NNIP'S GUIDE TO STARTING A LOCAL DATA INTERMEDIARY

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CHAPTER 1: INTRODUCTION

The National Neighborhood Indicators Partnership (NNIP), established in 1996 and coordinated by the Urban Institute, is a peer learning network of local organizations that share a mission to improve low-income neighborhoods by empowering residents and local institutions to use data in their community building and policymaking. NNIP believes that giving local stakeholders access to neighborhood-level information and data, and building their capacity to use those data, will lead to better program and policy decisions.

PURPOSE OF THIS GUIDE

This guide describes the role a local data intermediary plays in the community, the process of identifying a home for a local data intermediary, and how to think about its initial fundraising and activities. The guide is intended to help stakeholders think about the broader environment of community information as well as understand the technical and business aspects of setting up a local data intermediary. The advice is based on the NNIP model and draws from the experiences of NNIP's local partners over the past 20 years.

The guide is designed for organizations or individuals who are interested in becoming local data intermediaries and for foundations or nonprofit organizations that are interested in bringing this capacity to their communities. In some cases, organizations learn about NNIP when they are already well on their way to fulfilling the role of a local data intermediary. In other cases, civic leaders need to first identify an institutional home and develop new capacities. Current NNIP partners may find the guide valuable as they raise, maintain, and add to funds for their data intermediary activities. In addition, many of the guide's lessons may be relevant for local and national organizations that act as data intermediaries for a particular user group or for only one issue.

About a third of active NNIP partners are in university research centers, a third are nonprofits, and the remaining third are a mix of other institutional forms and collaborations. NNIP partners demonstrate that the data intermediary's type of institution is less important than the role it plays in its community. The local data intermediary and its activities should reflect the needs of and opportunities within its community. The work is not easy: the intermediary role requires a long-term commitment to fostering community participation, building relationships, and adapting to

changing circumstances. The NNIP network has shown that the payoff can be considerable, as demonstrated by Cowan and Kingsley (2010) and Kingsley, Coulton, and Pettit (2014), as well as by the projects described in box 2.1.

STRUCTURE OF THIS GUIDE

The guide's recommendations for developing a local data intermediary are based on 20 years of NNIP partner experiences and peer exchanges. It will help potential intermediaries to think about the broader economic and social environment as well as the technical and business aspects of setting up a local data intermediary. Although the chapters are sequential, the process is not linear, and users of the guide may find that reviewing sections over time is more helpful than reading it from start to finish. The relevance of each topic to a particular community will also vary depending on the local community information environment and stage of development.

Chapters 2 and 3 contain useful information for any organization that aspires to be a local data intermediary, as well as for community leaders interested in shepherding the process to establish a local data intermediary. Chapter 2, "Local Data Intermediary Activities and the NNIP Model," describes the core activities of a local data intermediary and relates them to the distinct characteristics of the NNIP model. In chapter 3, "Deciding What's Right for Your Community," readers learn how to develop a local data intermediary that makes sense for their community, including finding an appropriate institutional home, assessing the local data environment, and building support for the concept. This chapter provides guidance tailored to the most common starting points for communities interested in NNIP. Chapter 4, "Funding a Local Data Intermediary," discusses the finances of current NNIP partners, estimates the level of support needed to start a new intermediary, and provides guidance on raising funds to establish and maintain an intermediary. Beginning with chapter 4, the guide is intended for the actual or potential local data intermediary, although other audiences may still benefit from reviewing the information. Chapter 5, "Getting Started," elaborates on the technical activities of local data intermediaries and provides advice on important business strategies. Chapter 6, "Continuous Learning," explains the need for and importance of learning from and adapting to experience. Topics include using performance management tools, being aware of evolving environments, and using the power of connections with outside groups and networks, including the NNIP network.

Rather than go into detail about broad subjects like strategic planning or proposal development, the guide emphasizes aspects of those topics that are unique to local data intermediaries. It also references many documents from NNIP and other organizations that are examples of intermediary program development or that have more in-depth coverage of related topic areas. Provided at the end of each chapter is a list of online resources and their full web addresses. The electronic version of this guide includes hyperlinks and is periodically updated.

NNIP is always learning from the experiences of its partner organizations, which operate in different local contexts and information environments and are continually evolving. The authors of this guide welcome readers' feedback on ways to improve the guide or suggestions for including technical assistance materials for local data intermediaries.

CHAPTER 2: LOCAL DATA INTERMEDIARY ACTIVITIES AND THE NNIP MODEL

The first step for any community interested in establishing a local data intermediary is to learn what activities these intermediaries generally undertake. NNIP provides a specific model of a data intermediary as discussed in Kingsley (1999) and Kingsley, Pettit, and Hendey (2013). With an understanding of the potential value of a local data intermediary and the NNIP model, community leaders will be better equipped to take on the steps in chapter 3 of assessing their own local data environment and creating a plan that fits their community needs.

WHAT LOCAL DATA INTERMEDIARIES DO

As the name suggests, a local data intermediary acts as the mediator between data and local stakeholders—nonprofit organizations, governments, foundations, and residents. Local data intermediaries are data translators, educators, conveners, collaborators, and voices for change. They use data to describe their communities, and they empower communities to use data in their activities, from community building, to advocacy and program planning, to policymaking. They aim to be a permanent, ongoing part of the community information system (see box 2.1).

NNIP has created three major categories of activities for local data intermediaries:

- assemble, transform, and maintain data
- disseminate information and apply the data to achieve impact
- use data to strengthen civic capacity and governance

Assemble, Transform, and Maintain Data

The first responsibility in this category of intermediary activities is to acquire and assemble data. Typically the data intermediary acquires data from publicly available sources (e.g., the American Community Survey) and local administrative records. Data are acquired over time, and new data sources are added incrementally, with the goal of building an inventory of data (Coulton 2007). For most partner organizations in the NNIP network, local administrative data can be obtained through both informal exchanges and formal data-use agreements negotiated with city, county, and state agencies.

BOX 2.1

What Effects Can a Local Data Intermediary Have?

Changing Policies
Analysis by the Institute for Urban Policy Research (University of Texas) that showed dramatic disparities in well-being between North and South Dallas spurred civic leaders, in collaboration with a local newspaper, to set up a highly publicized program to lessen those differences and to quantitatively monitor the program's performance over several years. A Pulitzer Prize was awarded to the Dallas Morning News for its part in that effort (Kingsley, Coulton, and Pettit 2014).

In the early 2000s, ex-offenders in Rhode Island were not eligible to apply for food stamp (Supplementary Nutrition Assistance Program) benefits. The Providence Plan presented data showing that the rule prevented a surprisingly large number of low-income children from receiving food stamp aid. The program's presentations are generally credited with being the catalyst that led to the subsequent action by the state legislature to remove this restriction on eligibility (Kingsley and Pettit 2011).

Targeting Investments and Strategies
Neighborhood Nexus worked with DeKalb County, located outside Atlanta, Georgia, to review several data sources on the housing market. The project identified neighborhoods where limited resources from the federal Neighborhood Stabilization Program could be used most efficiently (Rich, Carnathan, and Immergluck 2009).

The Center on Urban Poverty and Community Development at Case Western Reserve University in Cleveland, Ohio, maintains unusually rich, regularly updated data on properties, including information regarding foreclosure status, vacancy, property taxes, planned city actions, and other circumstances. The database has been the essential basis of sound strategies for individual properties in Cleveland's highly regarded neighborhood-stabilization planning, for the city's program to hold all banks and investors accountable for the condition of their properties, and for the granting of authority to establish a local land bank (Nelson 2014).

Empowering Communities
The Homewood Children's Village in Pittsburgh, Pennsylvania, an initiative like the US Department of Education's Promise Neighborhoods, faced a substantial problem with distressed and abandoned properties that were unsafe for children to be around. The staff at the University Center for Social and Urban Research at the University of Pittsburgh worked with residents and staff at Operation Better Block, a community-based organization, to design a property survey based on the county assessor's data. The community used the survey results to identify the worst properties and to mount a campaign to get the city to address the large number of code violations (Teixeira and Wallace 2010).

More local governments are publishing raw local administrative datasets on open data portals, but those portals contain only a subset of data sources of interest to a data intermediary. Moreover, some data are confidential, such as data relating to social services, health care, and school performance, and they will never be available in their raw form on open data portals. Data intermediaries have played a role in making such data accessible for research and in creating aggregate statistics for public consumption of information that is based on protected data.

The second activity in this category involves processing raw administrative data into formats that are easier for a variety of stakeholders to use. Working with raw data is challenging, even for experts, and cleaning and creating usable indicators can take considerable time and resources. Local data intermediaries add value to raw data, for example, by calculating rates for neighborhoods or by merging data from multiple data sources to create more complex indicators. But even seemingly simple indicators, such as the number of foreclosures of owner-occupied single-family homes, often require the merging of two or more data sources. With a local data intermediary to create such an indicator, housing counselors and local governments can better tailor their interventions.

The third activity of local data intermediaries involves regularly updating the datasets they have compiled. Over time, they build up substantial knowledge about the reliability of the data, the processes used to create the data, and the purposes for which the data are best used. Intermediaries use that knowledge to create and improve their file documentation and data transformation processes. Local data intermediaries can also serve as an archive for data. In some cases, local governmental agencies regularly overwrite administrative data. A local data intermediary can perform a vital function by preserving each file, thus enabling the analysis of trends in individual properties or neighborhoods. Data intermediaries also build and maintain relationships with data providers. Keeping these relationships alive is critical to maintaining access to the data, establishing trust with the data provider, and understanding changes that agencies make to the data file over time.

Disseminate Information and Apply the Data to Achieve Impact

After the raw data have been assembled and transformed, local data intermediaries make the data available to the community in various ways. Disseminating information through a community information system can include publishing static displays such as maps and statistical profiles for individual neighborhoods and providing structured data files that users can download. Systems may have interactive online displays that allow users to specify how they

want the data presented, with the form and content of the maps or charts they want exhibited in real time. Local data intermediaries also do some analyses themselves, using more traditional forms of dissemination, including hard-copy reports and presentations to stakeholders in briefings, testimony, or public forums.

The most important form of dissemination involves data intermediaries working directly with local stakeholders to use the data to influence policy and achieve the community's desired goals. Local data intermediaries work with a wide range of local stakeholders: government agencies, city councils, community foundations, nonprofit service providers, hospitals, universities, neighborhood associations, and community development corporations. The intermediaries can help stakeholders identify emerging issues; efficiently target resources and investments; and analyze local conditions, programs, and policies. Intermediaries also use the data to motivate disparate stakeholders to see solutions they had not recognized before and to open doors for them to work together on a common agenda. Finally, they support longer-term endeavors, such as helping stakeholders use data to inform the design, program management, and evaluation of comprehensive community initiatives.

Use Data to Strengthen Civic Capacity and Governance

Local data intermediaries cultivate the local capacity for informed action. Their contribution includes enhancing the data capacities of other local institutions and promoting a culture of learning and collaboration. For example, they provide general advice, technical assistance, and training to resident leaders or local government agency and nonprofit staff members to help them be savvy users of information. Local data intermediaries also may help agencies that generate administrative data learn how they can improve the quality and usefulness of their own data and information systems. Most local data intermediaries involved in NNIP run help desks where local groups can call in and get direct hands-on help with data tasks. Some NNIP partners provide formal or informal training on basic data concepts, such as how to understand rates and margins of error.

Local data intermediaries should play a prominent role in developing a community among local stakeholder organizations to promote the effective use of data in decisionmaking. For example, the intermediary may convene regular meetings in which all participants can share innovative applications, identify gaps in local practices and ways to address them, and build a constituency for productive data efforts, such as local governments' open data portals. Local data intermediaries can also help foster collaboration between sectors—government, business, nonprofit, and philanthropic—and the emerging civic technology community.

THE NNIP MODEL

Begun in 1996, NNIP is a peer network of local data intermediaries that is operated by the Urban Institute. It was formed by six local organizations that saw a need for neighborhood-level data to inform local decisionmaking. These founding organizations believed that by democratizing data, they could give residents and community organizations a stronger voice in improving their neighborhoods. A full history of NNIP and documentation of the lessons from the network is available in *Strengthening Communities with Neighborhood Data* (Kingsley, Coulton, and Pettit 2014).

Three core functions emerged from this early work to make up the NNIP model. These functions still govern what it means to be an NNIP partner today:

- building and operating an information system with recurrently updated data on neighborhood conditions across topics in the local area
- facilitating and promoting the direct, practical use of data by community and government leaders in community building and local policymaking
- emphasizing the use of information to build the capacity of institutions and residents in distressed neighborhoods

Because many kinds of local data intermediaries exist, recognizing these three functions of the NNIP model is important for understanding the guidance offered here.

The first function of the NNIP model, building and operating an information system, has three elements. First, having an information system with neighborhood-level data is essential, because citywide averages rarely represent the range of conditions in neighborhoods. Data may show important differences across distressed neighborhoods that require different policy solutions. In this context, the word *system* refers to a group of datasets that have been cleaned and transformed into indicators. (*System* does not imply that all the data are stored in a single database.) Establishing the system could be accomplished in a variety of ways by using statistical and data management software.

A second key element of the information system is the collection of data covering multiple topics, such as student performance, crime, public assistance, and housing markets, in a one-stop shop for users. Nonprofits, funders, residents, and agencies can go to one place to find the information they need rather than having to identify each source of the original data and then establish relationships with each of the organizations responsible for the data. Having data on a

range of topics encourages users to look more holistically at neighborhood issues and the solutions that might be needed, thus reducing the fragmentation that often happens in planning and delivery of services.

The third element of the information system ensures that the data system evolves as part of the information infrastructure in a community. Maintaining the system over time—adding new years of data to existing datasets and continuing relationships with data providers—reduces the cost of new work and allows the NNIP partner to respond quickly as new situations emerge. Knowing the trajectory of a neighborhood is as important as understanding current conditions, and this is possible only when data are collected over multiple years.

The second function of the NNIP model, facilitating and promoting the direct, practical use of data, reflects the early NNIP partners' motivation and mission to allow stakeholders to have practical use of local data. This function implies going beyond providing data that can be downloaded on a website (which is in itself a worthwhile service). NNIP partners serve many government and community stakeholders, and having many types of users for the data is both more efficient and contributes to the effort's sustainability. NNIP partners work with their local governments and community groups, providing help that ranges from answering quick questions about data to offering long-term support for action coalitions or place-based initiatives. Several of the partners also create and maintain community indicator projects (see box 2.2).

Finally, the third function of the NNIP model, emphasizing the use of information to build capacity, supports building the capacity of institutions and residents in low-income neighborhoods to use local data to improve their communities. The central tenet of the NNIP mission is to help these stakeholders, who traditionally have lacked both access to data and the skill to use them, to use data to engage in advocacy, planning, and public debate. In this way, NNIP partners help level the playing field between the residents and community groups and the government and private sector, which generally have easier access to the data. Partners determine how to provide that support based on the local context and their own institution. Some NNIP partners may be more vocal advocates or provide direct training, whereas others collaborate with other organizations and only provide the data to support those activities.

BOX 2.2

How Does a Community Indicator Project Differ from a Local Data Intermediary?

Although their functions overlap, a community indicator project has a narrower scope and focus than a local data intermediary.

A community indicator project uses a deliberative process to select indicators that relate to local goals. The project may select indicators that assess the overall community's quality of life, or it may focus on a particular subpopulation, such as children or the elderly.

Community indicator projects may do the following:

- update the indicators recurrently (most often annually or biannually) to monitor progress
- sponsor a periodic review by stakeholders on how the community is doing
- include a narrative explaining the importance of the indicator
- be accompanied by more in-depth reports that highlight specific topics or populations
- be tied to explicit action plans to "move the needle" on certain indicators

About one-third of NNIP partners use data in community indicator projects to inform community action.

However, a community indicator project is only one of the activities local data intermediaries undertake when following the NNIP model. Even with data at the neighborhood level, a community indicator project's website does not take on all the model's recommended activities. In contrast to the narrower scope of a specific community indicator project, the most important local data intermediary activities involve proactively assisting various types of users and helping them to understand and work with the data. NNIP partners' data repositories typically contain a broader array of data than are displayed in an indicator project. That breadth of data allows the local data intermediary to be flexible in analyzing emerging policy issues, assisting with strategic program planning, and being prepared to construct new indicators when local priorities shift.

The Community Indicators Consortium provides an open network for community indicator practitioners and other interested individuals. Over the years, several NNIP partners have participated in the consortium as board or organizational members. For a discussion on the future of community indicator projects, see Warner (2014).

RESOURCES IN CHAPTER 2

- **Catalog of Administrative Data Sources for Neighborhood Indicators** (Coulton 2007)

  http://www.urban.org/research/publication/catalog-administrative-data-sources-
  neighborhood-indicators

- **Online Guide to Data Help Desks for NNIP Partners**

  http://www.neighborhoodindicators.org/library/guides/data-help-desks-nnip-partners

- **A Full History of NNIP and Network Lessons in the Book** *Strengthening Communities with*
  Neighborhood Data (Kingsley, Coulton, and Pettit 2014)

  http://www.urban.org/strengtheningcommunities

- **NNIP Partners with Community Indicators Projects**

  http://www.neighborhoodindicators.org/nnip-and-community-indicator-projects

CHAPTER 3: DECIDING WHAT'S RIGHT FOR YOUR COMMUNITY

Community leaders who want to develop and sustain the data and analysis capacities that local data intermediaries can provide face a serious undertaking. Yet the process can be rewarding, and it can result in new capacities that will become important long-term components of their civic infrastructure. As this guide shows, the NNIP experience includes many different successful institutional arrangements and adaptations to a variety of local environments. This chapter first describes how a community can get organized to explore establishing a data intermediary and then provides guidance on each of the three key activity areas needed to move from interest to a concrete plan.

GETTING ORGANIZED

To succeed in establishing a local data intermediary, communities need to move from a general interest to a concrete planning process. To do this, they will need to identify members of a planning team to move the process forward and understand the three major activities so they can create a customized plan adapted to the local context.

Forming the Planning Team

Ideally, a community should form a planning team to shape and carry out a transparent and politically credible planning process. The team can be a formal or informal group, but the process should include (1) an organization or individual who is accountable for a timeline and tasks, (2) roles and responsibilities for stakeholders, and (3) a transparent decisionmaking process. Community leaders should be given opportunities to collaborate and provide input into the scope of work for the local data intermediary. These leaders may come from nonprofit organizations that are in need of local data intermediary services, local foundations, and government agencies, as well as institutions that already or could potentially provide data intermediary services. This process can build long-term support for the data intermediary by developing a sense of ownership among stakeholders. In addition, funders who are involved in core planning efforts will be aware of the validity of the process, making it easier for them approve future funding proposals.

Another factor to consider when assembling the planning team is the potential geographic area it will serve. Some NNIP partners concentrate their activities on the central city or county as a strategic choice or for practical reasons, such as navigating the challenges to developing relationships with multiple local governments. Other NNIP partners have been able to maintain neighborhood data for the region or selected suburbs, which is helpful to address the needs of suburban communities that may have increasing low-income populations and issues such as housing and labor markets, which tend to be regional in nature. If the intermediary may possibly operate at a regional scale, the planning team should include members with contacts outside the central city.

Engaging stakeholders in the process of establishing the planning team can potentially cultivate long-term champions for establishing the data intermediary, as exemplified by the story from Detroit, Michigan, in box 3.1. A champion is an established organization or leader in the community who will invest time and/or resources to support the data intermediary from planning to implementation. Champions are especially valuable as supporters for fundraising and as leaders who can help convene their constituencies to bring attention to the data intermediary and its value in the community.

BOX 3.1

Detroit: An Example of a Champion for a Local Data Intermediary

In Detroit, a senior official at The Skillman Foundation had been part of an interfoundation committee on comprehensive community initiatives. Representatives from the Annie E. Casey Foundation and others on that committee explained and advocated following the NNIP model as a part of the committee's work. The Skillman Foundation official contacted NNIP staff to find out more and recognized that the model was capable of guiding community development in Detroit. She introduced and promoted the concept in discussions with other civic leaders and funders in the city. After she had their basic agreement to support and participate in the process, she designed and managed a process not merely to select, but in this case create, the local institutional home: Data Driven Detroit. Along the way, she consulted NNIP staff at the Urban Institute and experienced leaders of other NNIP partners for advice and support.

Understanding the Three Key Activities

Three major planning activity areas are fundamental to establishing a local data intermediary, and the process of completing them is not linear. The planning team will need to decide how

this work should be implemented given the local environment. The three activities are listed below and discussed in the sections that follow.

- *Identifying an institutional home.* Local data intermediaries can be based in single institutions, or their activities can be spread across a collaborative of multiple institutions. They can emerge from existing institutions, or a new organization can be created to serve as the local data intermediary. This section explores how institutional homes or coalitions are identified, the characteristics of local data intermediary organizations that work successfully, and potential types of institutions.

- *Assessing the local data environment.* Successful local data intermediaries should add new data and analysis capacities to meet the community's needs and complement data and services from existing organizations and initiatives. This section explores how intermediaries assess their local data environment to identify data users and their needs, the organizations that provide data services, and funding sources for local data initiatives.

- *Putting the plan together.* This section discusses considerations as the planning team builds off of the exploration of the data intermediary home and assessment of the data environment. Activities include writing a concept paper about the proposed local data intermediary, identifying quick-win projects, and expanding communications.

Customizing Planning to a Community's Starting Point

One major factor determining the specific elements and execution of the three key activities will be whether the team has already settled on an institutional home as the lead candidate or whether they need to identify potential institutional homes.

If a promising institutional home has been identified

If a candidate organization has expressed interest in becoming a community's local data intermediary or it has been suggested as the home by another set of stakeholders, the planning team needs to ensure that the candidate organization is a viable choice. The planning team needs to assess which services the candidate organization is already performing, and for whom, using the list of activities that are performed by a local data intermediary (see chapter 2). Next, using the list of characteristics described below in "Characteristics of Local Data Intermediaries," the planning team can determine what data and analysis capacities need to be created or strengthened and whether these should be built within the candidate organization or achieved

by partnering with another organization. This assessment is one element in assessing the local data environment (see below).

Indianapolis, Indiana, and Pittsburgh, Pennsylvania, are examples of cities that started the process with a promising institutional home already identified. In the early 1990s, the Polis Center at Indiana University–Purdue University Indianapolis started to build what would become a system with neighborhood-level indicators from multiple local administrative data sources. From the start, they undertook the project jointly with the local United Way, which acted as a partner, champion, and funder and helped them gain additional support from other funding sources. At the University of Pittsburgh, the University Center for Social and Urban Research, an established institution that conducts community research, recognized that it could accomplish its goals more effectively if it could acquire and maintain multitopic neighborhood-level data. The center began to introduce data intermediary functions locally and built support for their work among local civic leaders and funders.

If no candidate organization has been identified

When no candidate organization has been identified, a primary goal of assessing the local data environment and needs is to select the organization that best fits the community as the institutional home or to determine whether a collaboration of institutions will serve more effectively as the local data intermediary.

In some cases, such as occurred with [Data Driven Detroit](#) (box 3.1) and [The Data Center](#) in New Orleans, Louisiana, the planning team might decide that a new organization needs to be created. In other cases, the planning team might begin a collaborative process to identify an organization that is suited to providing data services following the NNIP model.
In an example of the second type of situation, the local site of the Local Initiatives Support Corporation in Houston, Texas, was committed to having a local neighborhood data intermediary to support their revitalization activities. After consulting with Urban's NNIP staff, they convened a group of stakeholders to learn more about the NNIP model. At the time, the consensus was that no one institution was performing all the functions described by NNIP. After a change in leadership at the Kinder Institute for Urban Research at Rice University in 2014, Kinder took the lead in exploring the local data environment and in partnering with Houston LISC to hear from community groups about their data-related needs. With a supportive funding environment, Kinder hopes to expand the services they offer in 2016 to include fundamental local data intermediary functions, such as collecting neighborhood data in multiple domains and offering technical assistance to nonprofits to support activities to improve neighborhoods.

IDENTIFYING AN INSTITUTIONAL HOME

With a common understanding of the activities required and a process in place, the planning team is ready to begin to identifying the institutional home for the local data intermediary. The experiences of NNIP partners have shown that no one ideal institutional type works for all communities. Rather, a local data intermediary needs to reflect the local context and be structured to best meet the needs of the community.

Local or regional politics—or the subtler politics of institutional and personal relationships—can be stronger drivers in the selection of an institutional home than any thoughtful assessment of organizational capacities or cost-effectiveness. Communities that already have a good candidate organization or collaborative institutions may still have to create a new institution that will be neutral territory and provide a clean slate. Community stakeholders may not be willing to financially support a complicated collaborative model or may not trust a local data intermediary that has close ties to another stakeholder.

The trust and support of community leaders are critical to a local data intermediary's ability to meet its goals. Politically driven institutional choices can be a strong functional model as long as all community leaders support the arrangement and as long as local data intermediary activities are carried out by an entity or entities with the characteristics described next. The remainder of the chapter describes potential institutional types for local data intermediaries and options for housing the local data intermediary.

Characteristics of Local Data Intermediaries

NNIP partners' experience over the past two decades has revealed a variety of characteristics that are significant for success as a local data intermediary. Each institution should bolster these characteristics where they are weakest and, as the institution evolves, continue to strengthen all of them. In addition to aligning with these characteristics, institutions can bring the most value to their communities by fully and publicly committing to take on the activities of a local data intermediary for the long term, not just for a short time or for a specific project.

Positive and collaborative working relationships with a wide range of local institutions. The organization and staff of a local data intermediary must be able—and be widely *perceived* as being able—to work collaboratively with neighborhood and nonprofit organizations, local government, and other community leaders. Community leaders in all NNIP partner communities have placed a high value on collaboration. For example, a university research center that rates

high in technical capacity is not suited for the local data intermediary role if it has a track record or reputation of not working collaboratively with and in the interests of community groups. Although trust can be built over time by a new and effective local data intermediary with no community history, a poor record or reputation can stand in the way of developing that trust and building the coalition needed to support this work.

Reputation for neutral information and data. A local data intermediary must be trusted to use data in an objective and unbiased manner that is in the public interest and not aligned with any particular political faction in the community. This neutrality is critical for providers of administrative data and end users of the information. A reputation for using data to attack agencies' programs and policies will also make negotiating for access to their data difficult if not impossible. Some communities have been unable to get a local data intermediary operating because no local institution capable of doing the work was trusted to be objective. If bias is suspected, the data likely would not be used often or referenced, limiting its influence or rendering it irrelevant.

Leadership. A local data intermediary needs a strong leader, one who is able to direct the technical, policy, and community-building aspects of the job and to function as an influential participant in the local public policy arena. Succeeding at this role while in the public spotlight is an extremely difficult and demanding assignment that requires a leader experienced in building consensus among competing interests and viewpoints. It is also helpful, particularly in the early stages of developing data intermediary functions, for a leader to have demonstrated technical competence in data management and security, integration and analysis, and communication and use, whether or not she or he will ever actually perform any of those day-to-day tasks. Leadership is needed to convince community leaders to support the institutional home for the local data intermediary and to bring stakeholders together to collaboratively use the data and services of the data intermediary when making decisions about public policy. Finally, the leader must be an effective fundraiser who can articulate the value of the local data intermediary.

Staff skills and capacity. The activities of a local data intermediary require technical staff members with capabilities that include data management, analysis, and visualization; geographic information system (GIS) and spatial analysis; and web development. Data providers also need to be able to trust that intermediary staff will handle data carefully, interpret data thoughtfully, and keep confidential and private information secure. Staff members also must be able to translate data and policy for diverse audiences, conduct community engagement activities, and provide technical assistance to a range of stakeholders, including

resident and community groups, foundations, and local agencies. These skills are necessary to build and operate a neighborhood information system and facilitate its use in the public interest. Existing institutions without these staff skills need to have a plan for developing these skills internally or find other organizations locally to partner with that will supplement their capacities.

Sustainability. A local data intermediary needs to continuously build institutional strength and financial support to sustain operations over the long term. By establishing ongoing institutional capacity, the local data intermediary shows its stakeholders that it will not be acting only in response to short-term issues or alliances but will have the long-term interests of the community as its priority. Local leaders are more likely to use data intermediary services when they have confidence that the institution's rich data repository, technical expertise, and strong analytical skills will be there when they need them, without having to start collecting new data every time they need a new study. In addition, funders may be more likely to invest when they know that the capacity will be in place over the long term.

Mission fit. Local data intermediaries that are a part of another institution, such as in a research center in a university or as part of a multipurpose nonprofit, need to contribute to the overall mission of the organization, or the intermediary's long-term sustainability can be threatened. If the local data intermediary is not a priority, its infrastructure can be difficult to sustain, and fundraising efforts to support new data and analysis capacities for the community may compete with the institutional home's interests. In the case of the Community Research Institute at Grand Valley State University in Grand Rapids, Michigan, for example, the local data the Community Research Institute collects and maintains, and its tools and technical assistance, serve as a research resource for faculty and students. The center also provides internship opportunities for students to learn new skills. Internal demand for the data and related services and the data intermediary's alignment with the organization's mission make the data intermediary essential and help to sustain it through funding challenges and leadership changes.

At the Urban Strategies Council in Oakland, California, local data intermediary capacities are integrated with and used across core programs in the organization. Local data and analysis are essential to the council's mission: an analysis of foreclosure data has been used by resident activists to influence policymakers, resulting in the requirement that investors register their properties with the city and keep those properties up to code. In this example, the policy, community organizing, and data activities are fully integrated and support the organization's mission.

Potential Types of Institutions

Local data intermediaries have been successful in university centers, in multipurpose nonprofits, in nonprofits that focus solely on data and information services, and in large and small institutions (see box 3.2). No one alternative is intrinsically better than any other, and different types and sizes of institutions have benefits and drawbacks.

Universities or regional planning agencies are viewed as permanent institutions in a community. Their embedded nature may make them suitable institutional homes provided they retain commitment to supporting their surrounding community. A university can offer additional advantages, such as giving the data intermediary access to student assistants to support day-to-day operations. On the other hand, some universities have a contentious history with their surrounding neighborhoods, and building the community trust needed for this work may be impossible, no matter how well intentioned.

Nonprofit organizations are generally trusted to have the communities' interests in mind. They may have closer ties to neighborhood groups and foundations than their academic counterparts. They may also be more agile than universities, without the bureaucratic requirements or policy restrictions that may be evident in an academic institution.

In general, a larger institution (university based or nonprofit) may be well positioned to contribute overhead, staff, and in-kind support to its local data intermediary over the long term. However, large institutions can also be challenging environments for performing local data intermediary functions if high overhead costs are attached to projects, or restrictive oversight limits which projects are chosen.

Rarely do local government agencies operate as data intermediaries. Government agencies may not be able to perform the full range of data intermediary functions, such as providing technical assistance to community-based organizations or supporting community-based initiatives. In addition, in some communities government agencies are seen as more likely to be responsive to current elected officials than to broader and longer-term community interests. In only two extraordinary cases have local governments been accepted as NNIP partners.

BOX 3.2

What Types of Institutions Are in the NNIP Network?

In October 2015, NNIP had 28 active partners and 3 partners that were exploring new institutional arrangements to continue providing local data intermediary functions in their communities. Generally, only one local institution is the NNIP partner, but in six urban areas, two or more organizations have joined NNIP together and share responsibility for carrying out local data intermediary activities and fulfilling the mission and functions of the NNIP model. For the active partners that are based in a single institution, the types of institution break down as follows:

- Eight are community-oriented university departments or research centers.
- Five are subunits of larger nonprofits that perform the data intermediary work along with broader community improvement or direct service missions.
- Four are freestanding nonprofits that perform data intermediary work exclusively.
- Three are local funders comprising one local operating foundation and two organizations that disburse public money to children's programs.
- One is a social enterprise (L3C).
- One is a government agency (a public health department).

The remaining partners formed collaboratives of multiple local institutions in the above categories. Two such collaboratives have one entity based in the central city (foundation or university center) and one in the planning agency for the metropolis as a whole. For more detail, the latest institutional inventory of NNIP partners is located on the NNIP website.

Many nonprofit and community efforts are affected by shifts in funders' priorities and in their own missions, and the same is true of local data intermediaries' work. NNIP partners have faced organizational transitions when they could no longer fully support the local data intermediary activities or when they had an opportunity to merge organizations or spin off a new organization. NNIP has a policy related to partners in transition, and there are several examples of partners that underwent successful transitions. Again, the right model is the one that works for a particular community at a particular time.

Options for Housing the Local Data Intermediary

In identifying an institutional home for a local data intermediary, the planning team will find three potential courses of action, depending on their starting point: (1) building local data intermediary capacities within a single existing institution, (2) building local data intermediary

capacities across a collaborative of multiple existing institutions, or (3) starting a new, freestanding institution as a local data intermediary.

Building local data intermediary capacities within an existing institution

In some communities, the choice of where to house the local data intermediary may not be difficult. The community may have a local institution that is already performing the basic functions of a local data intermediary or has the capacity to do so. However, the commitment to perform those functions is just as important. This commitment may be a given if the organization's sole mission is to provide data and analytical services to the community, but it cannot be taken for granted in the case of an organization with a diverse set of purposes. But the latter type of organization may be financially resilient and may enhance the prospect of sustainability of the local data intermediary over the long term. This potential benefit occurs only if providing local data services is a strategic priority of the institution and fits with the institution's mission.

In the experience of NNIP partners, institutions that seek to serve as a local data intermediary rarely have the full range of activities and characteristics that are expected. Most existing institutions will need to bolster their capacities, such as by hiring more staff members with analytical skills or with experience working with community groups. New staff members may be integrated into the institution's existing structures, such as an established university research center, or they may be set up as a new unit within an organization, as was the Data Initiative at the Piton Foundation in Denver, Colorado. Either way, a commitment and a plan for expanding skills and activities should be explicit when establishing the institutional home.

Building local data intermediary capacities across a collaborative of multiple existing institutions

In some cases, the right solution may be to select two or more institutions with different strengths that form a collaborative to collectively serve as the institutional home of the local data intermediary. Although this arrangement is not common among current NNIP partners, Boston, Massachusetts, and Charlotte, North Carolina, offer examples of this model.

In practice, a well-defined collaboration is needed to ensure the quality of services the stakeholders receive. With capacities spread among institutions, this structure necessitates careful planning and consensus building on the roles and responsibilities of each institution, the distribution of funding, how branding and external communication will be handled, and governance policies. Sustaining a local data intermediary can be difficult, and duplication of

work across institutions in a collaborative should be avoided if possible. Participants should also clarify how they will communicate internally, how decisions are made about what new work to pursue, and how any conflicts will be handled when they arise.

A signed memorandum of understanding or other formal document that includes all these components will provide a clear understanding from the beginning and help to maintain good relationships over time. Data intermediary work can proceed while the agreement is being drafted and finalized. The type of document may vary, because some organizations may have challenges in enacting a document that implies obligations of the institution. No matter what form of document they use, collaborating institutions must agree on the content. The process of establishing the collaborative should also demonstrate the viability and efficiency of the arrangement to funders.

Many variations of such collaboratives are possible. One institution may specialize in data development while another specializes in working with communities to help them understand and use the data. One may handle central city–focused projects while another works at the regional scale. A more technical institution may benefit from having a strong advocacy or community-based partner. Foundations may also play a role in hosting data intermediary activities. Large cities may need multiple organizations to meet the demand for local data intermediaries' contributions. Also, as in the case with a single organization, the institutions in the collaborative may need to add or strengthen their own capacities to fully develop the necessary characteristics of local data intermediaries.

Large cities may require creative thinking about coalition building because many institutions may already have various data capacities in place. A recent review for Chicago, IL, for example, concluded that the region already had many strong data-oriented institutions that could collectively perform many local data intermediary functions and that no new central intermediary entity was required. However, most institutions were fairly narrowly focused on a few specific policy domains. The resulting fragmented system made it much harder for community organizations and local stakeholders to access neighborhood data and to receive technical assistance with using that data in their work. To address these local information needs, the NNIP network suggested that the existing institutions join in a formal network that would keep all members informed of relevant new developments and would work in a coordinated way to bring together neighborhood data and assistance (Pettit and Kingsley 2013).

Starting a new freestanding institution to act as a local data intermediary

Several NNIP partners are freestanding institutions that have been created with the primary mission of providing data, analysis, and technical assistance to help community stakeholders make better decisions. In almost all cases, these partners are nonprofit organizations, but in one current case, the NNIP partner is a social enterprise.

A key advantage of this choice is that the institutions have the freedom to set their own agendas. They are not constrained by the policies, positions, or historic affiliations of any parent institution (e.g., a community-focused research center that is part of a university). In some communities, a freestanding institution may be able to assemble outstanding staff and far better technical capacity than what exists in a more established institution.

However, starting a new institution is difficult. A new institution initially does not have the brand or track record that serves as the basis for trust and confidence, though individuals who have led related work in the past could be brought in to bolster support for the new institution. Individuals thinking of creating a new institution to provide data intermediary services also must convince funders that they add value distinct from what peer and partner organizations offer. If the new institution would be building capabilities that already exist in the market, the individuals should consider a collaborative model as discussed above. New institutions also need to develop and fund all their operating and overhead functions, including human resources, accounting, legal services, and office management. Several NNIP partners have started out as independent entities that use another organization as a fiduciary agent. Typically, the agent is a local organization interested in seeing the data intermediary services develop, such as a community foundation or another nonprofit organization. This arrangement can save the costs of setting up "back office" services such as payroll and accounting.

ASSESSING THE LOCAL DATA ENVIRONMENT

Another key planning task to establish a local data intermediary is to assess the local data environment. The environment includes data users and their needs, community initiatives and policies that use data, the organizations that provide data services, and funding sources for local data initiatives. The planning team needs a thorough understanding of this environment to determine the political and economic viability of a new local data intermediary or the expansion of existing intermediary services.

The local data environment is always evolving as organizations expand their data services, users express new needs and uses for data, and funders' priorities shift. Assessments need to be put

into action quickly because their utility will become increasingly limited as local needs and interests change. If no action is taken, a repeat assessment will likely be needed.

Assessment Goals

An assessment is not just an academic exercise that produces a report to sit on the shelf. It is an opportunity to explain the potential value a local data intermediary and the NNIP model can bring to the community and to hear from stakeholders how they would shape a data intermediary's activities and mission to suit the local context. The results of the assessment and the articulation of the community's data needs, potential users, and valuable activities will also inform written products needed to get started, including a concept paper and fundraising proposals, and eventual implementation decisions about products and services. The discussions during the assessment may suggest ideas for quick-win projects that can help demonstrate the importance and value of a local data intermediary (see the final section in this chapter, "Putting the Plan Together").

The process of engaging civic leaders and other stakeholders in an assessment also offers an opportunity to broadly strengthen civil society and local governance. In the minds of all the players, these interactions enhance the idea that using data meaningfully in decisionmaking is both possible and important. They begin to create a new set of expectations about how the processes of policymaking and performance monitoring ought to be conducted. Further, engaging actors across sectors and disciplines emphasizes the idea that the community information system can serve as a multipurpose resource and facilitate communication and action across silos.

To fulfill the multiple goals of an assessment of the local data environment, the assessment results should answer three key questions: (1) Who needs local data and analytical services? (2) Who is providing local data and data services now, and what services are missing? (3) What funding exists for local data intermediary services? The planning team will need to decide about their geographic focus for these questions, which will determine the emphasis on reaching stakeholders in the central city, county, or region.

The first question will help the planning team understand the needs and interests of the community and tailor the proposed data intermediary services and the data they collect to ensure relevance. Potential purposes for uses of data include program planning, targeting investments, or community building. An assessment can identify audiences for other specific types of services, such as data-related training or analytic products and reports. An assessment

will also help spot opportunities to encourage new uses of data. For example, several NNIP partners help local nonprofits with organizing the collection and use of their own program data, helping them advance their capacity for performance management for service programs, place-based initiatives, or coalition efforts.

Most communities already have some local data intermediary capacities in place, and by asking about existing services, the planning team can understand the mission and capacities of data-related organizations. The answer to the second question will also reveal what data-related services are currently provided, as well as help identify the gaps. Understanding what capacities are already in place will also help the planning team consider possible institutional homes or collaborations, evaluate existing candidate institutions, and minimize duplication of efforts with existing services.

Finally, knowing what funding sources exist for local data intermediary services will allow the planning team to consider activities that are scaled to available resources. An assessment should also aim to identify opportunities to cultivate support either directly from local philanthropy or government or indirectly in partnership with nonprofits and initiatives that could incorporate local data intermediary services into their own funding requests. (Chapter 4 describes the funding patterns of current NNIP partners.)

Tailoring an Assessment to a Community's Needs

The activities of an assessment of the local data environment are described in more detail in the section below, but typically they involve documenting perspectives on the local data environment through secondary sources like websites and publications and gathering stakeholder perspectives through qualitative methods. The detail that is needed from the assessment activities will vary across communities and depends on the level of evidence necessary to produce a credible assessment that achieves the goals and answers the key questions.

The first draft of the assessment can usually be done by the planning team using existing knowledge. In some communities the participants of the planning team may already be quite familiar with the local data environment. They may be providing local data intermediary services themselves or have been advocating for the need for such services for some time. In this situation, the assessment might begin with documenting the knowledge of the planning team and secondary sources and then having a member of the team solicit perspectives outside of the team to broaden the input to the assessment and test the planning team's assumptions.

In other cases, the planning team may have less awareness of the broader local data environment. They likely would need a more structured and thorough assessment process to gather input from a diverse range of stakeholders to build a viable business case for a local data intermediary.

The level of evidence needed from the assessment also depends on whether a promising candidate institution has been identified. If it has, an assessment might be conducted by the planning team to confirm the reputation of the candidate institution, as well as to meet the other assessment goals. Depending on the local circumstances it may be appropriate for the candidate institution to conduct the assessment, which would give the institution the opportunity to engage with stakeholders and gain deeper firsthand knowledge of the community's needs, opportunities for collaboration, and support for services. However, in some communities it may be politically necessary to have a neutral party conduct the assessment, even if a promising candidate institution has been identified.

The planning team may see benefits to using a consultant to conduct the assessment. Such assistance may be valuable when additional capacity or expertise are needed, when a perspective outside that of the team would help generate interest or excitement, or when it will enhance the assessment's credibility and objectivity. The team should still plan to stay close to the interview process so they can use what is learned to advance their planning. In fact, after a candidate for an institutional home has been identified using the assessment, that organization may go through the process of engaging and learning from stakeholders again to develop concrete plans for activities and proposals for fundraising.

Assessment Activities

The primary activities in an assessment include documenting information about the local data environment from secondary sources, engaging stakeholders to document their perspectives about and knowledge of the local data environment, and reporting results to the internal team and the broader community. An assessment can be completed in as few as three to six months. If the assessment takes longer than this, it will begin to lose its usefulness; the information collected will become stale as the local data environment changes. If more than a year passes after the beginning of the assessment, the entire assessment process will likely need to be restarted to produce timely and useful information.

Documenting key characteristics and roles of community information stakeholders

The planning team will need to identify what organizations and initiatives are operating in the data intermediary space. The assessment should document what information services organizations provide, along with their core competencies, mission, partnerships, and capacity (such as staff size or budget). The assessment should also capture information about organizations and stakeholders that support information services or that represent key potential user groups. A template for documenting this information is provided in appendix A.

Conducting stakeholder outreach

As mentioned above, members of the planning team, a potential candidate institution, a neutral entity, or a consultant might conduct the outreach. The perspectives of stakeholders are critical for answering the three assessment questions: Who needs local data and analytical services? Who is providing local data services now, and what services are missing? What funding exists for local data intermediary services? The outreach should be considered a two-way exchange of information. Stakeholders will help answer the assessment's main questions, but they can also share ideas on how they see a local data intermediary serving the community. At the same time, the group doing the outreach can explain the value of a local data intermediary and different kinds of services a local data intermediary could provide.

Stakeholders can be engaged through meetings, interviews, surveys, or focus groups. Stakeholder engagement can be conducted with varying degrees of formality, from short three- to five-question conversations to formal sessions with prepared interview protocols. Collecting stakeholders' perspectives through interviews or small focus groups can be beneficial if stakeholders might not understand the range of services a data intermediary can offer. The interview or focus group provides an opportunity for educating those who would use the local data. Surveys can be used for collecting perspectives across a wide range of stakeholders. A sample interview guide is included in appendix A.

The entity tasked with outreach needs to connect with different types of stakeholders to get a variety of perspectives about the community's information service needs and gaps in those services. The outreach should include potential data providers, potential funders, and collaborators. Often one organization plays multiple roles in relation to community information. For example, a government agency might be a data provider, funder, and user of information services. The following are general types of organizations that should be consulted:

- *Nonprofits and other community groups.* Nonprofit organizations are the most common category of users of local data intermediary services. These groups include social service nonprofits, such as youth after-school programs; advocacy groups; or community action coalitions. Local data intermediaries may also help less formal groups like neighborhood associations.

- *Foundations.* Funders, including the local community foundation and United Way, have a unique perspective because they often already support multiple community organizations that are likely to need better information. In addition, funders' perspectives on what types of services and capacities are supportable are crucial for assessing what funding is likely to be available for a new local data intermediary. Such foundations can be past or current funders of data and information projects and services, or of other areas, such as housing or human services.

- *Local government.* The local government, including elected officials and agency staff, is a critical stakeholder for every local data intermediary. Data intermediaries have to negotiate with agencies to secure data and data-sharing agreements. Local governments are also users of data and analyses offered by local data intermediaries and are increasingly at the forefront of open data initiatives, an important aspect of the local data environment.

- *Regional agencies.* Most areas have metropolitan planning agencies, a council of governments, or regional transportation authorities. These groups are consumers of data and information products, and they often conduct their own analysis to support cross-jurisdictional planning or coordinate regional vision projects. Even if the planning team envisions the central city as the intermediary's focus, some understanding of the regional context is important for key issues that cross jurisdictional borders.

- *Higher education institutions.* Data intermediaries have many potential points of contact with colleges and universities. Individual departments, such as planning, public policy, or public health, have inherent expertise and interest in neighborhood-level data and use. Many universities also have multidisciplinary applied research centers that actively seek to share their academic research to improve local policy and programs. They may provide limited data services to a select group of nonprofits or provide ad hoc analysis on their specialty areas. Finally, universities and colleges may have offices on community relations or service learning that would be interested in community data.

- *Anchor institutions.* From libraries to hospitals to major employers, institutions that are important community anchors have a vested interest in the community's health and quality of life. They have extensive data needs and often have capacities to process and analyze data. Some, such as hospitals, may be potential sources for data as well. For more resources on the roles of anchor institutions in communities and on possible institutions to include in an assessment, see the [Democracy Collaborative](#).
- *Other research organizations.* Some communities also have nonprofit or for-profit research organizations that provide consulting services and may support government programs or community improvement efforts.
- *Open data and government advocates.* These groups share NNIP's mission of democratizing information and are good potential allies, though their strength and specific interests vary from place to place. This category also includes civic technology groups, such as [Code for America](#) brigades.
- *Federal Reserve branches.* Individual regional branches have community development departments that may conduct their own research, hold public events, and publish data and analysis for the region. They also have many offices in major cities outside of their primary branch city. In Los Angeles, for example, the staff at the branch office have helped convene community stakeholders and champion the need for a local data intermediary.

Reporting assessment findings

Products summarizing the assessment may vary depending on the level of detail of the assessment and the needs of the planning team. They may include memoranda for internal use by funders or by candidate institutions, or they may be documents published to help build community support for local data intermediary activities. Examples of published summaries of assessment results include those conducted in [Chicago](#) and [Hartford, CT](#). Memos, reports, or documents produced that summarize the assessment findings should be considered living documents that are updated over time. The planning team and candidate institutions will also use findings from the assessment in the concept paper, coalition building, and future fundraising proposals.

PUTTING THE PLAN TOGETHER

Ideally, efforts to explore potential institutions to serve as the local data intermediary and assess the local data environment will provide sufficient information so that the planning committee

can come to a consensus on a proposed home institution (or institutions). The background research should also guide the choices in the roles the intermediary will play in providing data and data-related services. In some cases, it takes multiple years to create a new institution or identify a home with the interest, capacity, and political support to move forward. In other cases, the planning process can happen relatively quickly and result in consensus in six months to a year.

If the planning team cannot come to a consensus about establishing a local data intermediary, the team members can still cultivate an environment more conducive for community information. This outcome can be achieved by organizing activities that build a constituency and community capacity to use data. For example, Smart Chicago Collaborative held the [Chicago School of Data](#) conference in September 2014, even though local organizations were still considering different forms for knitting the various Chicago data providers together. The conference offered immediate benefits to local community data users through training and peer learning opportunities on how data were being used around the city. In Hartford, the Hartford Foundation for Public Giving held quarterly meetings of nonprofit data users and other local stakeholders working at the regional and community levels, including nonprofits, government agencies, journalists, and researchers, to network and collaborate. In both Hartford and Chicago, the events brought together a diverse array of individuals and organizations and built awareness of current data resources and possibilities for the future.

Once the planning team has identified the home for a local data intermediary, steps can be taken to move to implementation. If the nominated home is an existing institution, it should lead the next stages, while continuing to involve key stakeholders. If a new institution is proposed, the planning team will need to continue to shepherd the work. In either case, the local data intermediary or the planning team will need to develop a concept paper and build support; identify quick-win projects to build momentum; and expand communications efforts about the proposed local data intermediary and its value.

A concept paper is needed to detail the plans for the local data intermediary in order to build support for it. The document must articulate the vision, mission, and functions for the planned data intermediary and clearly state the anticipated benefits of having a local data intermediary service for the community. The concept paper should include the intended geographic service area, in particular whether the organization seeks to brand itself as a central city, county, or regional organization. The document should also describe proposed partners and their roles, where relevant, and enhancements a candidate organization might need to make to be able

to conduct the data intermediary activities. Finally, the concept paper should include a timeline and proposed budget. This paper will likely be a living document, with updates as changes occur in the local environment. The institutional home for the data intermediary will need an active coalition of supporters if it is to succeed at fundraising and at engaging civic and community leaders to support its strategic initiatives. Thus, the engagement that was started in the assessment should continue with funders who sponsor the work, organizations and community-based groups, neighborhood leaders, and local governments.

During the interviews or focus groups for the assessment, ideas for immediate opportunities may have cropped up to illustrate the potential of local data intermediary services. Ideas might include producing a fact sheet, holding a training event for the community, or having a local "data day" that addresses an identified need or issue. These projects can be carried out alongside other planning activities. For example, the city of Charlotte developed a presentation for a Leadership Development Institute that used a variety of data from their Quality of Life indicators project to encourage a fuller examination of the community's biases and assumptions about lower-income neighborhoods. Portland State University analyzed the potential impact of a citizens' initiative that required the local government to compensate landowners for lost property value due to land use regulations.

Paying attention to communication is essential, even at this formative stage. The concept paper should be the basis for presentations tailored for different audiences describing the proposed services and value of a local data intermediary. Documenting and promoting the results from early projects can further demonstrate value to potential investors and supporters. Stories and blog posts about uses and users of community data delivered through the media, newsletters, and on websites help to build support for local data intermediaries. Having the community data users share the stories themselves about the important role of data in their work to improve outcomes for the community can be particularly compelling. Increased visibility for the idea will provide momentum for the fundraising efforts described in the next chapter.

RESOURCES IN CHAPTER 3

- **Current Institutional Inventory of NNIP Partners**

  http://www.neighborhoodindicators.org/library/catalog/nnip-partner-institutional-inventory

- **NNIP Policy on Partners in Transition and Examples of Successful Transitions**

  http://www.neighborhoodindicators.org/library/catalog/nnip-policy-transitioning-partners

- **An Assessment of Chicago's Community information Structure** (Pettit and Kingsley 2013)

  http://www.urban.org/research/publication/assessment-community-information-infrastructure-chicago-metropolitan-area

- **Assessment of Need and Opportunities for Data in the Hartford Capital Region**

  http://www.neighborhoodindicators.org/library/catalog/assessment-need-and-opportunities-data-intermediary-services-hartford-capi

- **NNIP Partners' Local User Conferences/Data Day Directory**

  http://www.neighborhoodindicators.org/library/guides/local-user-conferences-data-day-directory

CHAPTER 4: FUNDING A LOCAL DATA INTERMEDIARY

How much must a community invest to establish a new local data intermediary that can perform all the activities based on the NNIP model? The answer depends on the specific plan. This chapter discusses current NNIP partners' finances, estimates the costs for a new data intermediary, and discusses other important fundraising. Beginning with this chapter, this guide is intended for the actual or potential local data intermediary. Other audiences, including the planning team, may still want to review the information.

FINANCES OF CURRENT NNIP PARTNERS

The NNIP network conducted [a survey of the finances of NNIP partners](#) in 2014 that provides some useful guidance. The survey covered levels and variations in staffing and total budgets, along with an analysis of revenues by type and funding source. The median annual NNIP partner budget was $365,000, but the budgets varied considerably (Kingsley, Kandris, and Woluchem 2015). Other major findings are summarized in box 4.1.

Almost all NNIP partners receive two types of revenue:

- *General support*. Funding in which the funder places few or no restrictions on how managers of NNIP partners can spend the money. General support funding allows an organization to be more flexible about its work and to shift priorities as new issues in the community surface. Some NNIP partners use a portion of their general support funds to provide services to local nonprofits at reduced or low cost. General support funds may also help support activities that cannot be tied to specific projects, such as maintenance and updates to the data repository, online neighborhood profiles, and overall communications.
- *Project support*. Fees received from grants or contracts to produce specific products and services (e.g., research studies and reports), specific maps and custom data, technical assistance, and training. Projects vary significantly in size and scope, from conducting in-depth multiyear studies to holding a day-long convening of community stakeholders.

The median share of NNIP partners' total budgets covered by project funding was 67 percent. Thus the typical NNIP data intermediary was able to raise more than two-thirds of its revenues by providing various data-related services for a fee, and the general support funds needed from civic leaders amounted to a comparatively small share of the total budget. However, though they are a minority, sponsors in some communities have provided high levels of general support over the long term so their intermediaries are less dependent on competing for outside grants and contracts. For a quarter of the partners, general support covered 75 percent or more of their budgets (Kingsley, Kandris, and Woluchem 2015).

Interestingly, the analysis showed no systematic differences in finances among different types of local NNIP institutions. For example, data intermediaries housed in university centers are not characteristically larger or smaller, or more or less dependent on general support, than those housed in other types of local nonprofits or philanthropic institutions. Also, budgets do not vary consistently with the population size of the partner's home city. Local data intermediaries built on the NNIP model can work well and according to the desires of their funders, though with quite different institutional designs in quite different types of environments.

BOX 4.1

Major Findings of the 2014 Survey of NNIP Partner Finances

The median annual NNIP partner budget was $365,000, but there was considerable variation, with the middle half of the distribution ranging from $200,000 to $604,000.

General Support Funding

- The median share of all general support funding was 33 percent, with the shares for the middle half of the group ranging from 17 to 75 percent.
- Most partners (41 percent) received general support from only one source; another 38 percent received general support from two to three sources, and 14 percent had four or more sources.
- Most, 48 percent, received some general support funds from a local foundation; 45 percent received funds from local or state governments; 24 percent received funds from universities; 21 percent received funds from the United Way, and another 21 percent received funds from another nonprofit.

Project Support Funding

- The median share of all funding covered by project support was 67 percent, with the middle half of those reporting ranging from 25 to 83 percent.
- Sources for project support were more diverse than for general support. Only 14 percent had no or one source, 45 percent had two or three sources, and 42 percent had four or more sources.
- Local foundations provided project funding for 66 percent of partners; local and/or state governments provided for 59 percent; other nonprofits for 52 percent; national foundations for 28 percent; the federal government for 28 percent; and universities for 24 percent of partners.

In-Kind Services[a]

- Fifty-nine percent of partners are part of a larger parent organization (e.g., a university with an NNIP partner in one of its research centers) that provides them with one or more forms of in-kind support, with the type and value of that support varying across partners.
- Of those in this category, 34 percent receive some free information technology services, 38 percent receive free office space, 24 percent receive some free staff support, and 14 percent receive in-kind support in other forms.

Source: Kingsley, Kandris, and Woluchem (2015).
[a] Many NNIP partners develop projects or programs in close working partnerships with other organizations. These sources of in-kind support or collaboration—such as assistance in communicating and using project results—are important to achieving scale and impact but could not be captured within the survey.

THE COST OF A LOCAL DATA INTERMEDIARY

The survey results just discussed reflect the work of current intermediaries; they do not address the funding of a new data intermediary or even the ideal funding level for an established one. Organizations and community leaders interested in creating a local data intermediary reasonably ask NNIP staff: "How much does it cost?" The honest and admittedly unsatisfying answer is that it depends on local circumstances. This section describes three questions that the planning team and the selected local data intermediary need to consider to set a target level of funding to raise for the start-up phase or expansion of data intermediary services. The planning phase should provide the basis for answering these questions, but any knowledge gained then should be reviewed as circumstances change over time.

Is it an existing institution? For existing institutions that wish to develop or expand data intermediary services, the cost depends on what services were provided before (if any) and how they were funded and staffed. These institutions may have flexibility for ramping up data services over time if staff time can be partially covered by non-intermediary functions. The amount will be higher for establishing data intermediary capacities in a new freestanding institution that must setup administrative functions, rent space, buy equipment, and begin to create the infrastructure needed for the data management and services. A firm minimum commitment will be required to cover these costs to sustain a standalone organization. Start-up costs could be reduced by having an established organization serve as the fiduciary agent for the new data intermediary.

Where will the funds come from? The planning team should have explored potential sources of funding during the assessment of the local data environment described in chapter 3. Some regions have a well-developed philanthropic sector; others have no large foundations and it may be difficult to obtain large general support grants. Whether the city or county government is a funder also varies. Some city and county government agencies contract with outside organizations for analytic products and services, while others do not leverage external services. A nonprofit organization or community initiative may also be able to build in funding for local data intermediary services into their own grant requests. The following section discusses the need to diversify funding across many sources, but the exact mix varies from place to place.

What is the money for? The level of funding needed for the start-up phase will also depend on the activities that the planning team and community leaders outlined in the concept paper described in chapter 3. As discussed in the last chapter and reiterated in the following section,

new data intermediaries must begin community engagement and producing data products to prove their value even while they are just getting started. However, the scale of the initial work can vary. A blight survey of 300,000 properties is going to cost substantially more than conducting periodic training sessions for nonprofit organizations.

A key part of the workload in this early period involves assembling data files and creating an orderly—and secure, if the files are sensitive—infrastructure to house them. The hardware costs associated with this work have declined since NNIP first started, but staff costs associated with developing relationships with data-providing agencies to negotiate data-sharing agreements, understanding new datasets, and processing data over time are not trivial. The particular data plans will also affect costs. Obtaining confidential student records will require more resources (and time) than downloading crime reports from an open data portal.

Based on the current NNIP partner finances and partners' informal advice, the minimum staffing level recommended to launch a data intermediary is 1.0 full-time equivalent (FTE) (Kingsley, Kandris, and Woluchem 2015). If in an existing institution, this FTE could be spread across several individuals. To fund 1.0 FTE, we estimate that $100,000 to$150,000 per year needs to be raised, depending on salary levels, in-kind resource commitments, and other factors particular to a prospective community. For a standalone organization, likely some of the early funding would need to cover general operations and could not all be dedicated to projects. Starting this work at the minimum level is not advised if more funding can be raised to provide a sounder financial footing and expanded services to the community. In the case where this minimum cannot be raised, organizations can use smaller amounts to perform interim activities to strengthen a community's capacity to use data, but will need to set expectations that the full set of intermediary services will not be provided.

FUNDRAISING AND SUSTAINABILITY

To address interest in how to raise funds and sustain the work of a local data intermediary, this section reflects the experience of the Urban Institute, which has observed and interacted with NNIP partner organizations over the past two decades. The longevity and growth of the NNIP network has proved that the services local data intermediaries offer are valued and sustainable in many different contexts. But as anyone given the task of fundraising knows, the job is always difficult and requires constant attention. To be successful, local data intermediaries must provide and communicate their value and diversify their sources and types of funding.

Providing and Communicating Value

Local data intermediaries must adopt several critical elements of operational style to fulfill their mission and be sustainable. Responsiveness to the interests and concerns of the community, local funders, and government is crucial. Information needs in the policy world can shift rapidly, and local data intermediaries must be flexible enough to adjust their activities to accommodate the shift.

To ensure sustainability, a local data intermediary should have multiple types of data and analytic services and should periodically assess how that work fits into a strategic vision. NNIP partners have recognized that being known for one product or service alone can make finding new funding difficult when interest in that product wanes. The underlying multitopic data repository described in the beginning of the guide can support diverse streams of work and give local data intermediaries the flexibility to adjust to changing information needs in their community.

Another element the NNIP network recognizes as essential, particularly in a time when the word *data* is thrown about constantly, is to communicate the value of the work the data intermediary can provide. Local data intermediaries must maintain buy-in for the concept over time. As an overall message, the local data intermediary must present a compelling argument about the community's need for good information: that providing better data and helping groups to use them will enable the community to improve programs, practices, and advocacy efforts and will ultimately enhance the quality of life for residents living in low-income communities.

Local data intermediaries must communicate the value of their work broadly but also maintain good relationships with funders, whether the funding is project-specific financing or general support. Funders may lose interest in a specific data product or tool, they may not understand the value of helping the community with data-driven analysis and planning, or they may underestimate the efforts needed to maintain and expand intermediaries' work. To create and sustain knowledgeable and supportive funders, local data intermediaries should keep their funders informed about the work on a regular basis and engage them in any strategic planning efforts so they will continue to feel ownership of the local data intermediary's agenda. This ongoing communication will create opportunities to ask funders for additional support when appropriate or to ask them to play a leading role in identifying, contacting, and making the case to other potential funders.

By measuring their performance, local data intermediaries can improve the effectiveness of their efforts and track the organization's influence (see chapter 6). Sharing stories (e.g., case studies on their website) that result from this tracking can help raise the visibility of the data intermediary and demonstrate the value to funders and civic leaders. The Urban Strategies Council 2012–2013 Impact Report is one great example of communicating this value.

Diversifying Funding Sources and Types

As with most organizations, diversifying funding sources for a local data intermediary is necessary for long-term sustainability. A local data intermediary that provides a wide range of services and maintains a multitopic data repository has the opportunity to tailor proposals and fundraising requests to meet the interests and goals of a variety of funders. For example, a proposal the intermediary makes to a foundation interested in improving the well-being of children might envision working with the school district to map where children are living and how conditions in the neighborhood affect children's school performance. Another foundation may be more interested in employment outcomes, so the data intermediary may propose providing technical assistance to job training providers to improve their ability to target outreach and monitor their own performance. Both proposals leverage the underlying data on neighborhoods and aim to build the capacity of local institutions, but they are meeting the foundations' goals to improve child well-being and job access. It is important to demonstrate to funders how the work will advance the agenda of the foundation organization or agency, rather than how the funding would support the data intermediary. Still, although fundraising activities should always be framed appropriately for the source of funding, they should also be consistent with the mission and strategic priorities of the data intermediary.

Local data intermediaries operate in a range of funding contexts and should consider potential clients across sectors, including the public, private, nonprofit and philanthropic. Local data intermediaries should seek general support funding, which generally funds components of the enterprise that are important to its long-term sustainability, such as responsiveness, engagement with the community, and communication. In some places it may be difficult to raise initial general support funds before the value of data intermediary services has been demonstrated. Although not ideal, a few NNIP partners have only project support. They leverage projects to update project-related data sources and build communications, staff development, and so forth, into project work.

Raising money to support general operations can be challenging. Many local funders focus on supporting activities that yield direct results—for example, preparing young children for

kindergarten or training adults for employment—and offer minimal support for more indirect activities, such as those of a local data intermediary. Therefore, an intermediary will be more likely to obtain general support funding if it articulates the value of the concept and the influence its work can have on the direct outcomes funders seek. It may be helpful to frame the request in terms of investment in a community's information infrastructure. See the discussion in Harkness (2014).

Even if a local data intermediary is able to obtain general support, its fundraising for project support should begin right away. Potential opportunities such as the community's needs for data products and services may have appeared during planning phase conversations. Other opportunities for project-based support may be present in the substantive areas in which the local data intermediary has developed or is developing special expertise. For example, if general support funds were used to prepare an initial citywide, neighborhood-level study of early childhood needs and programs, the intermediary would contact major funders of the early childhood programs directly and suggest creative ways to extend the initial work in one or more new projects. Projects can also be opportunities to connect with new funders and demonstrate the value of using a local data intermediary. Successful project work then might present opportunities to request general support from funders.

A start-up local data intermediary should keep in mind two other points when seeking project funding. First, when possible, it should plan for and seek funding for recurrent tasks rather than one-off efforts. For instance, if an agency wants a study of health facilities across neighborhoods, the intermediary might suggest a plan to fund a series of periodic updates over the next few years, along with performing the initial work. Often, specific clients and the broader policy community will be interested in learning how the dimensions and character of the problem they are working on will change over the coming years. Planning for a series of updates at the outset would be more efficient, allowing agencies and policymakers to expect new data periodically, and it would provide a more secure funding base for local data intermediary operations over time. Second, as the intermediary gains expertise in a policy domain or with a type of technical assistance, it can approach a broader range of potential clients for similar work. For example, after completing studies on early childhood issues for a local agency, the intermediary might propose conducting deeper or differently structured research on that topic for nearby suburban jurisdictions or state agencies.

RESOURCES IN CHAPTER 4

- **A Picture of NNIP Partner Finances**

  http://www.neighborhoodindicators.org/sites/default/files/publications/2000505-A-Picture-of-NNIP-Partner-Finances.pdf (Kingsley, Kandris, and Woluchem 2015)

- **The Urban Strategies Council 2012-2013 Impact Report**

  https://urbanstrategies.org/presenting-our-inaugural-impact-report/

CHAPTER 5: GETTING STARTED

Following a successful planning process and initial fundraising effort, what's next for a local intermediary? As with the planning activities discussed in chapter 3, setting up and operating a data intermediary differ depending on the community. This chapter discusses the key considerations and activities involved in setting up a successful local data intermediary: organizing the operations, building the information system, designing the website, delivering products and services, and planning for sustainability.

ORGANIZING THE OPERATIONS

To provide data and analysis services to a broad constituency and be sustainable, local data intermediaries need to think about three functional aspects of their organization: operating style, approach to advocacy, and staffing structure. These aspects should be incorporated into early plans and discussed with local stakeholders early in the organizational process.

Operating Style

A successful local data intermediary must be flexible and agile in its operating style. It will not be the type of organization to develop an annual plan and complete only the tasks on that plan. Success in this sphere requires that an intermediary continues to be seen as relevant, engaged, and responsive to clients and the broader community. Staff members must always pay attention to emerging issues and shifts in perceptions, and they should regularly communicate with a variety of stakeholders, as well as being physically present at local events.

Local data intermediaries have regularly occurring activities, such as updating neighborhood profiles with new data or maintaining a help desk, but they need to be entrepreneurial and take advantage of opportunities that arise in a shifting policy environment. Such a response might be, for example, changing priorities in the plan for acquiring new datasets next month, or deciding to prepare a quick-turnaround analysis to respond to an issue that came up suddenly in a community group or city council meeting, or having a more active presence within traditional media (the press, television, and radio) and social media to keep up with local events.

The needed operating style is illustrated by the way the initial NNIP partners built their data systems. They did not try to design the ultimate system at the outset, nor did they wait to start

using the data until their whole system was in place. Rather, they started by negotiating data-sharing agreements with just a few agencies—a mix that took advantage of both the low-hanging fruit (datasets that were easy to obtain and incorporate) and datasets that could shed light on hot topics in local policy discussions and community-building efforts.

A local data intermediary must also carefully consider how to effectively communicate the results of its various activities. The leaders need to continually watch for opportunities to share how assistance with understanding data contributed to better community outcomes to demonstrate value to their funders. Some of these stories can be captured through performance-monitoring practices, discussed in chapter 6.

Approach to Advocacy

As described in chapter 3, one of the required characteristics for data intermediaries is a reputation for being an independent source of data and analysis. At the same time, the aim of providing data, analysis, and other data-related services is to positively influence the behavior of other local actors so they, in turn, can do a better job of achieving neighborhood improvement goals (Cowan and Kingsley 2015). Data intermediaries following the NNIP model also agree to emphasize using information to build the capacities of institutions and residents in distressed neighborhoods. Hence, they have social goals of promoting equity and opportunity. The leaders of NNIP partner organizations take all these values into consideration when deciding how much and what types of advocacy to undertake. The data intermediary organization's advocacy includes both direct actions—using its own voice to take a position—and indirect actions—facilitating advocacy efforts by other organizations.

The following are examples of NNIP partner activities that might be considered direct advocacy:

- testifying at a city council hearing on the need for greater investment for affordable housing
- writing a blog in favor of the city or state enacting universal prekindergarten to prepare all children for school
- urging reforms in school disciplinary policies that adversely affect African American boys
- publishing a regional policy agenda to achieve equity in outcomes, regardless of race or nativity

The local data intermediary's decision about what role it will play in advocating policies, programs, and investments is best made locally and depends on several factors. The first factor, the intermediary's mission, guides its choices about advocacy. For example, Oakland's Urban Strategies Council is explicit about the motivations for its analyses. According to its mission, the council "leverage[s] research, policy, innovation, collaboration, and advocacy to achieve equity and social justice." As another example, the mission of The Data Center in New Orleans is to build prosperous, inclusive, and sustainable communities by making informed decisions possible. Other NNIP partners emphasize their independent analysis and use concepts like "quality of life" or "community well-being."

A second factor that informs the intermediary's role is the type of institution in which it is housed. For example, a university-based center may be restricted in its advocacy or communications role by the general policy set by the university president's office. Nonprofits must follow Internal Revenue Service rules about the types and amount of lobbying they can do. Regional data organizations may be cautious about emphasizing the concerns of the large central city over those of their many suburban jurisdictions.

A third factor is the local political and institutional environment. Approaches in more progressive political climates, such as in Seattle, Washington, or Austin, Texas, may not be as effective in a conservative region. In the State of Equity project in Boston, the Metropolitan Area Planning Council chose to frame equity policies as essential to ensuring continued economic growth. In another place, the same policies could have been presented on the basis of racial justice.

Finally, the other types of organizations present in a community also affect an intermediary's decision about what role it will play. If local advocacy organizations such as PICO, Acorn, or an affiliate of the Economic Analysis and Research Network are already strong, a data intermediary may view its best contribution to be providing the analysis for such advocacy groups to use. As one example, union organizers in New Haven are one of many constituencies that use indicators from DataHaven's Greater New Haven Community Index to support their advocacy positions. In the past, union leaders have met with DataHaven staff members to discuss the information in the community index and to ensure that they understood it and interpreted the index appropriately. DataHaven also provided additional analysis to clarify the original report. Union leaders have independently republished the data in their own reports with new graphics. It is not necessary for DataHaven to advocate on behalf of unions (or even agree with them), but the data and products that local data intermediaries like DataHaven produce mean that advocates (and their opponents) can make data-driven arguments and suggest new solutions.

Staffing Structure

As discussed in chapter 3, a strong leader is necessary for maintaining a successful local data intermediary. This leader needs technical and policy expertise, a good reputation in the community, experience in building consensus and convening stakeholders, and experience as an effective fundraiser and champion for the use of data in decisionmaking and community building. But how many other staff members are needed?

The NNIP experience has shown that, depending on the local context, a small team may be able to fulfill many functions of the local data intermediary. In other cases, a much larger team can be supported. From the survey of NNIP partners in 2014, partners had varying mixes of full- and part-time staff, but 50 percent of partners had between two and five FTE staff members working on local data intermediary activities (Kingsley, Kandris, and Woluchem 2015). Organizations with larger budgets had more FTEs, but staffing levels were generally not dependent on organizational type or city size (however, almost all NNIP partners were located within large metropolitan areas with at least 1 million residents).

Perhaps more important than the number of staff members are the skills they possess, as described in chapter 3 in the characteristics of local data intermediaries. To acquire and transform administrative data, staff members need to be able to manage and analyze data, preferably using a software package designed for that purpose (e.g., R, SAS, Stata, or SPSS). Local data intermediaries also require staff members with at least some familiarity with data visualization tools, databases, and GIS. Some NNIP partners also regularly employ or contract with GIS analysts, statisticians, economists, developers, and graphic designers to allow more advanced analyses, websites, or other data visualizations.

In addition to these technical skills, local data intermediaries need staff members who can engage with community organizations and who can communicate complicated issues clearly to both expert and lay audiences through written content and in-person meetings and presentations. Familiarity with the local context and knowledge of a range of policy issues affecting low-income neighborhoods are incredibly useful.

Although such skills can be picked up through experience, having staff members with the skills from the beginning may help build and enhance the credibility of the local data intermediary. In particular, recruiting staff who have established track records on work related to data intermediary services may facilitate early fundraising efforts. Staff with various management and administrative, financial, communication, and other organizational skills have also enhanced the

partners' operations. Given that the median NNIP partner has three FTEs, the organizations likely required a single individual to possess or learn several different skill sets.

Though it is impossible to lay out an ideal staffing structure, NNIP partner staff members include data managers, analysts, community engagement staff, research directors, and developers. These job descriptions are available on the NNIP website.

BUILDING THE INFORMATION SYSTEM

One of the major activities of a local data intermediary under the NNIP model is to build and maintain a neighborhood-level information system that covers a range of domains and is frequently updated. The use of the word *system* does not imply that the data are all located in one place. NNIP partners use a variety of software packages and configurations to clean and maintain their data.

This section first covers the types of data local data intermediaries can collect and transform and how data can be acquired. Just as important as the process of acquiring and transforming data are the processes used to protect confidential information, document the data and create indicators, produce metadata, and store documentation and data-use agreements.

Types of Data

Building a diverse neighborhood-level data repository can take years. Even with the increasing availability of data through open data portals, some potentially useful and relevant data can never be housed in an open data portal. Instead, these data require secure transfer and use protocols, necessitating relationship building and negotiation with data providers. To make the case for deserving stakeholders' support, an aspiring local data intermediary should begin to acquire data that can be characterized as low-hanging fruit (such as record-level crime incidents with block identifiers, which are increasingly available on open data portals) or to focus on data that are most relevant to current local policy discussions and interests. Thus, the initial data sources obtained by data intermediaries will be different from place to place. NNIP partners are constantly working to obtain new data and update existing datasets. The paragraphs below briefly discuss the types of data these local intermediaries gather and offer links to other resources that explain how to obtain and use the data [also see Kingsley, Coulton, and Pettit (2014, chapter 3)].

National data sources

Various national datasets are now available. These have regularly updated data at a small-area level (e.g., census tract or ZIP code) and are extremely valuable in tracking and analyzing neighborhood conditions and trends. Subsets for a city, county, or metro area can be obtained at no or very low cost (although there are still costs to produce relevant indicators from these data). The most important source is the US Census Bureau's American Community Survey with annually updated information on a variety of characteristics, although the large margins of error in its five-year estimates make it difficult to reliably describe neighborhood conditions and trends.

A local data intermediary could also obtain data from the 2010 US Census and from the Neighborhood Change Database, which has standardized indicators for uniformly defined census tracts going back to 1970. Also particularly valuable to local data intermediaries are the Home Mortgage Disclosure Act dataset (used in analyzing neighborhood lending and real estate markets) and the Longitudinal Employer-Household Dynamics dataset (data on employment and wages). NNIP maintains a list of nationally available small-area data on its website.

Local administrative data

Though the availability of small-area data at the national level has improved since NNIP began, many domains, such as crime and education, still are not adequately covered by national data sources. Most of the data in NNIP partners' systems originate from administrative records from city, county, or state agencies, and sometimes other large institutions, such as health care providers. Tables summarizing the local administrative data holdings (at the neighborhood level or below) of NNIP partners are available on the NNIP website. The most commonly acquired data by NNIP partners are crime, vital statistics (births and deaths), social benefits (e.g., Temporary Assistance for Needy Families, Supplemental Nutrition Assistance Program), property characteristics and sales, and school enrollment and proficiency.

When NNIP began, obtaining local administrative data frequently required negotiating long-term data-sharing agreements with each source agency, and that is still a requirement in most cases. However, partly as a result of local open data campaigns, some agencies in quite a few jurisdictions are now releasing administrative datasets directly to the public over their websites. The release of such datasets reduces the data acquisition effort for local data intermediaries. An extension of the process of analyzing individual data files separately are systems that are based on records linked on individual land parcels or properties from several data sources. The most

ambitious of these is the NEO CANDO system operated by NNIP's Cleveland, OH, partner [see the case study by Lisa Nelson in Kingsley, Coulton, and Pettit (2014)].

Primary data

Although the two types of data sources mentioned above are by far the most prominent, local data intermediaries may also collect new data, either on their own or in partnership with other local organizations. Local intermediaries have, for example, managed projects in which handheld devices or even paper was used to record observed characteristics of properties or in which households were interviewed in structured surveys. New data intermediaries should keep these options in mind even if they do not initially have the capacity to undertake such work for individual neighborhoods or citywide.

Integrated data systems

Some partners are also responsible for (or involved in) an integrated data system (IDS), which assembles and integrates administrative records of individuals and at the record level from the holdings of administrative agencies that operate social services and other programs. For example, the record in an IDS for one child might include data about him from his school, the foster care agency, and the juvenile court. A good example of an IDS is the system maintained by the Allegheny County Department of Human Services in Pennsylvania, a 2012 video of an NNIP meeting session features their work, and Culhane et al. (2010) describe such systems and their uses]. Because much of the data in these systems is highly confidential, access must be rigorously controlled to prevent privacy breaches and protect sensitive information [see discussion in Petrila (2014)]. However, some NNIP partners have been able to work with an agency hosting an IDS to make deidentified or anonymized data summaries available for public use (see box 5.1).

IDS is mentioned here not because new local data intermediaries should try to create them in the short term, but because of their value in allowing a much deeper understanding than previously possible of the services, issues, and trends affecting the lives of residents. New types of patterns and questions can be explored with linked data, such as the number of children in multiple systems, the nonschool factors associated with absenteeism, or how people in different programs fare over time. For more information, see the introductory page to IDS and information about the NNIP cross-site project on this topic.

Data Acquisition

To obtain administrative data that are not publicly available through open data portals, local data intermediaries often negotiate data-sharing agreements with the source agencies. Many agencies allow researchers and others to use some of their data from time to time, but the factor that makes the NNIP model for a local data intermediary unique and ultimately so valuable is the goal to establish long-term agreements that enable the recurrent sharing of data.

Data acquisition usually begins by building a relationship with an agency's staff and leaders. This process can start when the intermediary is doing its assessment of the local data environment, meeting with stakeholders to explain the purpose of a local data intermediary and how data sharing can benefit the data provider. It can also begin by negotiating for data with a specific project in mind, with the aim of laying groundwork for future updates and additional uses. For data sharing to weather changes in agency staff, a written data-sharing agreement with each agency providing data is necessary. Sharing the intermediary's data products with the agency providing the data and seeking advice from the agency on how to interpret data are two ways to maintain a strong relationship and ensure access to the data over time.

The online guide [NNIP Lessons on Local Data Sharing](#) offers a general discussion of the principles involved in structuring sound data-sharing agreements and gives tips on approaches to negotiating them. Specific [examples of data-sharing agreements](#) can be downloaded from NNIP and adapted. Another good resource on data acquisition and sharing is the [guidance document](#) prepared by the Urban Institute for the Department of Education and their Promise Neighborhood grantees.

In addition to acquiring data directly, in recent years several NNIP partners have encouraged their local jurisdictions to open up their data and broadly support a culture of data sharing in their communities. A series of [case studies](#) available on the NNIP website documents how partners have been involved in open data movements in their communities. A local culture that supports the use of data, values data-driven decisionmaking, and facilitates data sharing will make the data acquisition process much easier.

Data Processing and System Development

Although all aspects of good data management deserve attention, this section offers only brief guidance on good data management practices to highlight important considerations in a local data intermediary's operations. Local data intermediaries should enter, organize, and store the data they receive in some form of a repository. A repository should include not only the datasets,

BOX 5.1

Protecting Confidential Data

Although many of the administrative datasets that local data intermediaries obtain are composed of information that is a matter of public record (e.g., property sales), some of the most valuable work a local data intermediary can do is to obtain sensitive and confidential data, responsibly deidentify or anonymize the information, and release aggregate indicators at appropriate geographic levels. For example, counts of Supplemental Nutrition Assistance Program recipients aggregated to the census tract level could help food banks decide on new food pantry locations and distribution sites; they do not need to know where individual recipients live.

Protecting confidential data is critical to maintaining a data intermediary's reputation and trust within the community. Data intermediaries must implement guidelines and procedures for handling sensitive information to prevent harm to individuals. Protecting this type of data begins at the data acquisition phase. When negotiating a data-use agreement, talking with the agency's data stewards to review the details of how and what data are collected can inform a request, build up trust, and improve understanding of how the data could be used.

Data-use agreements should document the local data intermediary's data security plan, specify who has access to any personally identifiable data, and describe how the data will be used. A data security plan should describe how data will be securely transmitted between the provider agency and the intermediary, acceptable methods for data storage, access levels, how long the data will be kept, and who has responsibility for ensuring that the data are kept secure. Data agreements also may address how data should be used to characterize small areas or groups in a manner that is sensitive, respectful, and statistically valid (given variations in numbers of observations per unit area) and that considers other underlying geographic or social conditions.

At a minimum, local data intermediaries need to understand and abide by relevant privacy laws such as the Family Educational Rights Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act (HIPAA) at the federal, state, and local levels. Some intermediaries, such as those located in university centers, may also have to meet standards governed by their institutional review boards. Data sharing that is compliant with these privacy laws is indeed possible: NNIP partners across the country have been able to obtain confidential records. A local data intermediary may need to start out by requesting data that have already been summarized and earn the trust of the data provider over time by handling data carefully and producing responsible analyses. Both Promise Neighborhoods' guidance document for collecting data and reporting results and StriveTogether's "Student Data Privacy Best Practices" offer more detailed guidance on these activities.

but also metadata, code, and procedures used to transform and analyze data; data dictionaries; and any related documentation, including data-sharing agreements and codebooks for individual fields. The basic goal is a system in which data are added and stored in a clear and fully documented structure, written procedures govern transformations and applications of data, and safeguards are in place to prevent unauthorized access and use. Further, the goal is to have a system that is designed to facilitate efficient data dissemination and use for legitimate purposes.

The benefits of an organized data system include standardized procedures and practices, portability and replicability of results, integrity of data, and efficiency. A properly organized data system also addresses several problems, such as inconsistently formatted datasets, hard-to-find datasets (on which computer, hard drive, or server?), staff turnover, having only "one person" who knows about a dataset, tendencies to reinvent the wheel, and inconsistent procedures.

A data intermediary needs to carefully consider and design a system for accepting, storing, and processing new data files. For one of NNIP's well-designed and documented systems, hosted at NeighborhoodInfo DC, a dataset is deemed to be formally *in* the repository when it meets the following conditions:

- It is *stored* in an approved format and location.
- It has been *processed* according to established procedures.
- It has been *registered* in the approved metadata system.
- Its *creating programs* have been *documented and stored* in the proper program library.
- All other *related documentation* on the data set has been *stored* in the proper documentation library.

These five components of bringing a dataset into a repository are briefly described below.

Organizing how (and where) data are **stored** will make the data easier to find, particularly if a number of staff or research assistants work with data. For example, creating directories to store data and documentation organized by the data source rather than by projects may be helpful in the long term.

One of the most important steps is for local data intermediaries to add value to the raw data they acquire by **processing** the data to create useful indicators. The national datasets noted earlier are clean and well documented. Local administrative data are often more complicated.

But national, publicly available datasets are not without their own difficulties. US Census Bureau–defined geographies may not align well with local geographies of interest, requiring a local data intermediary to combine and correctly weight estimates. Also, hundreds if not thousands of indicators could be created from these data, so the intermediary must ascertain which indicators are most useful for local stakeholders to use to advance their community-building, program planning, or advocacy efforts.

Administrative datasets from even the best-funded state agencies frequently have errors, missing data, limited documentation, and file formats and fields that may be inconsistent over time. Local data intermediaries need to learn a great deal about each dataset and its anomalies, often by talking with the staff responsible for creating them. The processes for cleaning data will also vary, depending on the file, but they likely will include determining the meaning of each field, which fields have outliers, and which have missing data (and what the missing values represent). Special rules may need to be developed to handle anomalies. Some administrative data, including those published on open data portals, may require considerable transformation to become truly compatible with other records in the repository. For example, different agencies are likely to use different methods of recording geographic identifiers, or some may not have geocoded the data at all. Developing a standard approach to assigning geographic identifiers is necessary to ensure that they will be uniform across all the data.

After cleaning the data, the intermediary may create and store datasets that have been summarized for geographies relevant to the community, such as local neighborhood boundaries. Having these files and indicators readily available will be useful in providing ad hoc technical assistance to local organizations and agencies. Some NNIP partners also post their cleaned and aggregated data to their websites or in [neighborhood profiles](#).

An important aspect of effective data management for a local data intermediary is to have procedures to **register** the data, including documenting data and storing information about the data in a metadata record. For NeighborhoodInfo DC, this requirement means that a dataset is not considered cleaned and processed until the dataset and all variables are labeled, the creating programs have been identified, and the variables are formatted, including the standardized geographic identifiers. A record of each dataset's contents is stored, organized by data source, and accessible to all team members. Metadata, especially for data published online, may need to contain information on how variables have been calculated, identify any licenses or rights to the data, name a contact person for answering questions, and describe the underlying raw data source.

Documenting and storing programs used to process the data are critical tasks for a successful local data intermediary. The authors strongly advise that intermediary staff clean the data and create the variables by using a software package that allows for saving code and adding notes directly in the code to document decisions. NNIP leaders have found in their own work as researchers, as well as through experience with NNIP partners, that these steps are important because they improve data consistency and, therefore, quality. The processing programs and the decisions made in them can be reviewed and corrected, and the data can easily be rerun by another staff member. If file structures are left unchanged by agencies, new updates to data, such as an additional year of records, can be more efficiently processed by updating the previous year's code. Data processed in this way can lead to a series of datasets that can be compared across time and analyzed longitudinally. It is also helpful to have a document that acts as an instruction guide for processing each data source. The document would outline for staff members which programs to run in what order, how to perform quality control checks, and what datasets should be created or updated. These instructions also make it easier to handle staff transitions.

Finally, a local data intermediary should have procedures for organizing and ***storing other related documentation*** to a dataset. This step might include storing any documentation received with the raw dataset (metadata and codebooks); correspondence with the agency about the data acquisition, work flow, or details about the data; and the formal data-use agreement or memorandum of understanding.

DESIGNING THE LOCAL DATA INTERMEDIARY WEBSITE

A website is the public face of an organization. At minimum, it communicates the organization's mission, capacities, and accomplishments. For local data intermediaries, it is also a vehicle to accomplish that mission—sharing analysis and perspectives on community issues and providing wholesale data through neighborhood profiles or downloadable data. Most NNIP partners also provide help desk services through their websites, which help build local capacity. By communicating all these purposes, the website makes an impression on potential funders, customers, and collaborators.

NNIP partners have chosen a variety of strategies in designing their websites, and several partners maintain multiple websites for different projects or audiences. In a scan of partners' websites in January 2016, about three-quarters of the NNIP partners had some level of interactive features on one or more of their websites (e.g., SAVI at the Polis Center in

Indianapolis). Interactivity allows users to engage with the data, such as zooming into areas of interest or customizing map displays for their own use. However, information can be shared very well without these extra features, as shown by The Data Center in New Orleans. Their team decided that a focus on well-designed displays for their analytic products and static maps and profiles best served their audiences.

The NNIP network has been encouraging partners to make their data more usable for organizations interested in downloading data to manipulate on their own (see NNIP and Open Data). Almost 80 percent of the partner organizations offer downloadable data in some format. Two partners—Data Driven Detroit and the Western Pennsylvania Regional Data Center coordinated by the University of Pittsburgh—maintain open data portals.

The intermediary's website can be a powerful tool for democratizing information and improving the community's understanding of local conditions and opportunities. However, having a website in itself is not sufficient for fulfilling the role of a local data intermediary. Without a focus on making the data understandable, relevant, and useful to its target audiences, an intermediary runs the risk of placing too much emphasis on technology and advanced features. Local data intermediaries need direct contact with their audiences to understand their information needs and to develop relationships within other important roles, such as facilitating discussions across diverse sets of organizations. In addition, NNIP partners have shared advice with their peers not to pour all their effort into a one-size-fits-all system or to build an organization's identity around a single product that will inevitably become obsolete. Past lessons from partners are available on technology planning (a 2012 session), "Technology for Managers" (a 2015 session), and a 2016 session on redesigning websites.

When thinking about website development, local data intermediaries should research a range of options to see which might best fit their goals and audience needs. Organizations should also consider balancing the desire to have a customized platform with an off-the-shelf program that is less flexible but ready to use. Some have used or developed open source software to minimize license costs and promote flexibility, including an open source neighborhood profiles platform used by Providence, Rhode Island, and Pittsburgh. Other partners have also thought about the most efficient ways to keep the content updated, such as linking to the US Bureau of the Census's application programming interfaces for their profiles.

Any organization designing a website should consider specific aspects of its use:

- Who are the audiences? What services can the website provide to each of them? Are websites the best delivery system for what they need?
- What is the internal capacity for development and maintenance of a website?
- What is the budget for technology development maintenance over the long term?
- Are there ways to directly integrate the website with the data management system for more efficient operations?
- What existing tools, such as content management systems and Web-based mapping and visualization tools, already exist in the organization?
- What will the selection process for a consultant or for technology tools look like?

With fast-evolving technology and design expectations, organizations should expect and budget to undertake a complete website redesign about once every three to five years. Six of the 30 NNIP partners redesigned their website in 2015 alone, including DataHaven (New Haven), Urban Strategies Council (Oakland), and CI:Now (San Antonio, Texas). To prepare for future iterations of their websites, data intermediaries must consider the software that powers the site's operations to maximize the flexibility and portability of the content.

DELIVERING PRODUCTS AND SERVICES

NNIP partners' experience demonstrates that building a neighborhood information system is the foundation for operating a local data intermediary following the NNIP model, but doing so is only part of the work. The other two categories of activities beyond assembling, transforming, and maintaining data that were outlined in chapter 2 are essential: (1) disseminating information and applying the data to achieve impact and (2) using data to strengthen civic capacity and governance. The only approach that will secure sufficient funder support for an organization to survive, let alone thrive, is to use data proactively to produce a continuing stream of products and to provide services that ultimately affect outcomes in the community and thus are highly valued. Even in its first year, while a local data intermediary is working very hard to design and populate data holdings, it needs to show the use and value of curated data and to continue to have a flexible and engaged operating style.

The products and services offered depend on the mission of the local data intermediary, the community needs, and funding streams. As discussed in chapter 4, most NNIP partners are able to raise at least some general support revenue, which can be used to take on activities like ad hoc technical assistance to community organizations. Most NNIP partners get the majority of their revenue from project support, grants, and contracts to produce specific products or

services for outside clients. Thus, a data intermediary's ability to maintain the neighborhood information system and provide products and services may depend on how well it can advertise the success of projects and weave together resources to support the whole body of work. The following are examples of products and services that can be implemented over the longer term but might be opportunities intermediaries can explore in the first year to generate visibility and early results.

Publishing Neighborhood Profiles. Neighborhood profiles are one of the most common and most appreciated products developed by local NNIP partners. Publishing profiles gives the data intermediary's efforts visibility. Whether neighborhood profiles are released on paper, as raw data, or on an interactive website, they allow users to quickly scan a variety of indicators for any selected neighborhood. These profiles consist of tables with a variety of indicators for each neighborhood, sometimes with adjacent columns showing values of the same indicators for other geographies (e.g., averages for the city as a whole or for other specified areas), so the users can immediately compare their selected neighborhood with other neighborhoods or areas. Data are normally presented to show trends as well as current conditions.

Many of the activities community groups need data to complete—from finding out a neighborhood poverty rate for use in a grant application, to revising the priority of activities, to making a case for changing a specific law or budget allocation—can be handled with neighborhood profile data alone. A new local data intermediary may not be able to get enough indicators up and running to establish a full neighborhood profile system in the first year. However, NNIP experience has shown that publishing the profiles as soon as possible as a broad community service will reduce the time spent responding to individual inquiries.

Analyzing Local Conditions, Programs, and Policies. A key part of being a local data intermediary is to keep local leaders and the public informed about neighborhood trends. Neighborhood profiles provide valuable information to a wide range of users, but they do not typically interpret the data or help users weigh the importance of one indicator versus another. Data intermediaries can begin analyzing and reporting on neighborhood conditions using only a selection of easily acquired national and local datasets. An early product may be a short, selective report on what the neighborhoods in the intermediary's city are like and how they differ from each other. As new data are added to the repository, the intermediary can report on relevant and interesting (and often surprising) changes its staff have discovered. For example, findings might show how gentrification (or abandonment) has recently accelerated in some inner-city neighborhoods but not others, how rates of crime and vacant properties have

become increasingly correlated in a few neighborhoods, or how conditions have changed in the neighborhoods that surround a mixed-use development that was built a few years ago.

Local data intermediaries also conduct in-depth analyses on conditions, programs, and policies, such as assessments of affordable housing needs, analysis of school discipline policies, or the impact of Superstorm Sandy. Local data intermediaries also might use their data to make sense of issues that were often undecipherable before and to point out new paths to solutions. For example, a community that has been struggling with a problem of wide concern may be encouraged by recent analysis of citywide averages that suggests things are getting better. Yet an analysis conducted by a local data intermediary using neighborhood data could show that conclusion to be seriously misleading. Real improvements in better-off neighborhoods may have been hiding the fact that, in lower-income neighborhoods, the problem has been getting much worse. By showing where and how big the problem is in those neighborhoods, the data intermediary is able to help policymakers reorient their budget allocations and more efficiently target their response. An analysis like this that successfully informs policies or practice will demonstrate the value of the work of a local data intermediary and of the focus on neighborhoods.

Helping Community Nonprofits, Foundations, and Government Use Data. Most of the first applications by NNIP partners involved coaching and teaching. For example, a local data intermediary might take data to a neighborhood group and coach them as they use the data for planning new activities or for just trying to better understand conditions and trends in their area. This type of useful service can be provided even if the local data intermediary has only national datasets and a few local administrative datasets in their repository.

A local data intermediary could also educate stakeholders on data concepts such as medians, means, rates, and margins of error to help them become better consumers of data. An initial session or longer engagement with a community organization to help them use data may empower them to become regular users of the data the local intermediary produces, including producing their own reports and analyses. Many partners also host local user conferences, or data days, to provide their participants with new training and exposure to data-use concepts while fostering a user community.

Supporting Long-Term Initiatives. In the current policy and program environment, action coalitions, place-based initiatives, and collective impact efforts are all expected to be sophisticated users of data and information, incorporating it into program planning,

management, and evaluation. Local data intermediaries have a role to play in helping these initiatives use and interpret data in all phases of their work. Moreover, intermediaries with neighborhood-level data across many domains can be an efficient resource for the community because they can serve many initiatives at once. Intermediaries can also help local organizations and coalitions sift through large amounts of available data (e.g., a dozen ways to measure violent crime in a neighborhood) and to apply that information in the most rational and systematic way. Examples of how NNIP partners have supported recent federal place-based initiatives are available at the NNIP website.

PLANNING FOR SUSTAINABILITY

Organizational sustainability is a universal concern among local data intermediaries, as it is among nonprofits and university centers more generally. As discussed throughout this guide, local data intermediaries need to be aware of changing local environments and shifting funding priorities, and sometimes must adjust their priorities and services to keep up. Local data intermediaries typically modify their strategies and work plans every year, but major overhauls may be appropriate periodically. In the NNIP network, a number of partners have initiated formal planning processes to understand their organization's strengths and to guide future directions. These plans may be conducted internally or by external consultants and have been referred to as business plans, strategic plans, or environmental scans.

A strategic plan typically includes an articulation of the organization's mission, long-term vision, values as an organization, strengths (including how the organization's has a local advantage— its unique value) and weaknesses, key opportunities and challenges, priority objectives and actions for the period the plan encompasses, and performance goals. A good resource on strategic planning is *Strategic Planning for Nonprofit or For-Profit Organizations* by Carter McNamara.

Many resources and consultants are available to assist with the planning process. A collection of resources from the NNIP network about operational planning is located on its website, and box 5.2 describes one specific approach. The following are a few brief points for strategic planning from NNIP partners' experience:

- A hired consultant should have a good understanding of the mission and roles of local data intermediaries. A consultant could interview other local data intermediaries to

learn from them. Local consultants may have a better understanding of the work and the local data environment.

- The strategic planning process should focus on the entire operation, not just on generating a new revenue stream on a product-by-product basis. Local data intermediaries typically need to raise funds for general operating support because many activities, such as making data freely available on websites, are difficult to charge to an individual user.

- As a local data intermediary becomes more established and its reputation better known, a strategic planning process could help it develop criteria and priorities for new work. This planning will help staff evaluate new opportunities and potential growth areas and decide if they fit the intermediary's mission and objectives. Strategic

The Business Model Canvas

In October 2014, about a dozen NNIP partner organizations participated in a half-day session facilitated by a consulting firm, ReWork, to learn how to use the Business Model Canvas, a tool developed by Alexander Osterwalder. Though the canvas was originally developed for technology start-ups, the NNIP partners, including both nonprofits and universities, found it useful to identify all the parts of their businesses: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. The design of the canvas enables the user to view all parts on one page and see how they interact. The central part of the canvas is the value proposition, an articulation of how an organization will provide value or benefits to specific customers or clients. The value proposition explains what is unique about the products and services the user's organization offers and why customers would choose that organization over another.

Each partner created its own business model canvas, section by section, during the session. They spent no more than five minutes filling out each portion, "suspending judgment" as to whether something was appropriate. Once the canvas was complete, partners shared with each other and then repeated the process to refine the canvas. Unlike many business plans that may end up being lengthy documents that take months to produce, the business model canvas is a planning tool that can be completed (twice!) in the course of an afternoon. It also is a tool that can be revisited over time and will help an organization explore opportunities to provide new services and value. Several partners took their canvases home and went through the process again with their staff and board members to further refine their model and share it with their local funders and stakeholders.

planning may also give the intermediary staff the chance to be more deliberate about pursuing new work, rather than reacting to proposals coming their way.

- If the intermediary engages a consultant to set up activities, such as implementing a new strategic communications plan, the process should include transitioning the work to existing staff when the consultant's contract ends to maximize the investment.

Strategic planning processes may also include reassessing a data intermediary's brand and the way its value, mission, and products are communicated. The NNIP experience has shown that local data intermediaries need to periodically review their communication strategy and channels—social media, television, video, traditional print media, blogs, and so on—to have more people use the data and analysis produced and raise the profile of their organizations.

NNIP has had several meeting sessions that focused on communication and branding, including how to use Twitter and Facebook, getting media coverage, and partnering with the media; strategic communication; and approaches to communications planning. Each of the session web pages has a video of the session, copies of the presentations, and handouts from the speakers, including tools to help organizations think through and measure their communication strategies.

RESOURCES IN CHAPTER 5

- **Example Job Descriptions from NNIP Partners**

  http://www.neighborhoodindicators.org/library/catalog?type=154&partner=All&keys=

- **List of National Publically-Available Data Sets with Small-Area Data**

  http://www.neighborhoodindicators.org/library/catalog/list-national-data-sets-small-area-data

- **Catalog of Administrative Data Sources for Neighborhood Indicators**

  http://www.neighborhoodindicators.org/library/catalog/catalog-administrative-data-sources-neighborhood-indicators

- **Inventory of NNIP Partners' Neighborhood Data**

  http://www.neighborhoodindicators.org/data-tech/nnip-data-inventory

- **Allegheny County Department of Human Services Integrated Data System, featured in the NNIP Meeting Session: Behind the Scenes of Integrated Data Systems**

  http://www.neighborhoodindicators.org/activities/meetings/behind-scenes-integrated-data-systems

- **Online Guide: NNIP Lessons on Local Data Sharing**

    http://www.neighborhoodindicators.org/library/guides/nnip-lessons-local-data-sharing

- **Catalog of Data-Sharing Agreements from NNIP Partners**

    http://www.neighborhoodindicators.org/library/catalog?type=151&partner=All&keys=

- **Promise Neighborhoods Guidance Document**

    http://www2.ed.gov/programs/promiseneighborhoods/

- **NNIP and Open Data Case Studies**

    http://www.neighborhoodindicators.org/activities/projects/nnip-and-open-data

- **Student Data Privacy Best Practices**

    http://www.strivetogether.org/sites/default/files/StriveTogether_Student_Data_Privacy_Best_Pract
    ices.pdf

- **Neighborhood Profiles on NNIP Web Sites**

    http://www.neighborhoodindicators.org/library/catalog/neighborhood-profiles-nnip-web-sites

- **Online Guide to Data Help Desks for NNIP Partners**

    http://www.neighborhoodindicators.org/library/guides/data-help-desks-nnip-partners

- **Scan of NNIP Partner Websites and Data Portals to Document Features**

    https://docs.google.com/spreadsheets/d/1rKQhnpZpqn6dh2t77jKueNPQuo1Umbkk-
    7B5OFCMlYk/edit?pref=2&pli=1#gid=1379957083

- **NNIP Meeting Session: Strategic Planning for Technology**

    http://www.neighborhoodindicators.org/activities/meetings/strategic-planning-technology

- **NNIP Meeting Session: Technology for Managers**

    http://www.neighborhoodindicators.org/activities/meetings/pre-meeting-session-technology-
    managers

- **NNIP Meeting Session: Redesigning Websites**

    http://www.neighborhoodindicators.org/activities/meetings/redesigning-your-website-lessons-
    field

- **Open Source Neighborhood Profiles Platform from Providence, RI**

    https://github.com/ProvidencePlan/Profiles

- ***Strategic Planning for Nonprofit or For-Profit Organizations,*** Carter McNamara

  http://managementhelp.org/strategicplanning

- **NNIP Resources on Operational Planning**

  http://www.neighborhoodindicators.org/issue-area/246

- **Business Model Canvas**

  http://www.businessmodelgeneration.com/downloads/business_model_canvas_poster.pdf

- **NNIP Meeting Session: NNIP and Media**

  http://www.neighborhoodindicators.org/activities/meetings/nnip-and-media

- **NNIP Meeting Session: Strategic Communication**

  http://www.neighborhoodindicators.org/activities/meetings/telling-your-story-strategic-communications

- **NNIP Meeting Session: Communications Planning**

  http://www.neighborhoodindicators.org/activities/meetings/approaches-communications-planning

CHAPTER 6: CONTINUOUS LEARNING

In the mid-1990s, it was unusual for organizations to have any GIS capacity. But today a neighborhood resident could help conduct a blight survey and upload geotagged data and photos immediately with a smartphone. The NNIP experience has demonstrated that local data intermediaries must evolve as technology changes, different policy issues gain importance, governments impose new requirements for data and evaluation, and funding priorities shift. There is no magic formula for staying on top of these trends, but as one NNIP partner puts it, "We need to be building the organization today that we need for tomorrow." NNIP partners' experiences have certainly taught that proactive change is difficult to do alone and that reaching out broadly to the community will create stronger organizations.

This chapter offers suggestions for how local data intermediaries can build their organizations for tomorrow by considering performance management, how to deal with shifting technology and policy landscapes, and reaching out to as other local organizations as well as the NNIP network.

PERFORMANCE MANAGEMENT

How do data intermediaries know when their work is making a difference? In the past few years, NNIP partners have increasingly desired to work more effectively, to better communicate their impact, and to become more clearly accountable to their boards and communities. Accordingly, NNIP developed a guidebook on performance management for local data intermediaries (Cowan and Kingsley 2015), and several partners have developed customized tools to implement the approach.

Measuring Influence

The performance management guidebook recognizes that the activities of local data intermediaries described in this guide do not directly improve final outcomes, such as improved health or higher graduation rates. Rather, the intermediaries' job is to use their data in ways that positively influence the work of other local actors who are charged with improving conditions directly. To have influence, the work of the intermediaries—data analysis, training, presentations, and so on—must lead to changes in the behavior of those actors. For example, it may persuade them to increase their budget for a valuable program or to try a new community development technique the data suggest will prove effective.

In this context, performance management requires not only establishing that the changes in behavior that occurred were because of the data intermediary's efforts, but also measuring the changes and monitoring other measures that preceded those changes. Such measurements can include identifying how many people actually received messages sent by the data intermediary, collecting evidence on whether recipients paid attention to those messages (who and how many), and ascertaining whether those messages changed attitudes (even though they might not have yet changed behavior).

Evaluating Processes and Techniques

The performance management guidebook suggests that local data intermediaries establish processes to purposefully measure the performance of all important regular functions and project-based activities. Informal feedback is extremely important. When the intermediary staff meet with key supporters and other stakeholders, they should ask how well they think initiatives have been working in relation to their objectives and interests, and why. Other ways local data intermediaries can collect useful performance information are as follows:

- taking notes and recording attendance at meetings the data intermediary convenes
- monitoring how local media report and react to data and products (ranging from a simple collection of mentions of the work in the press to a formal content analysis)
- gathering Web statistics (using statistical packages to gather data on the number of website visitors and their characteristics)
- using focus groups and surveys to ask audiences to rate the effectiveness of data intermediary work and assessing the reasons behind the results, good and bad

The guidebook emphasizes that performance management should be blended into regular management processes rather than being conducted as a separate effort. Reviews of performance data should be built into all regular management meetings. The emphasis should not be on handing out praise or blame. Rather, the emphasis should be on using the data to help think creatively about how to improve—both in making corrections to initiatives that are under way and in making longer-term adjustments to strategic plans. In this way, local data intermediaries can ensure that the substantial effort they are devoting to their activities has the greatest benefits for their community. In addition, performance management generates evidence of the value of data intermediaries' work that they can communicate to the community, funders, and other key stakeholders in the local data environment.

SHIFTING TECHNOLOGY AND POLICY LANDSCAPES

Staying abreast of changes in the technology and policy landscapes is critical for long-term organizational success. It enables local data intermediaries to get ahead of the curve on new business opportunities and to meet the changing needs of their community.

Technology has changed the way local data organizations analyze, visualize, and communicate data and information about the issues affecting neighborhoods. The sheer volume of content available online—including content from the growing number of "data journalism" desks at major news media organizations, local blogs, and social media platforms like Twitter and Facebook—has meant that local data intermediaries have had to adapt their approaches to communicating. In many ways the variety of formats, especially the increasing number of private news outlets that are hungry for local content, gives local data intermediaries an opportunity to share their work and engage a much broader range of stakeholders than ever before. But the crowded space can make it more difficult for stakeholders to sort through all the noise and for local data intermediaries to stand out among the many other organizations that provide sustainable, high-quality data or technology assistance in their communities.

Keeping key audiences and strategic priorities in mind will help local data intermediaries prioritize the trends to follow and how quickly the trends need to be adopted. As mentioned above, maintaining an organizational website requires periodic updates or overhauls, and being aware of current technology trends will help in the decisions about when and what kind of investments will pay off. It is also helpful to stay aware of emerging developments to maximize business opportunities. For example, a local data intermediary may not normally handle primary data collection activities, but if it is approached with a project to do a blight survey, awareness of recent technology trends can help an organization determine the most appropriate (and efficient) technology to help manage the data collection.

Local data intermediaries should already be monitoring shifts in policy at the local and state levels. But they should also pay attention to federal policy and what is occurring in urban places across the country. A new federal program may have important changes in performance management requirements for grantees (who may need assistance understanding, designing, and collecting data as a result of those measures). Additionally, federal and state agencies frequently publish innovative new datasets, online databases, publications, and other tools that can help communities understand local policy issues. Or large private foundations may begin talking about "collective impact" models or "resiliency," and opportunities may arise in the

community to support those efforts. The following sections illustrate recent shifts in technology and policy landscapes that have shaped and likely will continue to shape the activities of local data intermediaries.

Open Data

The rapid changes in technologies for storing, analyzing, visualizing, and sharing data over the past two decades made it increasingly easier for governments to move to electronic storage of data and begin to publish data in machine-readable formats. In addition, a movement grew to put pressure on governments to be more accountable and transparent. Several NNIP partners found a natural role in this cause (see, for example, the work of the Urban Strategies Council in Oakland).

However, the spread of government-based open data portals also caused some observers to question whether a local data organization was still needed. As a network, NNIP recognized the opportunities for local data intermediaries in the open data movement and spent two years exploring the relationship between NNIP partners and open data advocates and practitioners at partner meetings and outside conferences. That project culminated in case studies featuring individual cities and a summary paper. The Pittsburgh NNIP partner learned about open data through an NNIP meeting and has gone on to launch a collaborative open data portal with the city of Pittsburgh and Allegheny County. Work on open data and technology has continued with a project launched in 2015, the Civic Tech and Data Collaborative, an effort of Living Cities, NNIP, and Code for America.

The Affordable Care Act

With the passage of the Affordable Care Act, nonprofit hospitals are required to conduct community health needs assessments (CHNAs) every three years. CHNAs specifically require hospitals to engage with community members and the state or local public health agency and to focus expressly on the communities they serve (determined by the geographic area served, target populations, and principal hospital functions). With the establishment of CHNAs, local data intermediaries can play many roles to make the CHNA process more valuable to the community. For example, local data intermediaries may know how to access local data sources needed for the CHNA, which might be unfamiliar territory for hospitals that have traditionally focused on internal data. In some cases, hospitals across a large metropolitan area can collaborate on a single, shared assessment. Local data intermediaries that cover a large geographic area therefore may be well positioned to serve as a convener for such efforts. Local data intermediaries may also participate in developing the content of the CHNAs, may be

contracted to collect new primary data (e.g., from surveys and focus groups), or even be charged with completing the entire assessment. Intermediaries can help improve the utility of the assessments or the hospitals' overall community engagement efforts by connecting them to other organizations that should be involved. For example, local public health departments, which are often based within city or county governments that local data intermediaries may already work with regularly, have a similar process in place that is tied to national standards for accreditation (for more on this topic visit the NNIP website).

REACHING OUTSIDE USUAL CIRCLES

Although local data intermediary staff are often tempted to keep their heads down and focus on the work going on locally, taking a step back and learning from others may help elevate the work in unexpected ways. And fresh views and insights may provide a much-needed morale booster when work gets challenging. Reaching outside one's usual circles may mean partnering with the local university or reaching out to an organization with a specific topical focus (such as the local Enterprise Community Partners, the Local Support Initiatives Coalition, or the county public health department) to increase policy expertise. Or it may mean participating in a code-a-thon and getting to know the civic technology volunteers in the community, or connecting with an organization in a city across the country that has shared interests, such as learning how investing in quality housing can improve health outcomes. Reaching out may mean bringing the community into the local data intermediary by sponsoring (or fundraising for) internships to teach students basic data analysis and mapping skills with a focus on neighborhood policy. Attending a national conference or reaching out to local organizations in other national networks are both good ways for the intermediary's staff members and leaders to keep learning and growing.

The following are a few examples from the NNIP network:

- *Connect with the regional Federal Reserve Bank and branch offices.* The local branches and offices collaborate on community and economic development initiatives, conducting and sharing applied research and identifying emerging issues. The NNIP network and individual partner organizations have partnered with the Federal Reserve on several initiatives over the years.
- *Partner with the state's KIDS COUNT grantee.* The Annie E. Casey Foundation's KIDS COUNT network of grantees uses data to advocate policy changes to improve the lives of children and their families. Although KIDS COUNT grantees do not typically

collect neighborhood data, they may be important allies to move policy and may be able to apply local data intermediary products to advocacy at the state policy level.

- *Attend national conferences and connect online.* Many national conferences have open registration and could be valuable for staff members of local data intermediaries to attend. Conferences provide opportunities to expand knowledge about data sources, policies, and practices and to learn more about how practitioners and organizers improve their understanding of how to serve local communities. Some national networks may offer online communities as well, like the American Community Survey user group. The following are examples of conference opportunities for data intermediary leaders and staff members:

  o *Expand your technology expertise.* Conferences run by groups such as Esri, the Nonprofit Technology Network, Urban and Regional Information Systems Association, or the Free and Open Source Software for Geospatial (FOSS4G) may include training sessions, demonstrations, and information on emerging tools and technologies.

  o *Learn from other data and indicator experts.* Examples of conferences attended by NNIP partners in the past include the annual [Local Employment Dynamics Workshop](#) and the American Community Survey Users Conference. Networks such as the Association of Public Data Users and Community Indicators Consortium also run valuable national conferences.

  o *Connect with practitioners.* The Reclaiming Vacant Properties Conference has a wide variety of stakeholders from local governments, community development corporations, land banks, and so on. PolicyLink's Equity Summit has numerous opportunities to connect with community organizers and experts on equity issues.

  o *Connect with researchers, planners, and public health professionals.* Professional and academic associations like the American Evaluation Association, the American Planning Association, the American Public Health Association, or the Urban Affairs Association may be good places to learn from others, promote the use of administrative data, and share local intermediary activities on a national stage.

THE NNIP NETWORK

This guide discusses the NNIP model and what has been learned from the experience of NNIP partners over the past two decades. It has intentionally not focused on how to join the network or network activities themselves, because a core NNIP belief is that organizations should decide to pursue the activities of a local data intermediary because it is a way to help their community. The long-term sustainability of a local data intermediary will depend on its ability to develop and demonstrate its utility locally. The strength and commitment of NNIP's local partners have made it a successful peer learning network. Therefore, the last part of this guide briefly describes NNIP's goals, the benefits for local NNIP partners, and the network's activities.

NNIP has three main goals that drive its network activities:

1. Strengthen local capacity for data-driven decisionmaking.
2. Inform local and national policy based on lessons from local experience.
3. Build national support for community information systems.

Designed as a peer learning network, NNIP is a network of partners that share knowledge and best practices on policy domains, data management, visualization, and community engagement, as well as organizational management, sustainability, and communication. Learning from others enables partners to improve their work in their own communities, to seek new data, to import successful ideas, and to avoid pitfalls. Local partner staff members build relationships through network activities and assist each other when questions or challenges arise. Participation in NNIP also gives local partners the opportunity to have their work highlighted on the NNIP website and by Urban Institute staff representing NNIP at forums with national audiences.

The Urban Institute facilitates peer learning through in-person meetings, the NNIP website, webinars, individual referrals, technical assistance, and written and online tools and guides. Cross-site projects with NNIP partners and the Urban Institute are one way the network informs local policy and contributes to national field building on specific issues. Building collective knowledge about how to take action on specific policy issues is important to the partners and the Urban Institute. NNIP also encourages broad investment in long-term local information capacity and the necessary components of a healthy local data environment by articulating their value to other national networks and audiences. For general audiences, the network shares news about NNIP activities and about ways communities use and understand data through Twitter and a public Google group titled Urban-NNIPNews.

For organizations that have made the commitment to taking on the activities of a local data intermediary and are interested in implementing the NNIP model, a formal process is in place for joining the network. The application process consists of consultation with the Urban-NNIP staff and the submission of a written application with community references and an inventory of the organization's neighborhood data. The NNIP executive committee reviews the application and then submits it to the full partnership for their comment. For more details, visit the NNIP website.

The NNIP network has witnessed the value of what local partners have achieved over the past 20 years, and we hope to inspire others to join in the work to democratize data and level the information playing field for communities and to improve the quality of life for residents. Access to good data on neighborhoods is essential to empowering residents, creating an understanding of a community's needs to overcome structural barriers, and developing sound solutions to address them. The work of a local data intermediary is not quick or easy, but it is important and valuable to community organizations, local government, foundations, and advocates. The authors hope that your community will take on this mission and join NNIP partners in providing better data, for better decisions, to create better communities.

RESOURCES IN CHAPTER 6

- **A Guide to Performance Management for Local Data Intermediaries**

  http://www.urban.org/research/publication/monitoring-impact-performance-management-local-data-intermediaries/view/full_report

- **NNIP Partners and Open Data**

  http://www.neighborhoodindicators.org/activities/projects/nnip-and-open-data) advocates

- **Civic Tech and Data Collaborative**

  http://www.neighborhoodindicators.org/activities/projects/civic-tech-and-data-collaborative

- **NNIP Meeting Session: Engaging Hospitals as Partners in Community Change**

  http://www.neighborhoodindicators.org/activities/meetings/engaging-hospitals-partners-commu

- **NNIP Cross-Site Projects**

  http://www.neighborhoodindicators.org/activities/projects/

- **NNIP and NNIP Partners on Twitter**

  http://www.neighborhoodindicators.org/get-involved/listservs/follow-our-partners

- **Public Google Group Urban-NNIPNews**

  http://www.neighborhoodindicators.org/get-involved/listservs/nnip-news

- **Information on Becoming an NNIP Partner**

  http://www.neighborhoodindicators.org/partners/become-partner

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APPENDIX A: TOOLS FOR ASSESSING THE LOCAL DATA ENVIRONMENT

This appendix provides two tools for planning teams to use with the assessment of the local data environment (described in chapter 3). The assessment is a way for community leaders and potential local data intermediaries to scan the local data environment and solidify their understanding of the political and economic viability of a local data intermediary. The assessment also is an occasion to reach out to data providers, users, and funders to build support for local data intermediary activities and reveal emerging opportunities for work and funding.

The first tool is a template for documenting the characteristics and roles of organizations involved in the local data environment (exhibit A.1). This template could be used to provide a format for documenting the collective knowledge of the planning team or completed as part of a more formal assessment process. The planning team can choose to document more or less detail depending on the goals of their specific assessment. The second tool is an interview guide that could be used during stakeholder outreach to elicit information on who is providing local data intermediary services, what services are provided, and what needs there are in the community.

TEMPLATE FOR DOCUMENTING INFORMATION ON STAKEHOLDERS, PARTNERS, AND FUNDERS

Guidance for completing the template entries in exhibit A.1 is shown below.

EXHIBIT A.1
Template Shell

Organization name and website(s)	Key staff	Size (overall staff)	Mission, issue areas, and core competencies	Role(s) related to data	Reputation and relationships

Organization name and website(s). Document these basic identifying details.

Key staff. Document who the key staff person or people are who share an interest in using data intermediary services or who may be providers of these services. This list will help to identify individuals who should be participating in discussions related to starting an NNIP partnership, as well as serve as a list of potential individuals to invite to participate in one-on-one interviews.

Size (overall staff). Several organizations on this inventory might offer services similar to the services of a local data intermediary. Others represent potential users of data intermediary services. Document measures of scale to better understand how much capacity and interest are already present in the community. Number of staff providing an information service, or the number of staff seeking data, can be used as indicators of scale. Consider checking annual reports for information about how these organizations fund their work. The amount of funding, if listed, can also provide insight about scale.

Mission, issue areas, and core competencies. What is the overall mission of the organization? Does the organization focus on one or more specific issue areas? Answers to these questions are important considerations for potential collaborators, and they are essential to know for a potential local data intermediary's institutional home. A local data intermediary following the NNIP model collects and transforms data across multiple topics and issue areas and focuses on providing assistance to economically disadvantaged neighborhoods. Organizations that want to be the institutional home for, or strong collaborators with, a local data intermediary following the NNIP model need to ensure that their organizational mission and focus aligns with the model's values.

Role(s) related to data. Organizations can have many possible roles in the local data system. The following are some examples of roles to document:
  • Collection, assembly, and cleaning of data may include the following data sources:
    ○ national publicly available data sources (American Community Survey, Home Mortgage Disclosure Act)
    ○ local administrative data (crime reports, property transactions, vital statistics, social benefit receipt)
    ○ primary data (vacancy surveys, asset mapping)
    ○ program data (client characteristics, services provided)
    ○ integrated data systems (individual records linked across administrative data sources from multiple agencies)

- Dissemination of data may include both passive dissemination through application programming interfaces (APIs), open data portals, neighborhood profiles or spreadsheets, or the use of apps or visualization tools, as well as active dissemination through convenings, testimony, and briefings.
- Responding to ad hoc data inquiries may include providing data for a grant proposal, informing testimony for a public meeting, responding to a media request, or creating a map for a presentation.
- Longer-term technical assistance and evaluation are usually done through a regular engagement with a nonprofit, neighborhood or community group, government agency, funder, action coalition, neighborhood development initiative, or collective-impact project.
- Research and analysis may include academic research, advocacy research, or research used in a community planning context.
- Funding data activities include funders of data projects, data infrastructure, research, or evaluation initiatives.
- Using data includes consumers of data produced by others or consumers in need of data not currently provided.

Reputation and relationships. In addition to documenting roles associated with the data ecosystem, how does the organization relate to others? Are there partnerships? Are they trusted by local government? Is their work advocacy based? Are they viewed as objective or independent?

SAMPLE INTERVIEW GUIDE FOR ASSESSING LOCAL INFORMATION SERVICES, CAPACITIES, AND NEEDS

These are sample questions designed for interviews with organizations providing information services, data users, and other key stakeholders with an interest in local information services and a potential local data intermediary.

General questions, relevant for most stakeholders

1. Please tell me about your organization and your work. Listen and probe for

   - mission
   - staff
   - technical capabilities
   - issue areas
   - geographic focus

2. How do you use data? Listen and probe for

   - resource allocation and operational decisions
   - reporting and measuring impact
   - policy and advocacy work
   - understanding populations served
   - research and development and proposals

   2a. Probe for specific stories and ask for example documents for compelling, successful uses.

3. What data are most valuable to you? How do you access data? Listen and probe for

   - geography
   - specific datasets
   - issue areas
   - types (about people, places, and transactions)
   - static and/or trend

4. Are there data you want to use but can't? If so, what is the barrier? Listen and probe for

   - cost
   - access and availability
   - technical needs (processing, cleaning)

Questions to ask about other information services or organizations in the community

1. What organizations or services provide data and information services in this community? Listen and probe for
   - satisfaction with other organization(s)
   - uses and results achieved
   - strengths
   - weaknesses
   - overall perception

2. What other organizations and institutions are key to the data infrastructure in this community? Listen and probe for
   - satisfaction with other organization
   - uses and results achieved
   - strengths
   - weaknesses
   - overall perception

   2a. Listen and probe for partnerships (of any scale or duration) among the organizations mentioned.

Question specifically for organizations providing data and information services

1. Does your organization provide or have capacity to provide information services such as assembling and disseminating neighborhood-level data, providing technical assistance and training to data users, conducting issue area analyses, and supporting specific community-oriented projects? Please describe.

   1a. Listen and probe for specific examples of projects, organizations worked with, and results of the work.

Questions to ask about a potential local data intermediary (relevant for most stakeholders)

1. Consider a service that <u>assembles and disseminates neighborhood-level data</u>, with a focus on making recurrently updated, comprehensive data available for smaller-scale geographies in easy-to-use formats.

   1a. Who do you think would use the service?
   1b. What organizations would, in your view, have a role in providing the service?

2. Consider a service that <u>provides technical assistance and training to data users</u> and that empowers and builds capacity in the community to use data to aid in addressing community priorities and creating impact.

   2a. Who do you think would use the service?
   2b. What organizations would, in your view, have a role in providing the service?

3. Consider a service that <u>uses data to conduct issue area analyses and support specific community-oriented projects</u>. Examples could include applying neighborhood-level data to better understand specific areas of community interest such as education or housing, or using data in creating new policies or developing new programs.

   3a. Who do you think would use the service?
   3b. What organizations would, in your view, have a role in providing the service?

4. Who are potential funders and payers for these services? What funders have the strongest mission fit? What barriers exist to investment?

NNIP is a collaboration between the Urban Institute and partner organizations in more than two dozen American cities. NNIP partners democratize data: they make it accessible and easy to understand and then help local stakeholders apply it to solve problems in their communities.

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INDICATORS
PARTNERSHIP

NNIP

For more information about NNIP, go to
www.neighborhoodindicators.org or email nnip@urban.org.