

## Nancy La Vigne, Brian Elderbroom, and Diana Brazzell

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The Reentry Mapping Network (RMN) is a partnership between the Urban Institute and community-based organizations in 15 jurisdictions <sup>1</sup> that are analyzing and mapping local data on prisoner reentry and related topics and using the findings to improve their communities. One purpose of the RMN is to develop and disseminate best practices for the mapping and analysis of prisoner reentry and other justice topics. <sup>2</sup>

In December 2007, representatives of national criminal justice, social service, and government organizations met in Washington, D.C., to discuss justice mapping at a meeting sponsored by the Urban Institute. The session focused on innovative applications of mapping in the criminal justice field and explored strategies for using mapping to inform justice policy and practice. The material in this research brief is drawn in part from the presentations and discussions that took place at the meeting.

The Urban Institute is a nonprofit nonpartisan policy research organization established to examine the social, economic, and governance problems facing the nation. Funding and support for the Reentry Mapping Network and this brief were provided by The Annie E. Casey Foundation. The views expressed in this brief are those of the authors and do not necessarily reflect the views of the Urban Institute, its trustees, or its funders.

For more information on justice mapping and the RMN, visit <a href="http://www.reentrymapping.org">http://www.reentrymapping.org</a>.

## **Reentry Mapping Brief**

# Charting a New Direction: Exploring the Future of Justice Mapping

As computerized mapping technology has become more affordable and accessible in the past decade, the use of maps has become an increasingly important component of efforts to develop safer communities. Mapping is now a valuable tool for law enforcement, criminal justice agencies, state and local policymakers, service providers, and community organizations working to understand and address problems related to crime, incarceration, and prisoner reentry. It has been employed to develop more equitable and effective criminal justice policies, allocate limited resources efficiently, and educate and engage the public on crime and justice topics.

This research brief examines the new opportunities mapping has created for exploring and understanding criminal justice issues. The purpose of the brief is to highlight what has already been accomplished through justice mapping and to examine cutting edge developments in the field, including the incorporation of mapping into larger justice-related planning and service delivery initiatives.

#### WHAT IS JUSTICE MAPPING?

**J**ustice mapping is the use of geographic information systems (GIS), a computerized mapping technology, as a tool to understand the spatial dynamics of criminal justice issues such as crime, incarceration, and prisoner reentry. Mapping not only serves as a powerful tool for analyzing and displaying data, it also encourages new place-based approaches to problem solving. Rather than focusing on a topic or question in isolation, a place-based approach uses location as the key unit of analysis to explore the ways in which various social and political forces interact and affect neighborhoods and communities. In the justice arena, mapping helps us understand the impact of crime and justice policies on the communities in which we live and enables us to visualize the overlapping nature of challenges such as crime, reentry. poverty, poor health, low levels of education, and homelessness. Mapping can also highlight the resources available to meet these challenges, from service providers and community organizations to faith institutions, employers,

schools, and supportive housing.

Maps can communicate large amounts of information quickly and simply. They can demonstrate truths about our communities—such as the fact that crime and incarceration disproportionately affect certain neighborhoods—in a powerful way that narratives and statistics often fail to accomplish. In communities around the country, justice mapping is being used to

- Describe and analyze justice problems and explore their relationship to other social challenges and community factors;
- Examine the impact of changes in a community—such as property foreclosures—on patterns of crime, incarceration, and prisoner reentry;
- Communicate information on criminal justice issues to the public, policymakers, government officials, service providers, and other interested parties;
- Determine the most appropriate allocation of resources by examining patterns of community need and analyzing where services and other resources can be located to maximize their effectiveness; and
- Explore the spatial component of proposed policy responses and evaluate the impact of new policies after they are implemented.

The sections below provide detailed examples of the important role mapping can play in efforts to understand and address crime, prisoner reentry, and other justice issues.

# PROMISING APPLICATIONS OF JUSTICE MAPPING

was the first justice entity to integrate computerized mapping into its operations and decisionmaking. The use of mapping has since expanded to other justice stakeholders, including corrections agencies, local

government, service providers, and community-based organizations. As outlined below, mapping has been employed in the criminal justice field for a range of purposes, such as addressing prisoner reentry, encouraging interagency collaboration, guiding policy decisions, and engaging community residents.

#### Public Safety

Local law enforcement began using computer mapping technology several years ago to identify crime concentrations or "hot spots" and to allocate police patrols in response to changing crime patterns. The use of mapping is now widespread within the law enforcement community, and for many agencies it is the centerpiece of a strategic, data-driven approach to crime prevention and control. Mapping enables law enforcement to track crime trends both within and across jurisdictions and over time. Such efforts help police respond quickly to new developments by shifting resources to the neighborhoods that need them most. Mapping crime along with other neighborhood characteristics can also help identify the underlying causes of a crime problem, such as the presence of vacant houses serving as hubs for drug dealing and use. At the individual case level, mapping is used to investigate crime by examining the geographic elements of an incident and exploring ways in which multiple incidents may be connected.

#### Prisoner Reentry

While police agencies are now well versed in the use of computer mapping, the corrections field has been slower to invest in the technology. The increased focus on prisoner reentry in recent years, however, has prompted corrections agencies and their community partners to begin exploring the impact of incarceration and reentry by mapping the spatial distribution of persons returning home from prison. These efforts were enhanced by the establishment of the Urban Institute's Reentry Mapping Network (RMN) project in 2001. The RMN is a partnership among community-based research organizations in 15 jurisdictions that are using mapping to

understand and address prisoner reentry in their communities.

RMN partners have used mapping to examine the relationship between patterns of prisoner reentry and poverty, crime, homelessness, voter disenfranchisement, education levels, and the allocation of public assistance. The partners have educated local residents about reentry and have encouraged their communities to use maps and data to guide efforts to support former prisoners. RMN sites have also helped service providers understand how the availability of local reentry services compares to the need for these services, in some cases highlighting service gaps. On a policy level, reentry mapping has been used to explore the impact of various justice policy choices on the local community.

The power of mapping to make visible the impact of reentry has been essential to these efforts. In addition, the RMN sites have involved community stakeholders—including residents, service providers, and advocacy groups—at every stage of the mapping process, from data collection to analysis and mapping to dissemination. Community engagement strengthens their efforts to educate local residents, inform decisionmakers, and affect changes in policy and practice. For two examples of RMN successes, see the text box to the right.

#### Reentry Case Management

Mapping can be used not only to understand prisoner reentry at the community level, but to monitor and guide reentry at the individual level. It can be an important component of efforts by corrections staff, parole and probation officers, and nonprofit reentry case managers to support prisoners prior to and at the time of their release. Using maps, caseworkers can identify resources that align with an individual's needs and his or her location. By facilitating referrals to services, housing, and transportation, mapping can be an integral part of planning for the successful reintegration of former prisoners into the community.

Nonprofit caseworkers and parole and probation officers can also use mapping to track and manage their client base. The Rhode Island Department of Corrections and RMN site The Providence Plan have partnered to develop one of the country's first community supervision mapping systems. The web-based application helps Rhode Island probation officers track their

#### SUCCESS STORIES FROM THE RMN

**Providence. Rhode Island.** As The Providence Plan (TPP) and the Rhode Island Family Life Center (FLC) began to map and analyze prisoner reentry in Providence and talk to the community about reentry issues, the topic of voter disenfranchisement was highlighted as a significant concern. Rhode Island law barred anyone with a felony conviction from voting until his or her probation or parole was complete. To educate policymakers and the public on the effects of this law, The Providence Plan created maps exposing the disproportionate impact that disenfranchisement was having on certain neighborhoods. The FLC and its community partners used the maps to highlight the racial, geographic, and political discrimination that resulted from the ban. Due in large part to these efforts, in November 2006, Rhode Island voters amended the state constitution to restore voting rights to more than 15,000 disenfranchised individuals.4

Allegheny County, Pennsylvania. The Allegheny County Department of Human Services (DHS) approached the issue of prisoner reentry from a human services rather than a criminal justice perspective, leading them to map justice issues within a much broader context. DHS incorporated criminal justice data into their client database and used maps and data analysis to explore the overlap between the population using their services and the individuals involved in the local justice system. In combining criminal justice and human services data. DHS examined how different members of a single household were encountering government agencies at multiple points—for example, a father in the jail, a mother accessing public benefits, and a child in the child welfare system. By learning more about the overlapping needs of their clients, DHS has been able to improve service delivery for residents, save time and money through collaboration, and better meet the needs of the community as a whole.

clients and organize their caseloads geographically, enabling them to plan home visits more efficiently and increasing their ability to identify community service providers that fit their clients' needs. The application also helps supervision officers visualize the neighborhoods and streets where their clients are living and working, aiding their ability to recognize when clients are in areas that might pose a risk for reoffending.

### Cross-Agency Coordination

Given that formerly incarcerated people suffer disproportionately from joblessness, lack of health care, housing instability, substance abuse problems, and mental illness, efforts to address these challenges must consider their intersection with the justice system. A place-based approach to understanding and addressing justice issues can illuminate the connections between crime, incarceration, prisoner reentry, and many of the challenges listed above. Mapping can help link local justice issues to the broader social service delivery context in a jurisdiction, encouraging a holistic, comprehensive approach to human services.

Allegheny County, Pennsylvania, has used mapping to understand the overlap between populations involved in the human services and criminal justice systems in their area. (More information on their efforts is available in the text box on page 3.) The use of mapping to illuminate overlapping needs, in Allegheny County and elsewhere, can help policymakers reevaluate the most effective strategies for serving local populations and improving conditions in vulnerable neighborhoods. Such efforts also encourage collaboration across public and private agencies as part of a holistic approach to service provision that considers the multiple needs not only of individual clients but of their families as well.

#### Justice Reinvestment

Mapping can be used to explore the link between local conditions and larger statewide criminal justice policies. "Justice reinvestment," a concept spearheaded by the Council of State

Governments and the Justice Mapping Center, refers to the quantification of criminal justice spending and its impact on local communities with the goal of reallocating funds to yield greater benefits for localities. Maps enable policymakers to pinpoint the neighborhoods most affected by incarceration and estimate the money spent on incarceration city block by city block. Other investments in these neighborhoods are mapped as well, enabling policymakers to examine expenditures and their effectiveness at the block level. The ultimate aim is to encourage policymakers to consider the proper balance of investments in preventative and punitive responses to crime. This reexamination of policy choices can save money, enhance public safety, and improve conditions in the most vulnerable neighborhoods.

### Informing the Legislative Process

The justice reinvestment efforts described above highlight the important role that mapping, and the place-based approach it facilitates, can play in the policymaking process. Mapping can inject empirical, data-driven analysis into justice debates that are often heavily influenced by political and ideological drivers. One way to integrate mapping into the process is to require the inclusion of mapping "notes," or geographic impact statements, with proposed policies. Before a new sentencing law is passed or a new prison is constructed, state legislators should consult geographic impact statements to obtain a place-based understanding of the expected impact of the policy change. Decisionmakers should be aware of where resources will be spent, which populations will be affected. how the new policy will interact with existing community factors, and what obstacles may prevent its success.

Mapping can demonstrate the value of a proposed policy change or expose potential unintended consequences. For example, numerous state legislatures have passed laws that prohibit people previously convicted of a sexual offense from living within close proximity to schools, day-care centers, and other areas frequented by children. Though driven by the

intention of protecting children, these laws may threaten public safety by diminishing legal housing options for sex offenders. Doing so may force offenders underground, and thus beyond the reach of community supervision officers, or to areas with limited access to support services critical to successful reintegration. Mapping can reveal the true impact of residential restrictions, and can be used by policymakers to determine the most appropriate strategies for limiting residential options for released prisoners while supporting their successful reentry.

## Community Engagement

Mapping can be a powerful tool for engaging communities and initiating discussion on justice issues among government agencies, nonprofit service providers, and the communities they serve. Residents have a key role to play in any community response to reentry or crime and, when involved, can create a positive foundation for change. With access to justice maps and place-based information, residents can contribute to policy deliberations, inform policy decisions, and assist in the evaluation of policy interventions. Similarly, nonprofits and other community organizations should seek access to the data needed to engage residents, efficiently allocate their own resources, and effectively serve the community. Examples of this type of data access already exist in many National Neighborhood Indicator Partnership (NNIP) sites across the country. Aimed at democratizing data, NNIP sites strive to collect, maintain, and make widely available local data that can help inform policies and practices that have an impact on their communities.<sup>6</sup>

Perhaps most importantly, though, justice mapping can have a powerful impact on attitudes and perceptions. Mapping can help open a dialogue between neighboring communities, increase awareness of the causal factors underlying pressing community problems, and begin to address the negative stereotyping and labeling that occurs both within and between neighborhoods. As people begin to understand the interconnectedness of problems such as prisoner reentry, substance

abuse, homelessness, joblessness, and poor health, they will expect more place-based information from the organizations that work in their communities, the lawmakers that ask for their votes, and the advocates that enlist their support in community development processes. This push for expanded public access to data helps to further residents' engagement in the policy process and improve policy outcomes affecting their communities.

## WHERE DOES JUSTICE MAPPING GO FROM HERE?

State and local policymakers, community advocates, service providers, government administrators, and other stakeholders are beginning to recognize the importance of placebased information and analysis. If recent history is any indication of future trends, we can expect that local data will become more reliable, mapping technology will be increasingly accessible, and the interest in local information will grow. Mapping will therefore increasingly serve as a valuable resource in policymaking, agency management, service delivery, and policy research.

To fully capitalize on mapping's analytic capabilities and power to engage, stakeholders must make a concerted effort to increase awareness, develop leadership, facilitate collaboration, and change organizational cultures to support the use of mapping technology. Opportunities to assimilate mapping into current criminal justice initiatives are plentiful. The Second Chance Act, recently signed into law by President Bush, would allocate grant funding to state and local governments to develop reentry programs and initiatives aimed at reducing recidivism and increasing public safety. Given the valuable applications of justice mapping outlined in this research brief, federal and state legislators should give serious consideration to including support for mapping components in the initiatives funded under the Second Chance Act.

As the use of mapping continues to expand, it must be kept in mind that maps, no matter how impressive, are not the end product. They are analytic and engagement tools that lead to action. Mapping is most powerful as part of broader, innovative strategies that change the way we view public policy problems and the way we seek to solve those problems. When employed collaboratively, justice mapping has the potential to improve policy outcomes and positively shape the decisions that have a meaningful and substantial impact on public safety and our nation's most vulnerable communities.

**NOTES** 

<sup>1</sup> The RMN partner jurisdictions are Allegheny County, Pennsylvania; Atlanta, Georgia; Chicago, Illinois; Denver, Colorado; Des Moines, Iowa; Hartford, Connecticut; Indianapolis, Indiana; Louisville, Kentucky; Milwaukee, Wisconsin; Oakland, California; Providence, Rhode Island; San Diego, California; Seattle, Washington; Washington, D.C.; and Winston-Salem, North Carolina.

<sup>2</sup> More information on reentry mapping and the experiences of the RMN sites can be found in *Mapping Prisoner Reentry: An Action Research Guidebook* (Nancy La Vigne, Jake Cowan, and Diana Brazzell, 2007, 2<sup>nd</sup> ed., Washington, DC: The Urban Institute) available online at <a href="http://www.urban.org/reentry">http://www.urban.org/reentry</a> mapping/tools.cfm.

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## ADDITIONAL INFORMATION

Information and materials on reentry and justice mapping, as well as the work of the **Reentry Mapping Network**, can be found online at <a href="http://www.reentrymapping.org">http://www.reentrymapping.org</a>. The web site, hosted by the **Urban Institute**, includes background information on reentry mapping, justice mapping tools and resources, sample maps from the RMN partners, and resources on prisoner reentry and related topics.

The National Institute of Justice's Mapping and Analysis for Public Safety (MAPS) project focuses on the use of justice mapping and other data-driven approaches to address crime. Their web site, <a href="http://www.ojp.usdoj.gov/nij/maps/">http://www.ojp.usdoj.gov/nij/maps/</a>, contains a wealth of mapping resources, including publications, software applications, information on training courses, and details on NIJ's annual crime mapping research conference.

The Justice Reinvestment project of the Council of State Governments aims to engage state policymakers to reduce corrections spending and invest the savings in the communities most affected by crime and incarceration. More information on their efforts to improve public safety is available at <a href="http://www.justicereinvestment.org/">http://www.justicereinvestment.org/</a>.

The Justice Mapping Center provides policymakers, government officials, and other stakeholders with innovative maps and analyses to understand the impact of incarceration and reentry in cities across the country. See <a href="http://www.justicemapping.org">http://www.justicemapping.org</a> for more information and for a selection of sample maps.

<sup>&</sup>lt;sup>3</sup> For a comprehensive overview of crime mapping applications, see *Mapping Crime: Principle and Practice* (Keith Harries, 1999, Washington, DC: U.S. Department of Justice, National Institute of Justice).

<sup>&</sup>lt;sup>4</sup> Information on the campaign to repeal voter disenfranchisement laws in Rhode Island is available at <a href="http://www.restorethevote.org">http://www.restorethevote.org</a>.

<sup>&</sup>lt;sup>5</sup> For information on justice reinvestment and examples from select states, visit <a href="http://www.justicereinvestment.org/">http://www.justicereinvestment.org/</a>.

<sup>&</sup>lt;sup>6</sup> More information on NNIP is available at http://www.urban.org/nnip.