Neighborhoods and Re-Entry in Detroit: Mapping Prison Data

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Data Driven Detroit
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I. Introduction

Understanding criminal justice-involved populations and their reentry is critical to understanding urban poverty. Nationwide, roughly 650,000 individuals return from state and federal prisons to their communities each year. This amounts to about 10,000 individuals returning a week or 75 individuals returning an hour. While these numbers may be hard to digest in the abstract, they have a profound impact on the communities to which individuals return—often low-income communities of color that are ill-equipped to confront the systemic barriers that impede successful reentry.

Of the 95 percent of people that will return from prisons to their communities, two-thirds of formerly incarcerated individuals are re-arrested within three years, and one-half return to prison, either for violation of parole or for committing new crimes. This occurrence, known as recidivism, is what occurs when the transition from prison or jail back to the community is unsuccessful. The already dim prospects of a successful reentry due to formerly incarcerated individuals’ disadvantaged positions with regard to education, employment, social capital and physical and mental health are often further challenged by the instability of the neighborhoods and communities to which individuals return.

This brief report proposes a new framework of viewing criminal justice information; uses data from the Justice Atlas for Sentencing and Corrections to explore prison data in Detroit; focuses on access to substance abuse and mental health services; discusses neighborhood disadvantage and other social predictors of recidivism; highlights gaps in data; and explores questions for criminal justice policy and practice.

II. The Geography of Crime vs. The Geography of Prisoners

Typical Crime Map from Detroit News

Mapping of Criminal Events, Detroit

Understanding reentry and recidivism requires a reconceptualization of the way in which criminal justice information is collected, visualized and analyzed. Criminal justice information has primarily been used to regulate and organize the activities of those in the system.\(^5\) Crime data pinpoints a criminal event, or an individual case, presents it as a list, and primarily seeks to answer ‘what crimes were committed and where.’ For decades, this information has been used as a law enforcement and community policing tool to identify hot spots of criminal activity.

The New York-based Justice Mapping Center repurposes criminal justice information to focus not on events, but on people: where they live, where they were admitted from, and to where they return. Using the home addresses of incarcerated individuals in Brooklyn, planners shifted the focus from crime events to incarceration events, making the impact of criminal justice on the city visible. Unlike crime, which is dispersed in multiple locations across a city, those that are arrested and imprisoned are often densely concentrated in a few areas of the city. Simply put, incarceration is much more spatially concentrated than crime, and visualizing this concentration can lead to an entirely different set of questions about criminal justice policy, social welfare policy and urban planning.

The Spatial Information Design Lab’s Architecture and Justice Report shows how solely mapping traditional criminal justice information (i.e. crime data) limits the potential to understand the interrelation with other domains of city life, such as education, housing and health. This point becomes critical when looking at the spatial location of prisoners and formerly incarcerated individuals in the context of reentry, which is dependent on the infrastructure of a city. It also becomes important when communities have reached a so-called ‘tipping point,’ where incarceration and the routine absence of

segments of the population undermine local networks and the infrastructure of everyday life. This new framework suggests that questions of crime are questions of the city.

III. Prison Data: Detroit

While Michigan’s recidivism rate—defined as the percentage of parolees that have returned to prison within 3 years—has declined substantially over the last decade (from 41.9% in 2001 to 29% in 2010), it is not clear from the data how Detroit’s recidivism rate has changed over time. The Justice Mapping Center created an interactive mapping tool—the Justice Atlas of Sentencing and Corrections—to visualize the highly concentrated pockets of criminal justice within states, counties and cities. Using 2008 Detroit-specific data from the Justice Atlas, I created (or more appropriately re-created) maps to contribute to our understanding of incarceration, reentry and community supervision (parole) in Detroit. The chart below shows the data used in creating the maps displayed in this report.

<table>
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<tr>
<th>Detroit Zip Code</th>
<th>Prison Admissions Rate Per 1,000</th>
<th>Prison Release Rate Per 1,000</th>
<th>Parolee Rate Per 1,000</th>
<th>% Below the Poverty Level</th>
<th>% No High School Diploma (Pop. 25+)</th>
<th>% Unemployed</th>
<th>% Non-White or Hispanic</th>
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6 Ibid, Cadora E. and Kurgan, L.
8 The drop in the recidivism rate may be due to Michigan’s Prisoner Re-entry Program. For more information, see: http://www.michigan.gov/documents/corrections/Michigan_Prisoner_Reentry_Model_05.2012_454416_7.pdf. According to MDOC, there has been 38% fewer returns (or 5,193 in absolute returns) to prison for parole violations or new crime compared to baseline expectations.
9 The Justice Atlas’ visualizations display data at both the Census Tract and Zip Code-level, but the only Zip Code-level data is available for download. Data from the Justice Atlas was obtained from the Michigan Department of Corrections.
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IV. Substance Abuse, Mental Health and Recidivism

Critical to the understanding of reentry and recidivism is the role that substance abuse and mental health plays in the lives of prisoners as compared with the general population. According to the Justice Center, the incidence of serious mental illness is two to four times higher among those incarcerated than the general population.\(^\text{10}\) Furthermore, three quarters of those returning from prison have a history of substance abuse, and over 70 percent of the formerly-incarcerated with a serious mental illness also have a substance use disorder.\(^\text{11}\) Clinical experience with co-occurring mental health and substance abuse problems has shown that inadequate attention to one type of problem decreases the likelihood of successfully treating the other, reinforcing the importance of treating both.\(^\text{12}\)

Using a list of substance abuse treatment centers and mental health clinics from the Detroit Wayne Mental Health Authority, I was able to map treatment centers in the city. Though this is the most official list that the city keeps, it should be noted that individuals may seek out treatment at a range of substance abuse centers, including Alcoholics Anonymous, church or faith-based groups, outpatient facilities, and residential facilities, and a range of mental health clinics that may not be reflected in this list.


\(^{11}\) Ibid, “Reentry Facts and Trends.”

Overlaying prison release rate data with the location of substance abuse treatment centers and mental health providers in Detroit has the potential to illuminate important gaps in services. Of course, accessibility to services provided by substance abuse and mental health treatment centers is measured by more than their existence in certain neighborhoods. While mapping the location of treatment centers shows the spatial concentration (or lack of concentration) of centers, there are several barriers to actually accessing services. Depending on the kinds of services provided, treatment centers may have waiting lists or have wait times before appointments can be secured. Many treatment centers may not be accessible by public transportation or be served by unreliable bus routes. Further, some treatment centers may not accept Medicaid or other kinds of public insurance. There are several dimensions to treatment accessibility, and further data collection on different aspects of substance abuse treatment centers and mental health services (i.e., what populations they serve) could be beneficial in further analyzing barriers to services.

V. Mapping Neighborhood Disadvantage and Other Social Indicators

Successful reentry is often made difficult by the same neighborhood conditions that led to incarceration in the first place. The ways in which these neighborhood conditions can challenge successful reentry, notably for those battling substance abuse or mental health illnesses\textsuperscript{13}—cannot be underestimated. Thus, in part to give context to the conditions in which individuals are first arrested and in part to show the conditions to which they often return, I looked at a host of demographic indicators from the Justice

\textsuperscript{13} According to the Urban Institute, individuals reentering their communities with substance abuse problems prior to prison experienced more difficulty finding housing, employment and were, on average, more likely to recidivate.
Atlas data and the U.S. Census Bureau, including educational attainment, household income, unemployment and household structure.

a. **Educational Attainment**

Using 2007-2011 American Community Survey 5-Year estimates for the population 25 and over, I mapped the percent of the population 25+ that have not obtained high school diplomas. Nationwide, two in five incarcerated individuals lack a high school diploma or its equivalency.\(^{14}\) Further, about one in every 10 young male high school students that drop out are in jail or juvenile detention, compared with one in 35 young male high school graduates. This drops to one in four for African Americans.\(^{15}\) Incarceration exacerbates issues of educational attainment and the ability to secure employment.

b. **Income/Poverty Status**

Using 2007-2011 American Community Survey 5-Year Estimates, I mapped the percent of the population below the poverty level in the past 12 months. The relationship between poverty and recidivism is difficult to disentangle because they are intrinsically intertwined: mass incarceration (and recidivism) impedes poverty reduction by imposing additional barriers to employment, reducing lifetime and

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\(^{14}\) Ibid, “Reentry Facts and Trends.”

intergenerational earnings (draining assets of low-income families), limiting access to public benefits, and disrupting the social and economic fabric of neighborhoods.\textsuperscript{16}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{percent_below_poverty.png}
\caption{Percent Below the Poverty Level, 2011 by Zip Code in Detroit, Hamtramck, and Highland Park, MI}
\end{figure}

\textbf{c. Unemployment}

Using data from the Justice Atlas, I mapped the unemployment rate by zip code. Researchers from the University of Michigan’s Institute for Social Research studied whether returning to disadvantaged neighborhoods is associated with recidivism and employment outcomes.\textsuperscript{17} They found that returning to a more disadvantaged neighborhood was associated with more adverse labor market outcomes, including less employment and lower wages, and that being employed substantially reduced the risk of recidivism. Further, they found that in 2003, only 22 percent of parolees in Michigan were employed in the formal labor market during the first year after release. Re-entry programs often focus on employment as a key metric of ensuring that re-entry is successful, so the lack of employment options or the unemployment that preceded prison admission is perhaps indicative of the availability of opportunity in a neighborhood.


\textsuperscript{17} Ibid, Morenoff, J. and Harding, D.
d. Percent Nonwhite or Hispanic
African Americans are overrepresented in prisons and jails in every state in the US, including Michigan.\textsuperscript{18} Nationally, Blacks are incarcerated five more times than Whites. Given the negative intergenerational effects of the criminal justice system on Black communities, and the disproportionate incarceration rates experienced by these communities, it is critical to look at neighborhoods in this context.

VI. Gaps in Data

Though some research has been conducted with regard to recidivism and neighborhoods, the biggest issue is a lack of appropriate data. In order to conduct an in-depth analysis of neighborhoods, data at the census tract level is preferable to data at the zip code level. However, such data is not available for public download from MDOC. The University of Michigan report on neighborhoods, recidivism and employment accessed data from 2003 from MDOC through a “unique arrangement”,\textsuperscript{19} and much of the residential history of formerly incarcerated individuals was assembled from case notes. What would prove even more useful to conducing the kind of analysis undertaken by the Justice Mapping Center in Brooklyn is de-identified home addresses of former prisoners that could then be aggregated to the census tract level.

Further, the criminal justice-involved population often includes both prison and jail populations. However, the two serve different purposes: prisons are operated at the state or federal level to incarcerate individuals serving a judicial sentence, while jails serve primarily as detention facilities operated at the county, city or local level, usually to confine those awaiting a trial. While data on the 1,821 state and federal prison facilities is more systematically reported, less is known about the 3,283 jails across the country.\textsuperscript{20} What is known is that an estimated 11.6 million people are admitted to jails each year, and approximately 9 million individuals are released each year.\textsuperscript{21} Because jails incarcerate individuals who serve shorter sentences (usually up to one year and for misdemeanor offenses), the jail-involved population experiences more rapid reentry and cycles between the justice system and the community at a greater volume and with much more frequency. Thus, in order to fully understand the impact that the justice system has on neighborhoods and cities, we need accurate and timely jail data that tracks criminal histories, demographic data (including home addresses) and recidivism outcomes.\textsuperscript{22}

VII. Questions for Future Policymakers

Due to the prevalence of reentry services throughout low income communities, University of Michigan Social Work Professor Reuben Miller argues that reentry can best be viewed as a social institution within a hybrid-state welfare institution.\textsuperscript{23} He claims that larger trends of austerity and a retrenchment of social welfare policy has led to a shift in the responsibility of the state serving the needs of formerly incarcerated individuals to community actors and organizations within poor communities of color. Miller

\textsuperscript{19} Ibid, Morenoff, J. and Harding, D.
\textsuperscript{20} Marks, J. and Turner, N. “The Critical Link Between Health Care and Jails,” Health Affairs 33, No. 3(2014):443-447
\textsuperscript{21} Ibid, “Reentry Facts and Trends.”
\textsuperscript{22} For a successful model of jail data tracking, see Miami-Dade County Corrections and Rehabilitation Department’s Daily Jail Population Statistics: http://www.miamidade.gov/idwdashboard/statistics-en-us.pdf.
raises questions about the concentration of social disadvantage, social exclusion and the selective inclusion of poor people of color for criminal justice intervention. 

The kinds of data identified in the previous section could allow us to use criminal justice information to begin to answer Miller’s important questions, including what are the implications of individuals returning to neighborhoods and communities that are already socioeconomically marginalized or disenfranchised. They could help us delve into exploring whether there is an appropriate amount of job training and support opportunities, or whether mental health services are actually accessible in neighborhoods with the highest rates of jail-involved populations. Eventually, creating maps—similar to the ones the Justice Mapping Center produces—and distributing them to decision makers could lead to broader questions about resource allocation, positively impacting individuals returning to the same communities in which they were arrested.

While crime maps and the information they provide to city officials is critical to public safety, this report envisions a new way to use criminal justice information. If community organizations, local governments and states could benefit from access to prison data in the same way police departments use crime data to target hot beds of enforcement, they could target reentry in a manner that could lead to safer cities and more stable neighborhoods.

\[^{24}\text{Ibid, Miller.}\]