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# Activities to Improve Data Capacity

## A Deep-End Evaluation Feature Brief

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Data can motivate and inform the development of juvenile justice (JJ) reform efforts. Data are also essential for understanding the potential influence of reform activities, learning about what is working well, and strengthening policy and practice. In this brief, we describe how jurisdictions involved in a JJ reform effort identified and addressed their data needs and incorporated data into their activities and decisionmaking. The information is based on a developmental evaluation of the Annie E. Casey Foundation's (the Foundation's) expansion of the Juvenile Detention Alternatives Initiative® to the deep end of the JJ system. Deep-end reform aims to safely and significantly reduce the use of out-of-home placements for youth, especially youth of color. This brief supplements the information presented in *Keeping Youth Out of the Deep End of the Juvenile Justice System: A Developmental Evaluation Overview of the Annie E. Casey Foundation's Deep-End Reform*, which provides an overview of the evaluation of the deep-end reform and its findings (appendix A provides details about the methods used in the evaluation). Qualitative and quantitative data collection occurred between April 2014 and August 2018.

First, we explore the reasons for improving data capacity as part of deep-end reform. Then, we reflect on how stakeholders identified and addressed data needs and describe sites' progress in incorporating data into activities and decisionmaking. Lastly, we discuss factors that facilitated or impeded data activities that other jurisdictions interested in deep-end reform can consider.

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## BOX 1

### Key Findings

- Stakeholders (for example, staff from probation departments, courts, and other JJ agencies) used data to gain an accurate and comprehensive understanding of their jurisdictions' use and patterns of out-of-home placement, analyze patterns of placements by race and ethnicity, inform decisionmaking, support cross-agency coordination and policy implementation, and measure the progress and outcomes of new and revised programs, policies, and practices.
- Stakeholders identified and addressed data needs through three primary types of activities: (1) system assessments to establish a baseline against which future changes could be measured and to identify deep-end priorities and areas of strength and need; (2) investments in data infrastructure, including staff capacity; and (3) regular reporting and data tracking to calculate site-level placement rates, compare placement rates among racial and ethnic groups, and observe trends.
- Key factors that can facilitate or impede data activities for jurisdictions include staff buy-in, expertise in analytical methods and the JJ system, staff capacity to gather data, data collection system capacity, and cross-system coordination and information sharing.

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## Why Focus on Data Capacity as Part of Deep-End Reform?

Improving a jurisdiction's capacity to collect and use data is a central pillar of the Foundation's deep-end reform. Sites' reform-focused data activities included efforts to do the following:

- gain an accurate and comprehensive understanding of their jurisdiction's use and patterns of out-of-home placement
- analyze patterns of justice system involvement by race and ethnicity
- improve systemwide ability and capacity to use data to inform decisionmaking at the system level and individual level
- incorporate data in cross-agency coordination and policy implementation
- measure the progress and outcomes of new and revised programs, policies, and practices to determine whether they are achieving intended goals

To support sites undertaking these activities, the Foundation provided data-focused technical assistance (TA) as part of its [reform efforts](#). Site stakeholders embraced the value of using data to establish baseline measures of out-of-home placement in their jurisdictions to show progress and to inform decisionmaking. The Foundation's emphasis on data quality and performance monitoring in deep-end work (and in the Juvenile Detention Alternatives Initiative) reinforced these values. For instance, at the beginning of each site's grant, stakeholders prepared an individual-level dataset containing information on all youth who received a court disposition in the most recently available year.

This dispositional dataset was the baseline for measuring changes in out-of-home placement and for disaggregating measures of justice system contact by race and ethnicity (Vera Institute of Justice 2013). Sites generated most of the [performance measures](#) required by the Foundation’s grants—no small feat given where many of them started. Performance measures included out-of-home placements, referrals, and felony filings, disaggregated by race and ethnicity. However, even with significant TA, sites’ ability to meet the Foundation’s data requirements and progress toward effectively reporting and using data varied.

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## BOX 2

### Site Spotlight: Data Walks

In Pierce County, Washington, court leadership and probation staff regularly conducted data walks with all levels of staff to review the characteristics of youth served by the system, their flow through the system, and racial disparities in court contact. Staff reported that engaging with data provided helpful context for their work and makes them more comfortable talking about and using data in their roles.

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## How Did Sites Identify and Address Data Needs?

Site stakeholders identified and addressed data needs through three primary types of activities: system assessments, investments in data infrastructure, and regular reporting and data tracking.

### System Assessments

At the beginning of their deep-end reform, staff at each site collected quantitative and qualitative data as part of a system assessment. These data were used to establish a baseline against which future changes could be measured and to identify deep-end priorities and areas of strength and need. Stakeholders in some sites conducted data walks to engage a wide range of staff in their jurisdictions’ data and to collaboratively identify priorities for reform. As part of the system assessments and reform start-up, stakeholders also developed dispositional datasets they would eventually use for the Foundation’s required reporting. Frequently, sites’ existing data systems are not intended to track youth over time or across multiple agencies or to disaggregate trends by youth characteristics. Creating these datasets can therefore be time consuming: one site’s data analyst required three years to build the data capabilities needed to generate a dispositional dataset. Another site produced the dispositional dataset, including length of stay, as part of the system assessment process. This effort paid off, as the dataset became a road map for the site’s subsequent activities and the state planned to extend these data throughout other jurisdictions.

## Data Infrastructure

Sites had varying organizational capacity to collect, track, and analyze data when they began deep-end reform. Many lacked dedicated data staff with capacity to conduct required analyses. The system assessment process led some sites to invest in improving their data infrastructure, including adding dedicated staff and developing new integrated data systems. As one probation supervisor noted, “[We now have] a true data analyst on board. It’s not good enough to have the data—we’ve got to sit back and analyze it.”<sup>1</sup>

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### BOX 3

#### Site Spotlight: Data Tracking and Reports

Ramsey County, Minnesota, used data to calculate a commonly used metric, the relative rate index, to compare the experiences of youth of color with those of white youth across points of contact with the JJ system. The relative rate index report, created by the deep-end data workgroup, clearly shows disparities from arrest to adjudication.

Summit County, Ohio, has a full-time research analyst who produces a monthly report tracking performance measures that are used widely by staff throughout the county’s juvenile court.

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## Regular Reports and Data Tracking

Each year, sites report performance measures to the Foundation, such as the number and types of out-of-home placements by race and ethnicity.<sup>2</sup> These measures are used to calculate site-level placement rates, compare placement rates among racial and ethnic groups, and observe trends. In addition, stakeholders in some sites developed regular reports and other data tracking practices to observe system disparities, service use, out-of-home placements, probation violations, and lengths of probation terms and placement stays, as well as to monitor adherence to structured decisionmaking. Some sites remained in the initial stages of aligning data systems to enable the types of analyses needed to track the stock and flow of cases into (and out of) the deep end of the system. For instance, after data collection for the evaluation ended in August 2018, one site continued working with a Foundation-provided TA provider to identify how data elements map to its reform strategies and expected outcomes.

## How Did Sites Progress in Incorporating Data into Activities and Decisionmaking?

Sites incorporated data into decisionmaking in three ways: by convening data workgroups, by addressing racial and ethnic equity and inclusion, and by providing leadership connecting data to practice.<sup>3</sup>

## Data Workgroups

After the initial system assessments, sites employed data workgroups involving key stakeholders, such as probation staff and court staff, as a bridge between data and practice. Eight sites developed workgroups tasked with addressing data challenges, data systems, and data-related decisionmaking. In some sites, members of the data workgroup attended meetings for other workgroups, allowing them to expand data use throughout their sites' deep-end activities.

## Racial and Ethnic Equity and Inclusion

Data have been key in building support for reforms focusing on race and ethnicity. In many sites, using data to identify disparities at different system points, such as violations of probation or out-of-home placements, has generated support for reform among system stakeholders. "When people see the data, and they know it's good data, it helps drive decisions. It can be eye opening," noted a probation supervisor, who continued, "And it can help drive good discussions when it comes to race and disparities." Staff in some sites successfully used data as a starting point to guide difficult discussions about racial and ethnic equity in their JJ systems and their own practices.

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### BOX 4

#### Site Spotlight: Using Data to Highlight Racial and Ethnic Equity and Inclusion

In Bernalillo County, New Mexico, the racial and ethnic disparities workgroup examined data on youth in detention and found that Hispanic males were overrepresented. Looking deeper, they found these detentions largely owed to warrants issued for youth who had absconded, particularly in specific locations. After reaching out to youth on probation to ask why they were leaving home, they reported that they had no place to go when home felt unsafe. This input led to the creation of a stress pass, which identifies—for the youth, the family, and probation staff—a safe place for youth to go if they need to leave their home. In another site, prosecutors and defense attorneys conducted case file reviews to identify points where different decisionmaking might have led to a less disproportionate outcome.

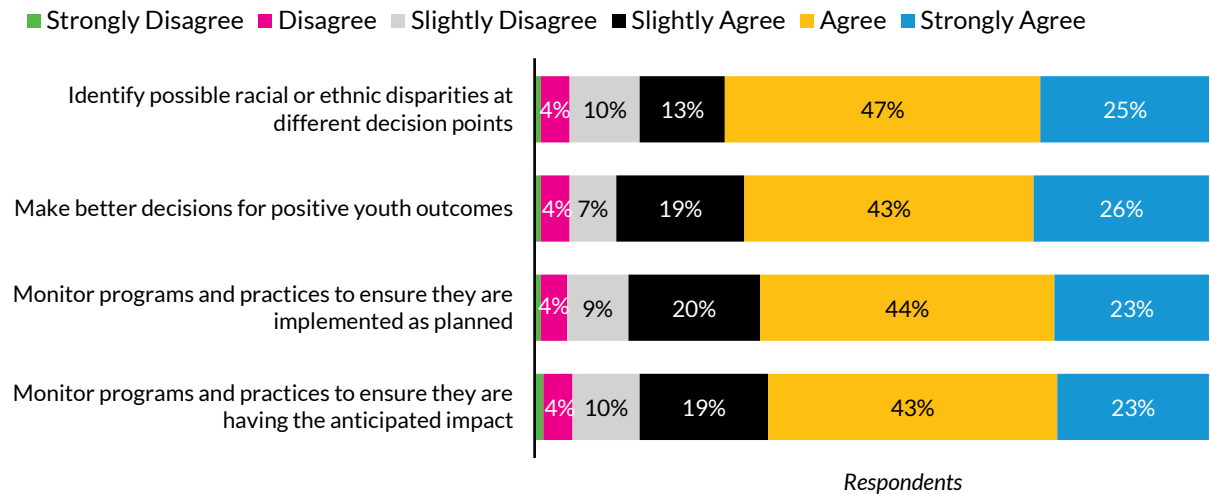
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## Leadership

Juvenile justice leaders, including juvenile probation chiefs, played a critical role in connecting data to practice in three ways: by referencing data points in conversations with staff, by using data to inform decisions, and by providing staff with regular opportunities to engage with data. A broad set of JJ stakeholders involved in the deep-end reform (including staff from community-based agencies, court administrators, judges, magistrates, prosecutorial staff, and detention staff) agreed on a survey that their leadership ensured staff used data to examine disparities, make decisions, and monitor programs and practices (figure 1).

FIGURE 1

Stakeholder Agreement with Statements that Leadership Ensure Data Are Used in Certain Ways



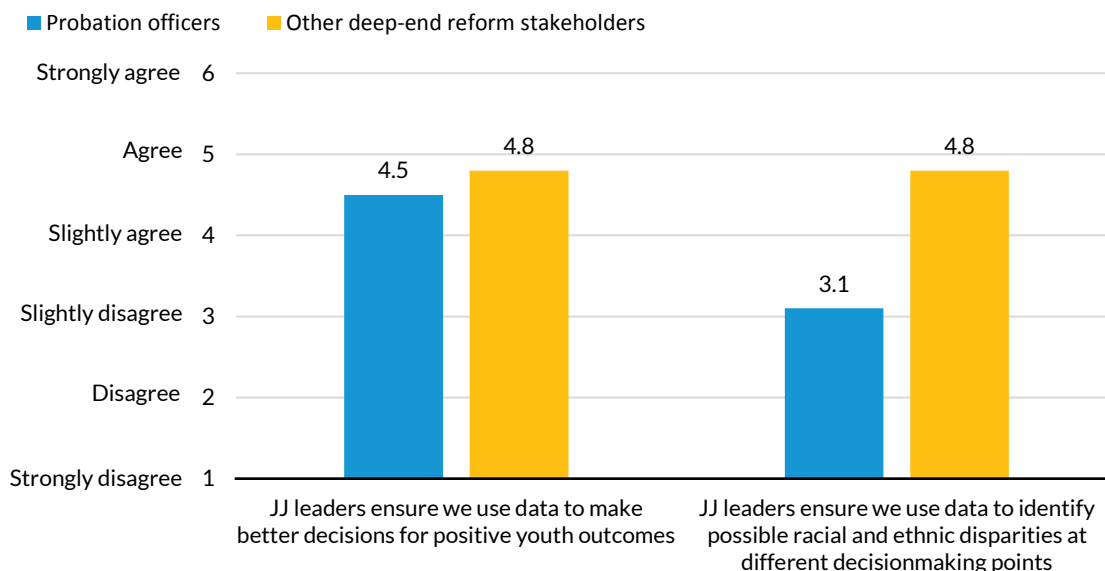
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**Notes:** Data were collected in 10 sites (Bernalillo County, Camden County, Hennepin County, Jefferson Parish, Lucas County, Marion County, Pierce County, Ramsey County, St. Louis City, and Summit County) via the Stakeholder Survey of Juvenile Probation Policies and Practices (summer to fall 2017; n=242; 79 percent response rate; these statistics omit 65 probation staff from the survey responses because similar statistics for probation staff, calculated from a different survey, are shown separately).

Probation staff had somewhat divergent views on the role of agency leadership in promoting data use. The majority of respondents to a 2018 probation survey agreed that leaders ensured they used data and research to make better decisions in the JJ system overall (figure 2). However, on average, probation survey respondents were less likely than other JJ stakeholders to agree with the statement that leaders ensured they used data to identify racial and ethnic disparities in decisionmaking.

FIGURE 2

Probation Officer and Stakeholder Survey Results on Data Use for Decisionmaking

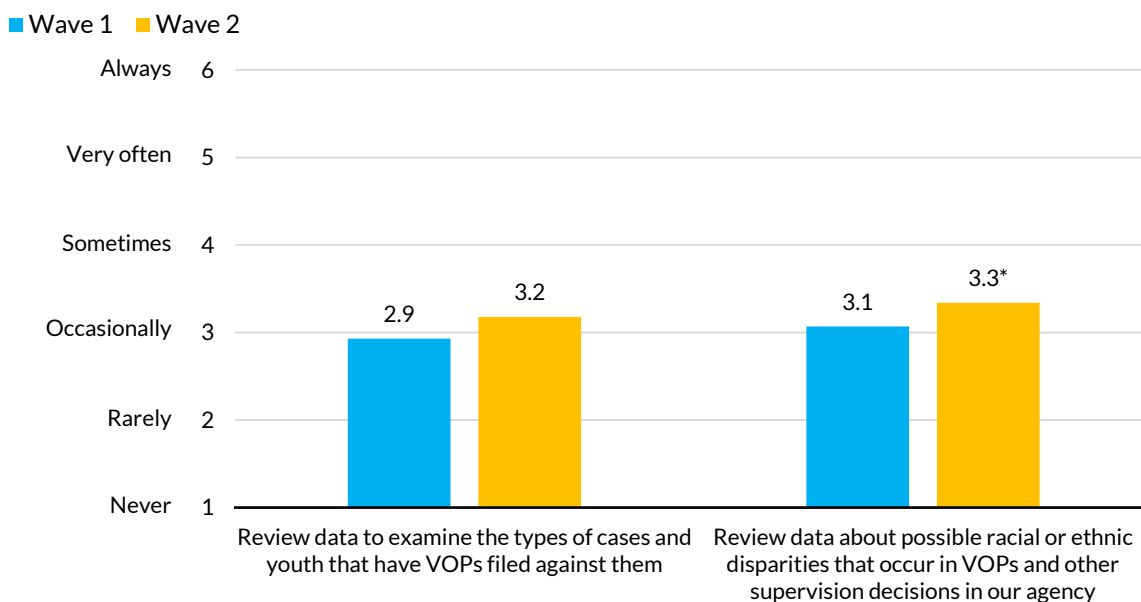


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**Notes:** Blue bars represent deep-end reform probation staff. Data were collected in 12 sites (Bernalillo County, Camden County, Dakota County, Franklin County, Hennepin County, Jefferson Parish, Lucas County, Marion County, Pierce County, Ramsey County, St. Louis City, and Summit County) and are from the second wave of the Probation Policies and Practices survey (2018,  $n=332$  [75 percent response rate]). Yellow bars represent deep-end reform stakeholders other than probation staff. Data were collected in 10 sites (Bernalillo County, Camden County, Hennepin County, Jefferson Parish, Lucas County, Marion County, Pierce County, Ramsey County, St. Louis City, and Summit County) and reflect one wave of the Stakeholder Survey of Juvenile Probation Policies and Practices (summer to fall 2017;  $n=242$ ; 79 percent response rate; these statistics omit 65 probation staff from the survey responses because similar statistics for probation staff, calculated from a different survey, are shown separately); “JJ” = juvenile justice.

Beyond the use of data by JJ system leaders, the Foundation encourages sites to adopt data-driven practices among probation staff of all levels. When asked about their own practices using data, probation staff reported occasionally reviewing data to examine probation violations, the frequency of which did not change (figure 3). Two years after first being asked, probation staff reported significantly more frequent use of data about possible racial or ethnic disparities that occur in violations of probation cases, or other supervision decisions, than they had during the initial survey wave.

**FIGURE 3**  
**Frequency with Which Probation Officers Use Data Over Time**



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**Notes:** Blue bars represent deep-end probation staff Wave 1 responses; yellow bars, their Wave 2 responses. Data were collected in 12 sites (Bernalillo County, Camden County, Dakota County, Franklin County, Hennepin County, Jefferson Parish, Lucas County, Marion County, Pierce County, Ramsey County, St. Louis City, and Summit County). Two waves of the Probation Policies and Practices survey (2015–2016,  $n=379$  [72 percent response rate]; 2018,  $n=332$  [75 percent response rate]) in 12 sites.

VOP = violation of probation.

\* =  $p < 0.05$

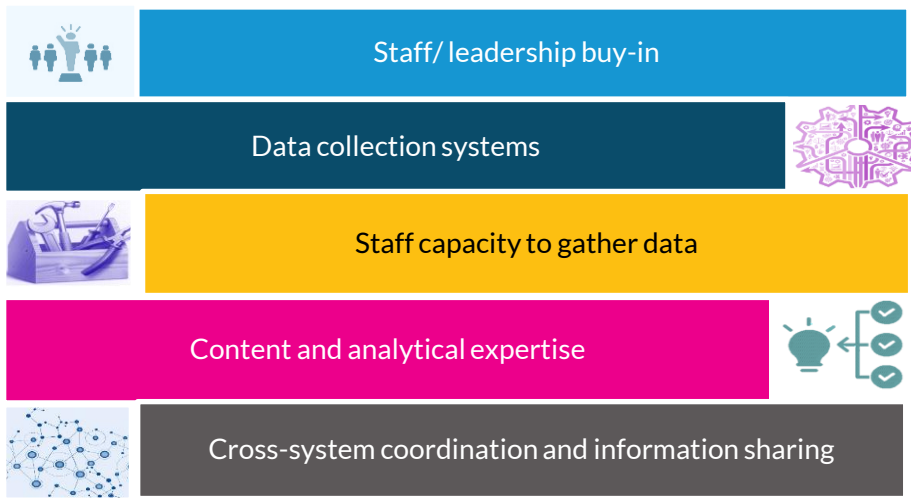
## Deep-End Takeaways: What Factors Facilitated or Impeded Data Activities?

Despite the central focus of the deep-end reform on data and the Foundation-supported TA, many stakeholders faced barriers to using data effectively and efficiently. Based on observations of deep-end activities and staff interviews, we identified five factors that facilitated or impeded activities in sites around data capacity and data use (figure 4). When engaging in deep-end reforms, stakeholders from communities and agencies might consider these factors when assessing their existing data capacity.



FIGURE 4

**Factors Influencing Data Capacity and Data Use in Deep-End Sites**



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**Staff/Leadership Buy-In**

Building support among leaders and staff for engaging with data—and building the capacity to do so effectively—is not always easy. We identified five main factors that facilitated buy-in for using data to guide practices: (1) clear messaging from leadership that accurate and comprehensive data (disaggregated by race and ethnicity) and data entry were a priority, (2) having a data champion or an active data workgroup, (3) producing and sharing data demonstrating changes over time, (4) providing training on data use and best practices, and (5) offering opportunities for staff to access and engage with data (such as data walks). Leadership also faced challenges generating buy-in. Such challenges included data analysts located in different departments who were unaware of deep-end priorities, stakeholder disagreement about data quality or comprehensiveness, limited access to data (particularly for direct service staff), and perceptions among some staff that deep-end data requirements were burdensome and did not capture the relationships between staff and youth.

**Data Collection Systems**

Data are only useful if the people who need them to make decisions can access them. Sites that improved the capacity of their data collection systems did so in multiple ways. Some invested in unified information management systems that allow for analysis of youth characteristics at key decision points. These systems included automatically generated reports that staff at many levels could access. In other sites, stakeholders identified and developed program-specific metrics that fed larger information management systems. Some stakeholders also incorporated data into grant writing (which can in turn generate additional resources to support growing system capacity). Common challenges to data collection system capacity included an inability to collect basic justice information or calculate simple

metrics (such as out-of-home placements or placements owing to violations), using data systems that could not easily create accessible automated reports, having data systems designed for case management rather than detailed or longitudinal analyses (that is, following a youth over time), not being able to disaggregate data by race and ethnicity, and having limited resources to devote to the development of new systems.

## **Staff Capacity to Gather Data**

Collecting high-quality data is a necessary precursor to using data to drive practices and decisionmaking. To enable staff to collect and enter reliable data, sites provided trainings on best practices for collecting and entering data and empowered staff to appreciate the utility of the data they were asked to enter and use it to inform their own practice. Challenges in this area included staff and leadership turnover, staff considering other parts of their jobs more important than data-specific tasks, and fragmented data and information systems that make data collection burdensome.

## **Content and Analytical Expertise**

A second dimension of data capacity and data use is a jurisdiction's ability to understand the content of its data and use appropriate methods to analyze them. Factors facilitating content and analytical expertise included having full-time staff dedicated to JJ data coordination, accessing external TA providers (such as the National Council on Crime and Delinquency or local universities) to bolster data analysis capacity, receiving training on evidence-based best practices, and having access to Foundation experts. Stakeholders encountered three challenges with this dimension: (1) not having staff with the capacity or training to interpret and apply data analyses, (2) having staff with great analytic skills but limited expertise in the JJ system and court processes (making it difficult to collect the right metrics), and (3) struggling to agree on common definitions for key metrics (such as out-of-home placements).

## **Cross-System Coordination and Information Sharing**

Juvenile justice systems often include multiple agencies, and having high-quality data that these stakeholders can share is critical to understanding how people move through the system. Stakeholders facilitated cross-system coordination by sharing a data entry and management system across agencies, regularly sharing results and progress across agencies and with community partners, and tailoring findings to resonate with intended audiences. However, stakeholders also faced multiple challenges to system coordination. In some sites, partner service providers had limited data capacity, fragmented systems, and disparate data collection practices that resulted in poor data quality. Moreover, agency data in some sites were organized by decentralized data authorities rather than one centralized person or unit, making access and linkages difficult. In many sites, case processing data were not linked to postadjudication data, and integrating these data systems required significant time and resources. To integrate data systems across agencies and programs, it might be difficult to find a single data system that meets the needs of all agencies and providers. Lastly, in many sites, stakeholders had varying

comfort with and commitment to using data, and building consensus about the definitions of key measures (such as out-of-home placements) took time.

Building data capacity, analyzing data, and using data strategically to garner support and buy-in within agencies were major focuses of deep-end reform. Although this process was not always easy, many jurisdictions found that investments in data infrastructure and capacity benefited their overall reform efforts.

## Notes

- <sup>1</sup> Quotes from stakeholders throughout this brief are drawn from interviews or open-ended comments from surveys of stakeholders conducted by the evaluation team, August 2014 to August 2018.
- <sup>2</sup> The Foundation requires sites to report on several performance measures—including the number of referrals, dispositions to probation, commitments to state custody, out-of-home placements, felony filings, youth tried as adults, and average daily population in detention—disaggregated by race, ethnicity, and gender. More details about these measures can be found at <https://www.aecf.org/work/juvenile-justice/reducing-youth-incarceration/deep-end-tool-kit/>.
- <sup>3</sup> The evaluation team assessed progress on data activities based on sites' reported changes to policy and practice, and on the results of a survey of justice system stakeholders (e.g., court staff, probation officers, and district attorneys) and two surveys of site probation staff.

## Reference

Vera Institute of Justice. 2013. *Using Data to Guide Deep-End Juvenile Justice Reform: A Foundational Manual for Local Jurisdictions*. New York: Vera Institute of Justice.

## About the Author

**Johanna Lacoë** is research director of the California Policy Lab at UC Berkeley. She is a policy scholar with expertise in criminal and juvenile justice, education, employment, and housing. She designs and leads experimental and quasi-experimental research studies. Her work includes evaluations of policies and programs aimed to prevent neighborhood violence, improve school safety and discipline, divert felony cases from formal court processing, and prepare individuals reentering society after incarceration for employment. Before joining the California Policy Lab, she was a senior researcher and deputy director of Justice Research and Analytics at Mathematica.

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