County Sheriff allows us to capture much of the incarceration from occurring, but not all. These maps do not include individuals from Worcester incarcerated in other counties and in state or federal correctional facilities. The data also exclude all incarcerated women.

Maps 3A & B: Returns from the Worcester County Jail and House of Correction, 2013 Admissions

A. Greater Vernon Hill



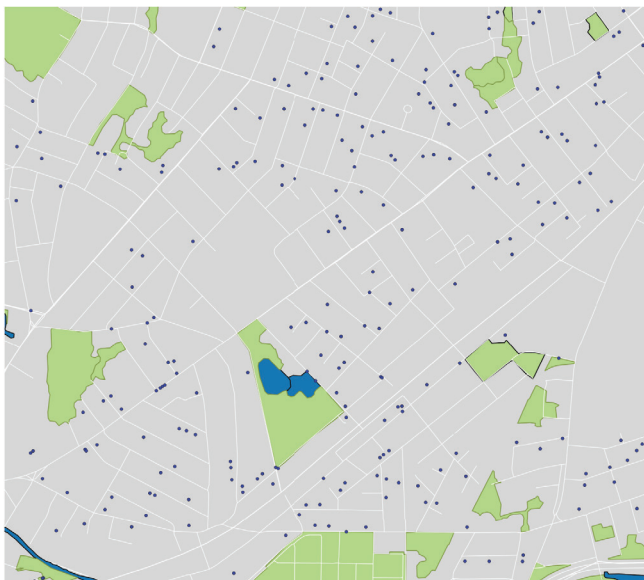
B. Lower Lincoln



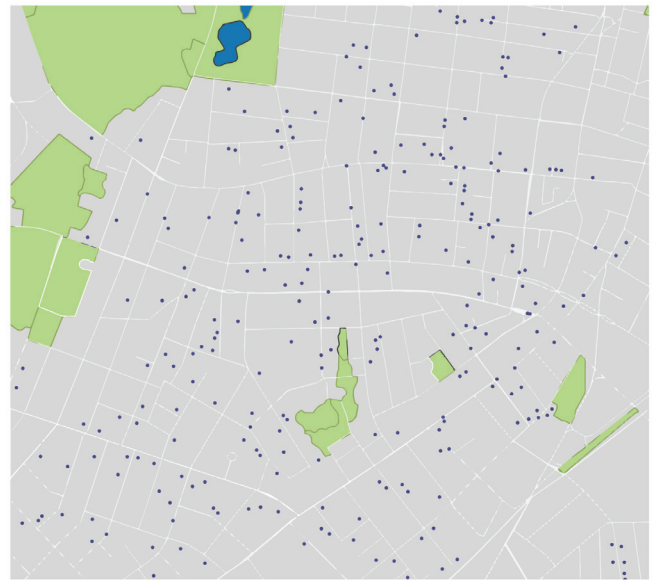
- Admission to House of Corrections 2013
- Admission to County Jail 2013

Maps 4A & B: Returns from the Worcester County House of Correction, 2009 – 2013 Admissions

A. Main South



B. Greater Piedmont



- Admission to House of Corrections 2009-2013

III. The Cost of Incarceration in Worcester

The residents of Worcester neighborhoods who entered the Worcester County House of Correction and the County Jail in 2013 consumed roughly 200,000 bed days between the time they were admitted and the time of their release. At an average cost of \$120 per day, this amounts to nearly \$24 million for admissions over the period of a single year. On average, each HOC admission cost \$25,560 and each jail detention \$6,480.

Examining these costs relative to other investments in Worcester—many of which could prevent costly incarcerations—helps put these figures in perspective for leaders evaluating criminal justice reform proposals with the potential to reduce high rates of incarceration in Gateway City neighborhoods across Massachusetts:

- The cost of incarcerating residents is more than \$1 million annually for 8 Worcester neighborhoods (Beacon Brightly, Bell Hill, the Central Business District, Main Middle, Shrewsbury Street, Union Hill, University Park, and Vernon Hill). In Main Middle, the outlay for incarceration equates to more than \$7 million per square mile; in Beacon Brightly, it approaches \$5 million per square mile (Figure 3).
- The cost of incarcerating residents from Main Middle (\$1.7 million) was higher than the city's entire economic development budget (\$1.6 million) for FY 2013.
- Twice as much was spent incarcerating residents of Union Hill (\$1.9 million) than Worcester currently receives for violence prevention citywide, through the state's two primary grant programs (the Shannon Grant, \$494,824; and the Safe and Successful Youth Initiative, \$600,000).
- The cost of incarcerating residents from University Park (\$1.4 million) was more than four times higher than the city's budget for public health (\$334,132) in FY 2013.
- The \$24 million total is nearly twice the state's FY 2013 budget for Quinsigamond Community college.

Figure 3: Cost per square mile, 2013

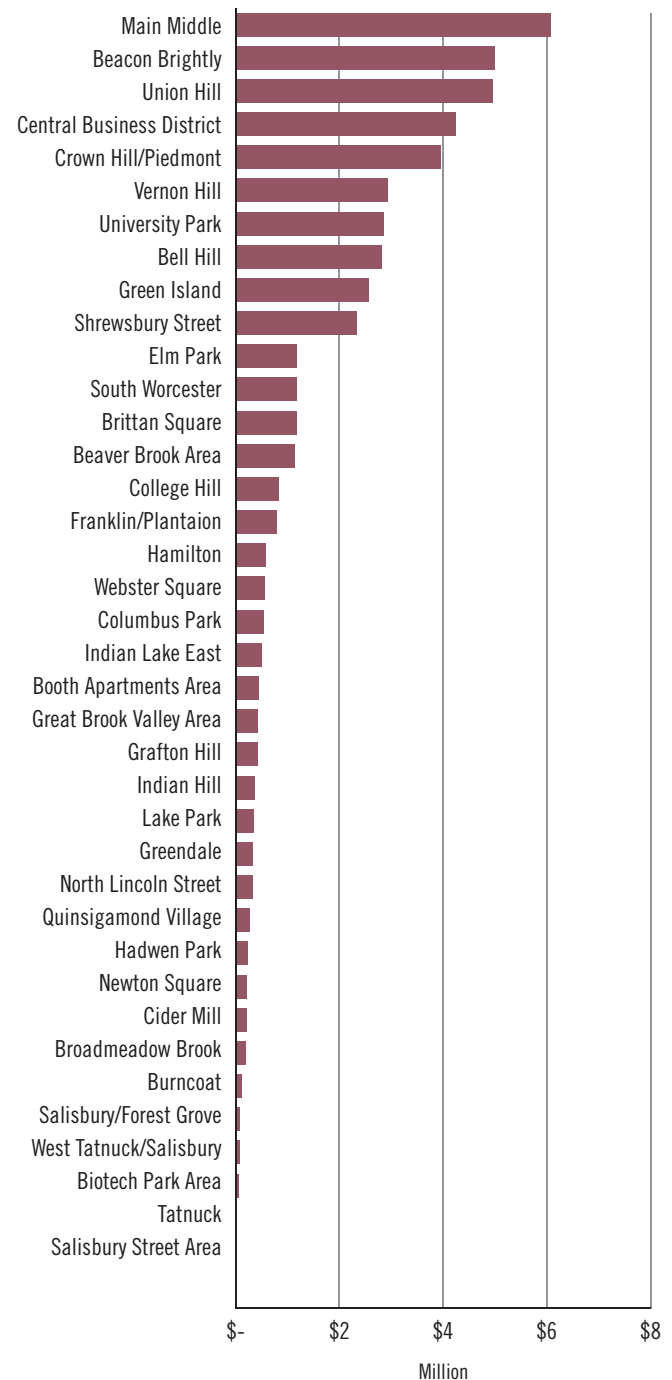


Figure 4: Relationship between voter turnout and neighborhood incarceration

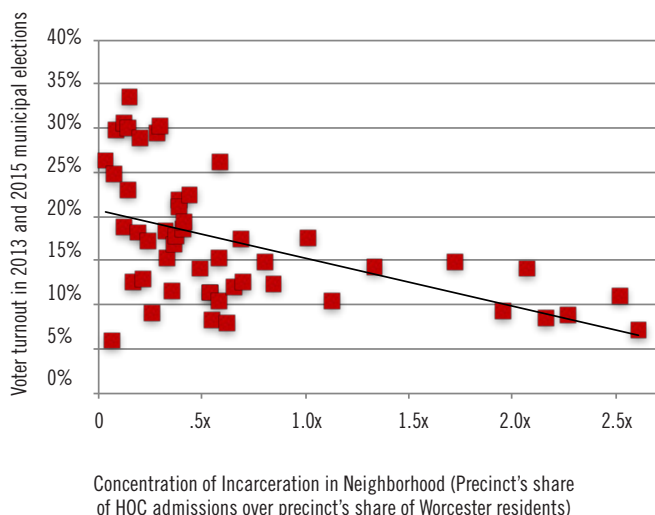
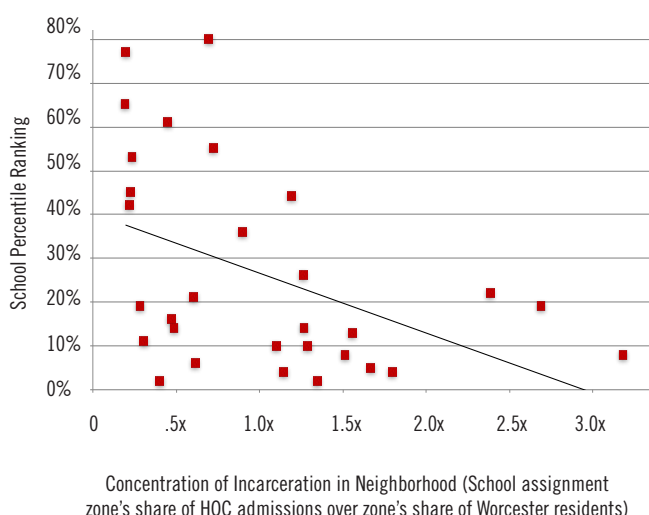


Figure 5: Relationship between school performance and neighborhood incarceration



IV. High Incarceration Rate Neighborhoods and Community and Economic Development

Beyond creating an environment that fosters additional crime (as previously described), there are a variety of other ways that high incarceration rates can be harmful to community and economic development in Gateway Cities. The implications of high neighborhood incarceration rates for civic participation and school quality deserve particular attention.

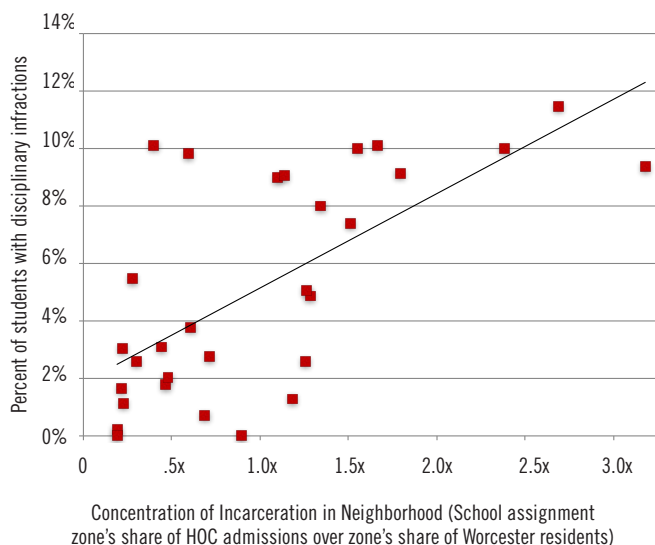
High Incarceration Rate Neighborhoods and Civic Participation

Figure 4 shows the relationship between voter turnout and neighborhood incarceration. Each dot in the scatterplot represents one of Worcester's 50 voting precincts. Those with the lowest share of admissions to the Worcester County House of Correction tend to have the highest rates of voter turnout in the 2013 and 2015 municipal election; conversely, turnout was far lower in precincts with the highest share of HOC incarcerations.

While this simple correlation does not establish a causal relationship, there is a large body of research that suggests residents in high incarceration rate neighborhoods disengage from the political system. Social scientists have found that incarceration can damage perceptions of fairness and the legitimacy of government. At the same time, incarceration may cause individuals to undervalue their own self-worth and expectations about the positive contribution that they can offer the community through civic participation. A large body of research also shows civic engagement is largely transmitted to children by their parents. So when formerly incarcerated individuals do not vote or otherwise engage in civic life, there are lasting generational consequences.¹²

This is especially problematic for Gateway Cities, which have very modest resources for community and economic development and therefore depend largely on residents to engage in local improvement efforts. From neighborhood revitalization to school reform, success tackling stubborn challenges in these cities is closely tied to resident participation.¹³

Figure 6: Relationship between school discipline and neighborhood incarceration



High Incarceration Rate Neighborhoods and School Quality

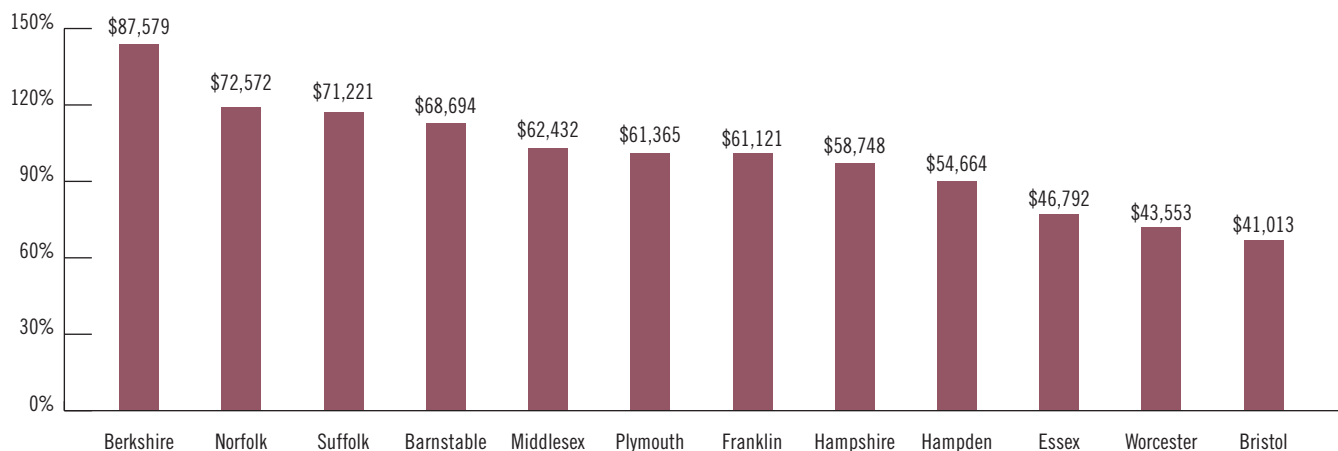
These data also allow us to explore the relationship between neighborhood incarceration and schooling. Figure 5 plots each school's percentile ranking under the state accountability formula relative to the concentration of HOC commitments within each school's assignment zone (this analysis is limited to the 30 elementary schools with neighborhood-like assignment boundaries). These data show a strong correlation between incarceration and school performance. While performance varies considerably across the city's low incarceration rate school assignment zones, there are no high-performing schools in high incarceration rate areas.

While this field of research is still limited, there is a growing body of evidence establishing a causal relationship between high rates of incarceration and school performance. Controlling for other neighborhood and family characteristics, studies show that high levels of incarceration are harmful to

a school community.¹⁴ Students with incarcerated parents are most impacted. They may need to take on childcare responsibilities for siblings or find work to replace a lost parent's income. The incarceration of a family member also produces trauma from the separation, stigma, family instability and strained parenting, increasing the risk that children will have behavioral difficulties. These impacts reverberate in a school community with high rates of incarceration, negatively affecting the educational achievement classmates.¹⁵

Consistent with the research, which finds children with incarcerated parents are particularly at-risk for behavioral difficulty, there are even stronger correlations between school disciplinary problems and high-incarceration rates in Worcester's elementary schools (Figure 6).¹⁶

Figure 7: Total expenditure per inmate, FY 2016



Sources: MassINC's analysis of Massachusetts Office of the Comptroller data request and Department of Correction Weekly Count Sheets

V. Making Justice Reinvestment a Priority on the Urban Agenda

For decades, Massachusetts has crafted criminal justice policy based on sensational crime and news headlines. This analysis is yet another indication that more effort is needed to take a holistic view and build policy according to data and rigorous analysis. Getting smart on criminal justice is critical to Gateway Cities like Worcester. From education reform to economic development, a corrections system that breeds recidivism and additional crime and victimization will undermine all of the creative work that leaders in our urban communities are painstakingly undertaking to bring about growth and renewal. Toward this end, we repeat here the recommendations offered in the Boston report, and urge Gateway City leaders to coordinate with leaders in Boston working to make Justice Reinvestment a priority on the urban agenda.

1. Replace mandatory minimums with evidence-based approaches to sentencing that allow courts to tailor justice to the needs of the community. There is widespread consensus that mandatory minimum sentences have been a costly mistake. The most prominent example are the findings from a blue ribbon group of experts convened by the National Academy of Sciences at the request of the US Department of Justice. In 2014, this group called on state legislatures to revisit the use of mandatory minimum sentences, pointing specifically to a mountain of evidence indicating that this practice

has imposed large social, financial, and human costs.¹⁷

MassINC's 2014 poll found strong support for eliminating mandatory minimum sentences among Gateway City residents. Fewer than one in 10 residents in these urban communities favored the continued use of mandatory minimum sentences. In fact, Gateway City residents were much more likely to opt for full judicial discretion sentence on a case-by-case basis versus having judges adhere to mandatory minimums or use sentencing guidelines.¹⁸

2. Redesign Houses of Correction so that they excel at providing services that address criminogenic risks and needs. Like all correctional agencies in Massachusetts, the Worcester County Sheriff's department has very limited funding for behavioral health treatment, education, job training, and reentry services. The vast majority of the agency's resources are devoted to securely housing inmates. This problem is particularly acute in Worcester because the agency's budget allocation is significantly lower on a per-inmate basis (Figure 7). As noted in MassINC's recent study, declining inmate populations create an opening to significantly overhaul correctional budgets so that agencies have the resources required to provide services that lead to cost-effective reductions in recidivism.¹⁹

3. Focus jail diversion and pretrial services on high incarceration rate communities. Greater use of jail diversion must be front and center in any strategy to reduce incarceration in high incarceration rate communities. Traditionally this practice is reserved for first-time juvenile defendants charged with nonviolent offenses. Experts have called for expanding jail diversion options to adults and those with more serious charges. To the extent that Massachusetts places attention on building diversion programs as an alternative to incarceration, this work should focus first on high incarceration rate communities.

Many Gateway Cities have underutilized Community Correction centers that are well-positioned to undertake this work. There have been various proposals to allow the Probation Department to provide pretrial services through these centers, which offer a range of rehabilitative services and have capacity to serve many more clients. Defendants sent to these centers could be connected to services and observed in the community pending trial. For those who respond well, disposition to their cases could be found that do not involve incarceration and a criminal record. Such a model could prove particularly effective for residents suffering from addiction.

4. Develop complementary community-based strategies. Criminal justice reform is central to reducing high incarceration rates and improving outcomes for individuals returning to Gateway City neighborhoods after serving time in prison. However, addressing the lasting effects of tough-on-crime-era policies on these communities will also require complementary community-based strategies.

Colorado offers an example of how resources can be reinvested directly in community-based organizations. In 2015, the state created a \$1 million grant program for community-based organizations that provide reentry services. These resources were awarded to the Latino Coalition for Community Leadership, a national intermediary that re-grants state funds to small grassroots organizations after providing training and technical assistance. Preliminary data show parolees assigned to these organizations for reentry services have had significantly better outcomes. As a result, Colorado is expanding this approach by allocating savings from proposed parole reforms to more community-based, crime-prevention initiatives.

Our legislature is currently considering a bill that would create a similarly styled “Justice Reinvestment Fund” for high incar-

ceration rate neighborhoods in Massachusetts. Jointly filed by Boston State Senator Sonia Chang-Diaz and Worcester State Representative Mary Keefe, the legislation (S. 64/H. 1429) would create a strong sustainable mechanism for investing in community-based services in affected communities.

Appendix A: Admissions to Worcester County Jail and House of Correction, 2013

Neighborhood	Number of Admissions	Neighborhood's Share of Worcester Admissions	Neighborhood's Share of Worcester Population	Total Bed Days	Total Cost (\$120 per Bed Day)
Biotech Park Area	2	0.1%	0.3%	739	\$88,680
Burncoat/Greendale	58	2.8%	6.7%	5825	\$699,000
Burncoat	19	0.9%	2.7%	1,554	\$186,480
Greendale	39	1.9%	4.0%	4,271	\$512,520
Beaver Brook/Columbus Park	72	3.5%	3.2%	6994	\$849,780
Beaver Brook Area	8	0.4%	1.0%	2,258	\$270,960
Columbus Park	64	3.1%	2.2%	4,736	\$578,820
Broadmeadow Brook	71	3.5%	5.0%	5,916	\$709,920
Central Business District	158	7.8%	1.3%	16,871	\$2,024,520
Franklin / Plantation	45	2.2%	1.9%	2,934	\$352,080
Grafton Hill	87	4.3%	6.0%	8211	\$985,320
Grafton Hill	56	2.8%	4.3%	4,959	\$595,080
Hamilton	31	1.5%	1.7%	3,252	\$390,240
Greater Piedmont	238	11.7%	8.7%	26853	\$3,222,360
Crown Hill / Piedmont	76	3.7%	2.6%	7,785	\$934,200
Elm Park	63	3.1%	3.6%	4,831	\$579,720
Main Middle	99	4.9%	2.5%	14,237	\$1,708,440
Greater Vernon Hill	352	17.3%	9.5%	36507	\$4,380,840
Green Island	59	2.9%	1.2%	6,423	\$770,760
Union Hill	163	8.0%	3.7%	16,488	\$1,978,560
Vernon Hill	130	6.4%	4.6%	13,596	\$1,631,520
Hadwen Park	22	1.1%	1.2%	2,289	\$274,680
Lake Park	18	0.9%	1.5%	1,950	\$234,000
Lower Lincoln	168	8.2%	3.7%	11823	\$1,418,760
Bell Hill	141	6.9%	2.8%	9,330	\$1,119,600
Brittan Square	27	1.3%	0.9%	2,493	\$299,160
Main South	270	13.3%	9.5%	30414	\$3,649,680
Beacon Brightly	100	4.9%	2.0%	12,055	\$1,446,600
South Worcester	57	2.8%	2.2%	6,550	\$786,000
University Park	113	5.6%	5.3%	11,809	\$1,417,080
North Lincoln	71	3.5%	7.1%	8460	\$1,015,200
Booth Apartments Area	20	1.0%	2.2%	3,900	\$468,000
Great Brook Valley Area	17	0.8%	1.9%	1,517	\$182,040
North Lincoln Street	34	1.7%	3.0%	3,043	\$365,160
Northside	100	4.9%	9.1%	11642	\$1,397,040
Indian Hill	20	1.0%	2.0%	4,405	\$528,600
Indian Lake East	60	2.9%	1.9%	5,666	\$679,920
Salisbury / Forest Grove	20	1.0%	5.2%	1,571	\$188,520
Quinsigamond Village	50	2.5%	4.5%	4374	\$524,880
College Hill	0	0.0%	0.5%	0	\$0
Quinsigamond Village	50	2.5%	4.0%	4,374	\$524,880
Shrewsbury Street	112	5.5%	3.7%	12,383	\$1,485,960
Webster Square	95	4.7%	5.8%	7787	\$934,440
Cider Mill	67	3.3%	4.6%	4,650	\$558,000
Webster Square	28	1.4%	1.2%	3,137	\$376,440
Westside	46	2.2%	11.4%	4294	\$515,280
Newton Square	17	0.8%	3.4%	1,706	\$204,720
Salisbury Street Area	8	0.4%	2.0%	234	\$28,080
Tatnuck	6	0.3%	2.2%	267	\$32,040
West Tatnuck / Salisbury	15	0.7%	3.8%	2,087	\$250,440
Total	2035	100%	100%	206,402	\$24,768,240

Appendix B: Admissions to Worcester County Jail, 2013

Neighborhood	Number of Admissions	Neighborhood's Share of Worcester Admissions	Neighborhood's Share of Worcester Population	Total Bed Days	Total Cost (\$120 per Bed Day)
Biotech Park Area	1	0.1%	0.3%	11	\$1,334
Burncoat/Greendale	38	2.7%	6.7%	2,070	\$248,357
Burncoat	15	1.1%	2.7%	949	\$113,831
Greendale	23	1.6%	4.0%	1,121	\$134,526
Beaver Brook/Columbus Park	60	4.2%	3.2%	2,479	\$297,486
Beaver Brook Area	3	0.2%	1.0%	111	\$13,350
Columbus Park	57	4.0%	2.2%	2,368	\$284,136
Broadmeadow Brook	49	3.4%	5.0%	1,850	\$222,022
Central Business District	119	8.3%	1.3%	6,351	\$762,151
Franklin / Plantation	37	2.6%	1.9%	1,786	\$214,277
Grafton Hill	65	4.6%	6.0%	3,597	\$431,538
Grafton Hill	40	2.8%	4.3%	2,287	\$274,388
Hamilton	25	1.8%	1.7%	1,310	\$157,150
Greater Piedmont	152	10.6%	8.7%	9,926	\$1,191,075
Crown Hill / Piedmont	43	3.0%	2.6%	1,921	\$230,509
Elm Park	46	3.2%	3.6%	1,842	\$221,050
Main Middle	63	4.4%	2.5%	6,163	\$739,516
Greater Vernon Hill	229	16.0%	9.5%	12,182	\$1,461,745
Green Island	34	2.4%	1.2%	1,376	\$165,103
Union Hill	113	7.9%	3.7%	5,426	\$651,097
Vernon Hill	82	5.7%	4.6%	5,380	\$645,545
Hadwen Park	20	1.4%	1.2%	1,886	\$226,282
Lake Park	13	0.9%	1.5%	628	\$75,343
Lower Lincoln	132	9.2%	3.7%	4,804	\$582,423
Bell Hill	113	7.9%	2.8%	4,050	\$491,986
Brittan Square	19	1.3%	0.9%	754	\$90,437
Main South	188	13.2%	9.5%	13,258	\$1,590,957
Beacon Brightly	65	4.6%	2.0%	5,170	\$620,337
South Worcester	40	2.8%	2.2%	1,748	\$209,818
University Park	83	5.8%	5.3%	6,340	\$760,802
North Lincoln	52	3.6%	7.1%	2,545	\$305,300
Booth Apartments Area	12	0.8%	2.2%	689	\$82,656
Great Brook Valley Area	13	0.9%	1.9%	909	\$109,057
North Lincoln Street	27	1.9%	3.0%	947	\$113,587
Northside	63	4.5%	9.1%	2,903	\$348,406
Indian Hill	15	1.1%	2.0%	1,790	\$214,802
Indian Lake East	33	2.3%	1.9%	752	\$90,252
Salisbury / Forest Grove	15	1.1%	5.2%	361	\$43,352
Quinsigamond Village	36	2.5%	4.5%	3,179	\$381,443
College Hill	0	0.0%	0.5%	0	\$0
Quinsigamond Village	36	2.5%	4.0%	811	\$97,307
Shrewsbury Street	78	5.5%	3.7%	6,230	\$747,542
Webster Square	66	4.6%	5.8%	2,709	\$325,156
Cider Mill	50	3.5%	4.6%	1,949	\$233,908
Webster Square	16	1.1%	1.2%	760	\$91,248
Westside	23	1.6%	11.4%	902	\$108,373
Newton Square	10	0.7%	3.4%	572	\$68,677
Salisbury Street Area	6	0.4%	2.0%	158	\$19,015
Tatnuck	3	0.2%	2.2%	82	\$9,870
West Tatnuck / Salisbury	4	0.3%	3.8%	90	\$10,811
Total	1428	100%	100%	76,976	\$9,237,120

Appendix C: Admissions to Worcester House of Correction, 2013

Neighborhood	Number of Admissions	Neighborhood's Share of Worcester Admissions	Neighborhood's Share of Worcester Population	Total Bed Days	Total Cost (\$120 per Bed Day)
Biotech Park Area	1	0.2%	0.3%	728	\$87,360
Burncoat/Greendale	20	3.3%	6.7%	3,755	\$450,608
Burncoat	4	0.7%	2.7%	605	\$72,596
Greendale	16	2.6%	4.0%	3,150	\$378,012
Beaver Brook/Columbus Park	12	2.0%	3.2%	4,603	\$552,295
Beaver Brook Area	5	0.8%	1.0%	2,147	\$257,611
Columbus Park	7	1.2%	2.2%	2,456	\$294,684
Broadmeadow Brook	22	3.6%	5.0%	4,066	\$487,956
Central Business District	39	6.4%	1.3%	10,520	\$1,262,380
Franklin / Plantation	8	1.3%	1.9%	1,148	\$137,782
Grafton Hill	22	3.6%	6.0%	4,614	\$553,594
Grafton Hill	16	2.6%	4.3%	2,672	\$320,586
Hamilton	6	1.0%	1.7%	1,942	\$233,008
Greater Piedmont	86	14.1%	8.7%	16,927	\$2,031,216
Crown Hill / Piedmont	33	5.4%	2.6%	5,864	\$703,622
Elm Park	17	2.8%	3.6%	2,989	\$358,674
Main Middle	36	5.9%	2.5%	8,074	\$968,920
Greater Vernon Hill	123	20.2%	9.5%	24,325	\$2,918,890
Green Island	25	4.1%	1.2%	5,047	\$605,610
Union Hill	50	8.2%	3.7%	11,062	\$1,327,408
Vernon Hill	48	7.9%	4.6%	8,216	\$985,872
Hadwen Park	2	0.3%	1.2%	403	\$48,401
Lake Park	5	0.8%	1.5%	1,322	\$158,681
Lower Lincoln	36	5.9%	3.7%	7,019	\$842,297
Bell Hill	28	4.6%	2.8%	5,280	\$633,643
Brittan Square	8	1.3%	0.9%	1,739	\$208,654
Main South	82	13.5%	9.5%	17,156	\$2,058,703
Beacon Brightly	35	5.8%	2.0%	6,885	\$826,169
South Worcester	17	2.8%	2.2%	4,802	\$576,206
University Park	30	4.9%	5.3%	5,469	\$656,328
North Lincoln	19	3.2%	7.1%	5,915	\$709,763
Booth Apartments Area	8	1.3%	2.2%	3,211	\$385,265
Great Brook Valley Area	4	0.7%	1.9%	608	\$72,920
North Lincoln Street	7	1.2%	3.0%	2,096	\$251,578
Northside	37	6.0%	9.2%	8,739	\$1,048,780
Indian Hill	5	0.8%	2.0%	2,615	\$313,806
Indian Lake East	27	4.4%	2.0%	4,914	\$589,734
Salisbury / Forest Grove	5	0.8%	5.2%	1,210	\$145,240
Quinsigamond Village	14	2.3%	4.5%	3,563	\$427,598
College Hill	0	0.0%	0.5%	0	\$0
Quinsigamond Village	14	2.3%	4.0%	3,563	\$427,598
Shrewsbury Street	34	5.6%	3.7%	6,153	\$738,330
Webster Square	29	4.8%	5.8%	5,078	\$609,431
Cider Mill	17	2.8%	4.6%	2,701	\$324,139
Webster Square	12	2.0%	1.2%	2,377	\$285,292
Westside	23	3.8%	11.4%	3,392	\$407,037
Newton Square	7	1.2%	3.4%	1,134	\$136,098
Salisbury Street Area	2	0.3%	2.0%	76	\$9,120
Tatnuck	3	0.5%	2.2%	185	\$22,165
West Tatnuck / Salisbury	11	1.8%	3.8%	1,997	\$239,654
Total	607	100%	100%	129,426	\$15,531,120

Endnotes

- 1 Robert Clifford and Riley Sullivan. "The Criminal Population in New England: Records, Convictions, and Barriers to Employment" (Boston, MA: Federal Reserve Bank of Boston, 2017).
- 2 One example is enhanced penalties for drug distribution near schools. Because these laws based a violation on proximity around these locations, schools zones covered wide swaths of densely populated cities. See Heather Ann Thompson. "Why mass incarceration matters: Rethinking crisis, decline, and transformation in postwar American history" *The Journal of American History* 97.3 (2010); and Becky Pettit and Bruce Western. "Mass imprisonment and the life course: Race and class inequality in US incarceration." *American Sociological Review* 69.2 (2004).
- 3 Dina Rose and Todd Clear. "Incarceration, Social Capital, and Crime: Implications for Social Disorganization Theory" *Criminology* 36.3 (1998); Robert Sampson. "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy" *Science* 277.5328 (1997); Jeffrey Morenoff and others. "Neighborhood Inequality, Collective Efficacy, and the Spatial Dynamics of Urban Violence" *Criminology* 39.3 (2001).
- 4 See Natasha Frost and Laura Gross. "Coercive Mobility and the Impact of Prison-Cycling on Communities." *Crime, Law and Social Change* 57.5 (2012); Todd Clear and others. "Coercive Mobility and Crime: A Preliminary Examination of Concentrated Incarceration and Social Disorganization." *Justice Quarterly* 20.1 (2003); Robert Crutchfield and Gregory Weeks. "The Effects of Mass Incarceration on Communities of Color: In Poor and Disadvantaged Communities, There May Well Be a Tipping Point at Which Rigorous Crime Policies and Practices Can Do More Harm Than Good" *Issues in Science and Technology* 32.1 (2015).
- 5 Todd Clear and others. "Predicting Crime through Incarceration: The Impact of Rates of Prison Cycling on Rates of Crime in Communities." Final Report to the National Institute of Justice. (Washington, DC: U.S. Department of Justice, 2014).
- 6 Benjamin Forman and others. "The Geography of Incarceration: The Cost and Consequences of High-Incarceration Rates in Vulnerable City Neighborhoods" (Boston, MA: MassINC and the Boston Indicators Project, 2016).
- 7 For more on how policy changes have influenced incarceration rates in Massachusetts, see Benjamin Forman and John Larivee. "Cost, Crime, Consequences: Is It Time to Get Smart on Crime?" (Boston, MA: MassINC, 2013); and Benjamin Forman and others. "Mounting an Evidence-Based Criminal Justice Response to Substance Abuse and Drug Offending in Massachusetts" (Boston, MA: MassINC, 2016).
- 8 "Justice Reinvestment in Massachusetts: Policy Framework" (New York, NY: Council of State Governments, 2017).
- 9 Because HOC sentences are up to 30 months, 2013 is the most recent year that allows us to track individuals over their entire period of confinement to understand the cost and impact associated with an entire year of admissions.
- 10 Bruce Western and Christopher Wildeman. "The Black Family and Mass Incarceration." *The ANNALS of the American Academy of Political and Social Science* 621.1 (2009); Todd Clear. *Imprisoning Communities: How Mass Incarceration Makes Disadvantaged Neighborhoods Worse*. Oxford University Press, 2009.
- 11 In Boston's most impacted neighborhood, more than 20 percent of this cohort had been incarcerated. However, the Boston data covered a slightly longer timeframe (2009-2015). See Forman and others (2016).
- 12 Hedwig Lee and others. "Consequences of Family Member Incarceration: Impacts on Civic Participation and Perceptions of the Legitimacy and Fairness of Government" *The ANNALS of the American Academy of Political and Social Science* 651.1 (2014); Traci Burch. "Effects of Imprisonment and Community Supervision on Neighborhood Political Participation in North Carolina" *The ANNALS of the American Academy of Political and Social Science* 651.1 (2014); Vesla Weaver and Amy Lerman. "Political Consequences of the Carceral State" *American Political Science Review* 104.04 (2010).
- 13 For example, see: Yolanda Kodrzycki and others. "Reinvigorating Springfield's Economy: Lessons from Resurgent Cities" (Boston, MA: Federal Reserve Bank of Boston, 2009).
- 14 John Hagan and Holly Foster. "Intergenerational educational effects of mass imprisonment in America" *Sociology of Education* 85.3 (2012).
- 15 Joseph Murray and others. "Children's Antisocial Behavior, Mental Health, Drug Use, and Educational Performance after Parental Incarceration: A Systematic Review and Meta-Analysis" (2012).
- 16 Murray and others (2012).
- 17 See Jeremy Travis and others, editors. *The Growth of Incarceration in the United States: Exploring Causes and Consequences* (Washington, DC: The National Academies Press, 2014).
- 18 Fifty percent in Gateway Cities versus 38 percent in all other Massachusetts communities opt for full judicial discretion. See crosstabs from statewide poll of 1,207 Massachusetts residents with urban oversample. Field Dates: January 23-29, 2014, available from MassINC Polling Group upon request.
- 19 See Benjamin Forman and Michael Widmer. "Getting Tough on Spending" (Boston, MA: MassINC, 2017).

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ABOUT MASSINC

The Massachusetts Institute for a New Commonwealth (MassINC) is a rigorously nonpartisan think tank and civic organization. It focuses on putting the American Dream within the reach of everyone in Massachusetts using three distinct tools—research, journalism, and civic engagement. MassINC’s work is characterized by accurate data, careful analysis, and unbiased conclusions.

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The Massachusetts Criminal Justice Reform Coalition (CJRC) is a diverse cross-section of leaders who find common ground in the urgent need for comprehensive corrections reform. The Coalition co-chairs are: Wayne Budd, former U.S. Attorney; Kevin Burke, former Secretary of Public Safety; and Max Stern, past President of the Massachusetts Association of Criminal Defense Lawyers.

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