

# STRENGTHENING LOCAL CAPACITY FOR DATA-DRIVEN DECISIONMAKING

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June 2013





## ACKNOWLEDGMENTS

The authors thank Alaina Harkness of the John D. and Catherine T. MacArthur Foundation and Cindy Guy from the Annie E. Casey Foundation for their advice during the strategic planning process and throughout the years. In addition, we acknowledge the contributions of the partners serving on the NNIP Executive Committee during this time period: David Bartelt (Philadelphia); Phyllis Betts (Memphis); Todd Clausen (Milwaukee); Matthew Kachura (Baltimore); Kurt Metzger (Detroit); and Steve Spiker (Oakland). Finally, many other local partner staff shared valuable insights on earlier drafts and at the session at the partners meeting in Providence in September 2012.

This paper was supported by the John D. and Catherine T. MacArthur Foundation. The views expressed are those of the authors and do not necessarily represent those of the MacArthur Foundation or the Urban Institute, its trustees, or its funders.



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## EXECUTIVE SUMMARY

A large share of public decisions that shape the fundamental character of American life are made at the local level; for example, decisions about controlling crime, maintaining housing quality, targeting social services, revitalizing low-income neighborhoods, allocating health care, and deploying early childhood programs. Enormous benefits would be gained if a much larger share of these decisions were based on sound data and analysis.

In the mid-1990s, a movement began to address the need for data for local decisionmaking. Civic leaders in several cities funded local groups to start assembling neighborhood and address-level data from multiple local agencies. For the first time, it became possible to track changing neighborhood conditions, using a variety of indicators, year by year between censuses. These new data intermediaries pledged to use their data in practical ways to support policymaking and community building and give priority to the interests of distressed neighborhoods. Their theme was “democratizing data,” which in practice meant making the data accessible to residents and community groups (Sawicki and Craig 1996).

The initial groups that took on this work formed the National Neighborhood Indicators Partnership (NNIP) to further develop these capacities and spread them to other cities. By 2012, NNIP partners were established in 37 cities, and similar capacities were in development in a number of others. The Urban Institute (UI) serves as the secretariat for the network.

This report documents a strategic planning process undertaken by NNIP in 2012 and early 2013. The network’s leadership and funders re-examined the NNIP model in the context of 15 years of local partner experiences and the dramatic changes in technology and policy approaches that have occurred over that period. The first three sections explain NNIP functions and institutional structures and examine the potential role for NNIP in advancing the community information field in today’s environment.

Based on the evidence presented in the earlier sections, the last three sections of this report lay out NNIP’s proposed strategy to expand and strengthen local data intermediary services and capacity in metropolitan areas. The three components are (1) an information campaign to advise local stakeholders nationwide about the potentials for data development and data-driven



decisionmaking, (2) an expansion and upgrading of the services provided by the NNIP network to current and potential partners, and (3) targeted efforts to catalyze elements of a broader national system to support effective local data use. The strategy is intended as a blueprint to guide the NNIP's activities in 2013–14 but will be treated as a living document as the network and its local partners discover new opportunities and adapt its priorities to the evolving environment.

### Functions of Local NNIP Partners

All the local partners in NNIP have performed three functions since the network began in 1995, functions viewed as transformative at the time (Kingsley 1999).

- ***Assemble, transform, and disseminate data.*** Accessing data from multiple agencies through open data portals or data sharing agreements is the first step. The data also have to be cleaned, translated into forms that are easier to use, and integrated into recurrently updated information systems.
- ***Apply the data to achieve impact.*** NNIP partners consider their most important function to be applying the data to address local policy problems and, in particular, the opportunities and needs of distressed neighborhoods. They work with local stakeholders to identify emerging issues and target resources and investments efficiently. They also take advantage of the power of data to motivate collaboration and craft innovative ways to address community issues.
- ***Use data to strengthen civic capacity and governance.*** NNIP partners also work to cultivate the overall local capacity for informed action. This includes enhancing the data capacities of other local institutions and promoting a culture of learning and collaboration.

As these capacities emerged, they were attractive to community groups that previously had little access to relevant data. The capacities were also much valued by public agencies and nonprofits that needed a richer understanding of neighborhood conditions and trends to plan their work effectively but lacked internal capacity to perform their own analyses. The capacities were also important to civic leaders who previously contracted research to out-of-town consultants and evaluators but wanted to retain the knowledge and expertise locally and over the long term.



With NNIP, the data were available in a “one-stop shop” and regularly updated so users did not have to start all over again with a long period of data collection when they wanted an updated study of an issue. Accordingly, leaders (including local philanthropies) began to see it as cost-effective to invest in *local* professionals who would keep the relevant data up to date and be there over time to interpret and advise—people who lived in their cities and understood local context. All NNIP partners are a part of “neutral and trusted” institutions mostly outside of government, and none are “owned by” the current mayor or any political faction.

### A Sustainable Institutional Approach

The desire for local data assembly and expertise has fueled the growth of the network to 37 cities today. Some institutions that have taken on these functions are community-oriented research institutes at local universities. Others are nonprofits or government agencies that see this comprehensive data work as supportive of their broader missions. In some cases, this work is being done under collaborative agreements by two or more such institutions.

- Although their financial strength varies, NNIP partners in these varied institutional forms have been able to sustain operations for many years almost entirely with local funding. Nine have been in operation for 15 years or more, and none relies solely on support from national philanthropy or the federal government.
- A survey in 2009 showed that NNIP partners operate at an annual budget level averaging \$322,000, but there is considerable variation. All of them require some general support, but almost all are effective at leveraging resources, bringing in substantial fees for direct services they perform.

Since the network was founded in 1995, several partner organizations have closed. However, in all but one case, the NNIP functions were successfully continued by another local institution.

### Intermediaries and the New Environment

The NNIP approach represented a major breakthrough in 1995, but what roles are relevant for local partners today given the changes that have taken place over the past 15 years?

Changes in the data environment have been dramatic:



- Technology has led to unprecedented reductions in the costs of data assembly, storage, manipulation, and display.
- The amount of relevant data available to the public has been vastly expanded. This includes new national data files with small-area—level or address-level data (from the federal government and commercial sources) and publicly available local government administrative files, reflecting the progress of the open data movement.
- National data visualization platforms and online tools have been developed that make it easier for users to work with data.
- A number of local governments have markedly improved their internal data capacities (staff knowledge, data collection, program/policy applications).
- There are now many more outside consultants to help locals take advantage of these new capacities.

Far from replacing the need for NNIP partner services, the advances appear to be strengthening demand for such services but often in different forms than in the past.

- NNIP partners are shifting their priorities, methods, and workloads to take advantage of the technological advances. For example, the availability of more data at low cost means that partners have been able to substantially expand their own data holdings and yet spend less time overall assembling data and more time on practical applications and catalyzing effective data use more broadly.
- NNIP partners are active users of the new national datasets, visualization platforms, and tools, but these generally are used in conjunction with local data systems to achieve real payoffs.
- Some NNIP partners are at the forefront of promoting the open data movement locally, but many local governments have not yet embraced open data principles. Even with publicly available data, partners still need to transform much of the raw data released into forms that are easier for other local stakeholders to understand and use.
- NNIP partners are helping government agencies develop their own data capacities, but agency staff still recognize the critical work of an independent data intermediary they can count on to help them with these functions.



- NNIP partners are encouraging local leaders to use the good outside consultants, but the model cases have the partners working in collaboration with the consultants to assure positive “leave-behinds.”

**Changes in the policy environment** have also enhanced demand for advanced data capacity. Particularly important at this point are local efforts to address the devastating aftermath of the foreclosure crisis and Great Recession in low-income neighborhoods. Many cities are working on integrative strategies that cut across traditional program silos, such as housing, education, and public safety. To plan and implement these approaches, local leaders are taking advantage of the NNIP partners’ assembled data, knowledge, and analytic skills, along with the partners’ experience in collaborating with neighborhood stakeholders.

**The environment in non-NNIP cities.** We find that more local groups are working with data and using the new tools now than were doing so even five years ago, but these efforts typically remain partial and fragmented. In most places, there are still major data inefficiencies (e.g., would-be users have to go to many different sources to try to assemble data), and no one is trying to coordinate local data work. Knowledgeable respondents suggest that civic leaders in these places would benefit from learning about the potential payoff of a local data intermediary and related examples of how data is being used to improve local policies and programs.

### Strategy for Advancing the Field

The recent advances in the data environment we have noted, along with the progress of NNIP itself, make this a time of tremendous opportunity to expand informed decisionmaking in American communities. The NNIP network is uniquely well positioned to serve as a catalyst to accelerate this progress. Accordingly, ***we recommend a national effort to strengthen local data intermediary capacity where it now exists and to develop capacity where it could be most beneficial but does not yet exist.***

To further this goal, NNIP will mount a sizable information campaign to promote the NNIP model to civic leaders and accelerate better decisionmaking in larger metropolitan areas. In addition, the UI needs to improve services to current partners to support the advancement of their work





and sustainability of their organizations. Accordingly, increased investment to strengthen NNIP network activities and services will be essential.

***The Information Campaign.*** The objectives of the information campaign are to reaffirm and expand support in existing NNIP cities, substantially enhance awareness of new opportunities for data-driven decisionmaking and intermediary development in new cities, and influence other related networks to incorporate the lessons and principles of NNIP into their activities.

We propose implementing the campaign in partnership with other organizations. Most important will be groups that represent local civic funders—the groups that can support enhancement of the data environment at the local level (e.g., community foundations, United Way). But we will also involve many other national interest groups (e.g., the Federal Reserve system, International City and County Managers Association, the National League of Cities, and Local Initiatives Support Corporation).

NNIP has close working relationships with many of these groups and will expand those as a part of the campaign by making presentations at group conferences and writing articles for their publications. These efforts will explain the history of NNIP, describe success stories and what made them work, and explain how new cities can get started. Through this approach we expect individuals in cities without NNIP partners will emerge to serve as local champions for the NNIP approach. This can then lead to assistance by phone, regional webinars, and site visits to discuss the NNIP model with local leaders and funders.

***Expanding and upgrading the services provided by the NNIP network.*** This involves efforts in four areas. The first is developing capacity in new communities, following up on new interests that surface through the campaign. Activities include providing technical assistance to new candidates, creating a standard kit of materials to help new partners get started, and maintaining the network's standards for membership through a rigorous application process.

Second is *strengthening local NNIP partner organizations*. This entails continuing current activities, such as the web site and partner meetings, to maintain momentum but also providing an expanded program of technical assistance that draws on the expertise of UI and local partner staff.



Third, we plan to raise funds for *new cross-site initiatives*—NNIP’s main method of advancing the state of the art in data applications to address real policy issues and enhance community development. Topics could include housing markets, neighborhoods and health, early childhood and education, integrated data systems, or the NNIP Shared Indicator System.

Finally, we plan to markedly *expand our documentation and dissemination of best practices*.

These new guidance materials will be based on recent innovations in the sites that we have not yet had the chance to document, as well as applications that emerge from new cross-site work. They will cover promising practices on the technical side as well as in policy and programmatic approaches.

### A National Support System

NNIP’s efforts alone will not be sufficient to advance effective local data use quickly or comprehensively enough to meet local demands. In addition, the community information field needs ***a broad-based national support system to enhance data-driven decisionmaking in all local communities***.

As we see it, this effort will entail (1) pressing national and state governments to make many more of their neighborhood-level datasets available to the public; (2) transforming those datasets to make them easier to use and releasing them to the public; (3) expanding online visualization platforms and developing automated tools to facilitate local applications; and (4) developing curricula based on NNIP capacities that can be adapted by professional schools of public administration, urban planning, and other relevant disciplines.

While not taking the lead, we suggest that NNIP perform an initial assessment to help start this effort and serve as a collaborator and participant in this work thereafter. The assessment will examine the status of all of the mentioned elements and identify important gaps that need to be addressed.

### Conclusion

NNIP leadership undertook a strategic planning process and this companion paper to examine the role of local partners in a new era and hold inclusive deliberations about the directions for



the network. The results have reinforced our conviction that the NNIP model remains sound almost two decades after its conception. The network still has a valuable role to play in encouraging new data intermediaries in more cities, fostering the existing community of practice, and implementing cross-site initiatives to inform local and national policy. NNIP leadership and local partners will continue to shape the NNIP network so that it can thrive as it grows in size and influence. NNIP staff and local members are also committed to collaborating with others to nurture the national support system for community information.

The next few years represent an important time in the development of local capacity for data-driven decisionmaking in America. Advances in data availability and technical tools are inevitable, but in and of themselves, these will not guarantee marked improvements in local policies and programs. Skilled professionals with knowledge of local context will be needed to help residents and civic leaders achieve the payoff from progress on the technical side. Individual funders and funder networks could further the agenda to build this local capacity in multiple ways: documenting success stories, hosting in-depth discussions on barriers to using information, and directly investing in local and national support organizations. Coordinated and deliberate actions by funders and other concerned stakeholders would ensure the continued advancement of the community information field.



## Section 1

# FUNCTIONS OF LOCAL DATA INTERMEDIARIES

The local data intermediaries that are a part of National Neighborhood Indicators Partnership (NNIP) have always performed three basic functions. The paragraphs below describe how they work in most cities and how communities are changed by the presence of an NNIP partner.

Although the main functions are the same, many aspects of the way that they are performed have changed dramatically, particularly in response to remarkable technical advances and increases in data availability that have taken place over the past 15 years. That topic will be touched on in this section but covered in more depth in section 3.

### 1. Assemble, Transform, and Disseminate Data

**Data assembly.** This most basic function for NNIP partner organizations entails working out long-term data sharing agreements with a broad range of agencies and obtaining the data to incorporate in their systems. Most often this is done by NNIP's lead organization in a locality, but it could be done by several groups working on individual data sources and then combining the indicators so the public can access them via one data portal. Either way, the intermediaries commit to regularly updating the data over the long term, and the commitment by civic leaders to support this activity needs to be long term as well. Another increasingly common aspect of this function is encouraging local government agencies to release their nonconfidential data directly to the public over the web. In a recent survey, one-third of the partners had participated in open data activities, from a one-day hackfest to developing a portal for open government data.

Due to these data assembly efforts, community organizations, residents, and local agencies have to go to only one source to easily obtain comparable data for all neighborhoods on diverse topics such as housing sales volumes and prices, crime rates, teen pregnancy rates, student math proficiency ratings, foreclosure rates, day care capacity, and Temporary Assistance for Needy Families (TANF) and Supplemental Nutritional Assistance Program (SNAP) reciprocity



rates. (See Coulton 2008 for a full list of administrative data sources and the NNIP Data Inventory at <http://www.neighborhoodindicators.org/data-tech/nnip-data-inventory> for the latest report on partners' data.) This idea—accessing data from a wide variety of agencies and then providing it to users via a “one-stop shop”—has been one of the major benefits of the NNIP approach.

As one example, foreclosure and home sales data are critical to measuring the housing market impacts of the foreclosure crisis across neighborhoods. However, by linking those data to school enrollment data and crime data, some NNIP partners have identified a wider range of consequences of the crisis. These data then provide the basis for consideration of a wider range of policy responses, such as changing policies on school assignment to reduce student school mobility due to involuntary moves and increasing police patrols where vacant, foreclosed housing is concentrated.

***Transforming data to make them easier to use.*** Even for experts, working with raw administrative data to create useful measures is challenging and can be very costly, especially when it becomes necessary to combine indicators from the files of several different agencies. Intermediaries play an essential role in transforming data to make them easier for others to use (e.g., nonprofit and agency staff, community groups, and others who do not have much experience working with data). This work includes cleaning the data, creating metadata, crafting new indicators, and developing new forms of display.

Because NNIP partners regularly update datasets that they have worked to obtain, they build up substantial knowledge over time about the reliability of the data and the purposes for which the data are best used. This knowledge is used to improve the transformation process. The example described about analysis of linked school enrollment and foreclosure requires substantial transformation of data from each source. The address-level data must be geocoded, aggregated to the appropriate geography, and analyzed together—something that would be very hard to do without the one-stop shop approach.

Government datasets released through open data portals are supporting many important policy and service innovations today and will be the basis for more in the future. But these data will be mostly in a raw form that will be difficult for those without a high level of expertise to use directly. These datasets still require transformation by data intermediaries to maximize their usefulness



for influencing policy and improving communities. Additionally, when contributing agencies update their administrative datasets they may replace the old version with the new (i.e., so that data on past transactions are lost). NNIP partners often take on the role of archiving the historical data, creating longitudinal datasets that enable the examination of trends over time.

***Disseminating data.*** For the most part today, dissemination means releasing the data directly to the public over one or more web sites in different forms to suit a range of needs and technical expertise. Dissemination by NNIP partners ranges from publishing static displays, such as maps and statistical profiles for individual neighborhoods, to providing structured data files that users can download. Some displays are interactive, for which the users specify aspects of the form and content of the maps or charts they want and the exhibits are created in real time. On some web sites, for example, a user can click on a particular land parcel on a map and the system then brings up various displays about that parcel, including a photograph and characteristics of the parcel. NNIP partners also disseminate data in more traditional forms (e.g., hard-copy reports and fact sheets). As described later, a large part of the dissemination role that NNIP partners play in their community is to work directly with local stakeholders, agencies, and organizations, engaging them in using the data to influence policy and achieve impact.

## 2. Apply the Data to Achieve Impact

Although the acquisition, transformation, and dissemination of data are essential, NNIP partners consider their most important function to be applying the data to address local policy problems and, in particular, address the opportunities and needs of distressed neighborhoods. The founding NNIP partners saw that data were available to governmental and private sector decisionmakers but not to the residents in low-income neighborhoods who were most affected by their actions. The partners aimed to level the playing field by providing residents and community groups both the relevant data and the training to advocate and plan for their neighborhoods.

Although the tenet of “democratizing information” is still central to NNIP partners’ missions, they work directly and proactively with a wide range of stakeholders to assure their data are used in practical ways. Clients include government agencies, city councils, community foundations, nonprofit service providers, neighborhood associations, and community development



corporations. Data and technical assistance from NNIP partners motivate changing public policies at the neighborhood, local, and state levels.

The partners endeavor to increase the ability of governments and community organizations to identify emerging issues and target resources and investments efficiently. (Just a few examples are noted in box 1.1. For many more, see Cowan 2007 and Kingsley et al. 1997). The partners may prepare analyses and reports on a particular topic. The most beneficial experiences, however, are when the NNIP partner works interactively with individual clients and helps them to understand and use the data. In these engagements, the NNIP partners prompt learning along the way so that at the end, the clients legitimately feel that they own the final products.

Sometimes simply the release of data—issuing a news release or brief report showing some surprising new trend—will make a difference. For example, in Columbus, the Community Research Partners' annual "Benchmarking Central Ohio" report revealed that the Columbus metropolitan area had the worst poverty rate among 15 comparison areas. This information was covered in the press and resulted in stakeholders organizing a convening called "Facing Facts" and featuring discussions about how to improve local asset building programs.

But many projects are more complex. Examples include using the data to inform the design of a neighborhood improvement initiative; working with funders to conduct community needs assessments; helping an individual agency or nonprofit use data in program planning and performance management; or conducting independent program evaluations. For example, a number of NNIP partners have been selected to play important roles in the planning and implementation of the federal government's Promise Neighborhoods, Choice Neighborhoods, and Sustainable Communities Initiative programs. In several cases, NNIP partners' data and input were used during the proposal process to improve analyses of need and the proposed plans. Their continued involvement in the initiatives will help improve planning, performance measurement, and local evaluation efforts.

In addition to working with organizations or initiatives one by one, NNIP partners use their data to catalyze new collaborations, improving the chances for policy influence. There are many stories in NNIP of situations in which local groups that had not worked together in the past came together around a fresh examination of the data and went on to collaborate in their work. In other cases, compelling presentations of the data were the basis for engaging community



residents who had been reluctant to participate in community activities before or for gaining new interest in an issue from funders who had not been positively engaged before.

Even simple collaborations organized by NNIP partners can be beneficial. In Grand Rapids, Michigan, Community Research Institute was working with both the local food bank and earned income tax credit (EITC) coalition. They noticed that the drop in requests for food at the food bank coincided with the tax season. The two organizations worked together to make sure that EITC clients were encouraged to continue using the services of the food bank and apply their tax returns to asset-building activities.



**Box 1.1****NNIP PARTNER WORK WITH LOCAL STAKEHOLDERS—IMPACTS**

(Names of NNIP Partners in Italics)

***Policy Change***

(Dallas) Analysis by the *Institute for Urban Policy Research (University of Texas)* showing 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 of action to lessen the differences and quantitatively monitor the program's performance over several years. A Pulitzer Prize was awarded to *The Dallas Morning News* for its part in this effort.

(Providence) In the early 2000s, ex-offenders in Rhode Island were not eligible to apply for food stamp (SNAP) benefits. The *Providence Plan* presented data showing that this rule prevented a surprisingly large number of low-income children from receiving food stamp aid. These presentations are generally credited as the catalyst that led to the subsequent action by the state legislature to remove this restriction on eligibility.

***Targeting Investments and Strategies***

(Atlanta) *Neighborhood Nexus* worked with suburban DeKalb County, using several data sources on the housing market to target the limited federal Neighborhood Stabilization Program resources to neighborhoods where the funding could be put to its most efficient use.

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

***Empowering Communities***

(Pittsburgh) The Homewood Children's Village, a Promise Neighborhood-like initiative, faced a substantial problem with distressed and abandoned properties in the community that were unsafe for children to be around. The *Pittsburgh Neighborhood and Community Information System* staff worked with residents to design a property survey based on the foundation of the city assessor's data. The community used the survey results to identify the worst properties and mount a campaign to get the city to address the large number of code violations that were pending.



### 3. Use Data to Strengthen Civic Capacity and Governance

**Enhance the data capacities of other local institutions.** There are also many cases in which NNIP partners have had important impacts by providing general advice, technical assistance, and training to agency staff and community practitioners to help them build internal data capacity and working directly to improve the quality of data systems maintained by public agencies. The direct engagement work of NNIP partners with local organizations around data and analysis helps the staff or residents to become savvy users of data and information. Although limited everywhere by funding constraints, almost all NNIP partners also run “help desks,” where local groups can call in and get direct hands-on help with data tasks. Additionally, a number of NNIP partners provide training on specific data sources, the use of data, and the local NNIP data portals. For example, the Regional Housing and Community Development Alliance in St. Louis holds training sessions to teach local community development corporations how to use and interpret data from the American Community Survey.

**Promote a culture of learning and collaboration.** Beyond this, the NNIP network encourages its partners to play a lead role locally in developing a community of practice among local stakeholder organizations to promote the effective use of data in decisionmaking. This may include the intermediary convening regular meetings in which all participants can share innovative applications, identify gaps in local practice and ways to address them, and build a constituency for productive data efforts, such as local government open data portals.

Also in line with these objectives, we expect that NNIP partners will continue to play an important role in partnering with outside experts in the future. In recent years, new innovative national groups have formed that combine data, analytic, and technical skills and a public-service mission to improve public and nonprofit operations. One prominent example is Code for America, which places talented technologists in city governments to develop innovative applications. NNIP partners can encourage local leaders to bring in such groups and collaborate in the process to enhance payoff and productive “leave-behinds.”



## Section 2

### A SUSTAINABLE INSTITUTIONAL APPROACH

The advisability of trying to bring NNIP-type services to many more cities depends on whether the underlying institutional approaches by which they are delivered are viable. Accordingly, this section examines the types of institutions that have taken on data intermediary roles in NNIP cities. Knowledge of the comparative advantages of institutional options and how local leaders have made institutional choices is needed to uncover the most sensible ways to expand this type of capacity nationally. The experience suggests that the approach is indeed sustainable.

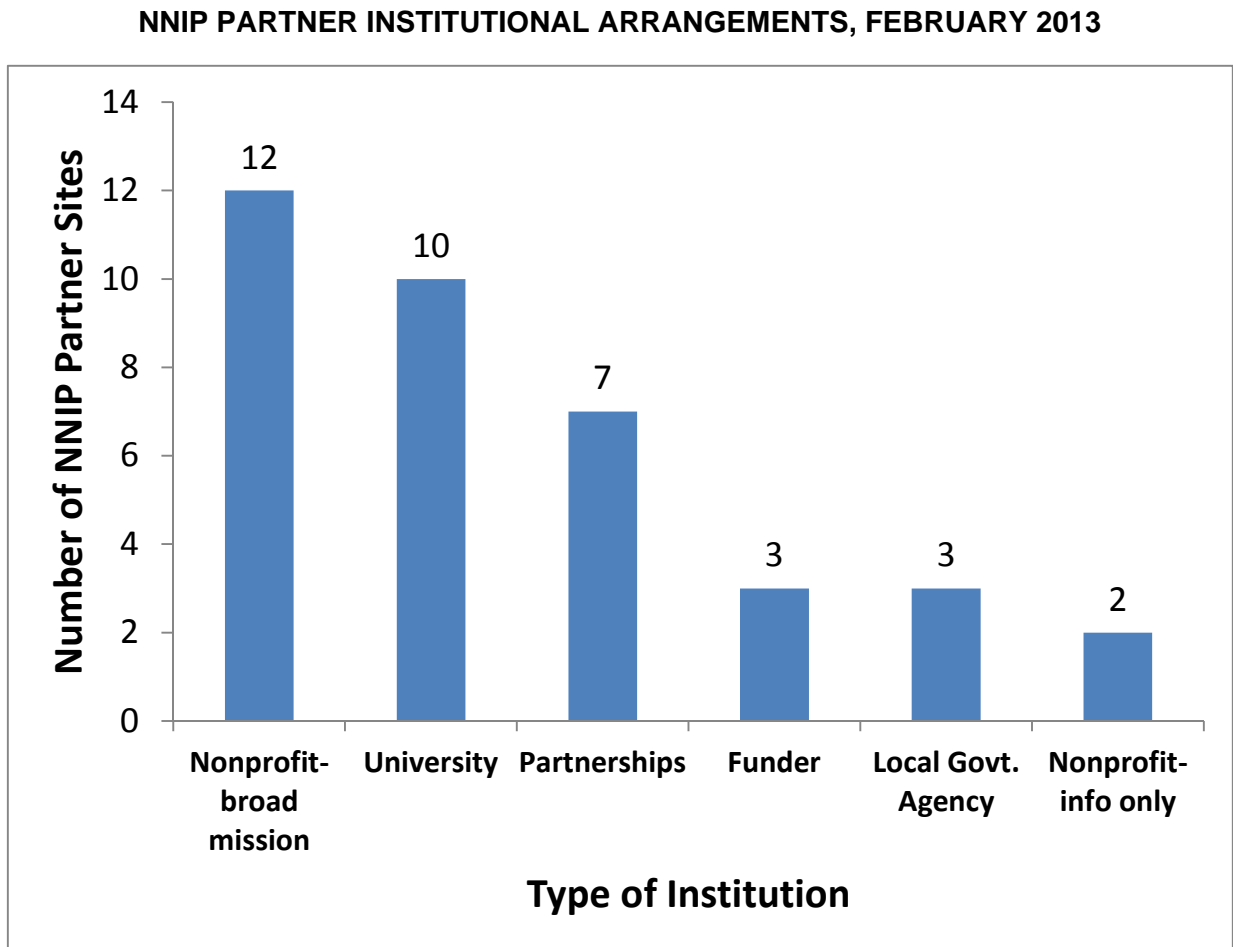
- Success in these activities has been achieved under a variety of institutional forms.
- Although their financial strength varies, NNIP partners have been able to sustain operations for many years almost entirely with local funding. Nine have been in operation for 15 years or more and none relies solely on support from a national philanthropy or the federal government.
- Since the NNIP network was founded in 1995, several partner organizations have closed, but in all but one city, the NNIP functions were successfully relocated to another local institution.

#### Types of Institutions Serving as Data Intermediaries

At the time of this writing, NNIP has 37 local partners (in 36 metro areas). Of the partners (listed in table 2.1), 12 are freestanding nonprofits that perform the NNIP work along with broader community improvement or direct service mission; 10 are community-oriented university departments or research centers; 3 are government agencies (a library, a public health department, and a metropolitan planning organization); and most of the rest are formal partnerships between two or more of these types of institutions (figure 2.1). Among the latter, several involve partnerships between an entity based in the central city (nonprofit or university center) and the council of governments or planning agency for the metropolis as a whole. This facilitates the presentation and use of data at differing scales.



Figure 2.1



### Reasons for Selection

Civic leaders mobilize the core funding for local data intermediaries and select the local institutions to serve in that role. Two features of these selections are noteworthy. First, one might think a municipal agency (probably the city planning department) might be selected for this work, but that has not happened in NNIP experience. The reasons we have heard most often are that (1) city charters do not permit their agencies to perform the full range of data intermediary functions we have listed; (2) city agencies are seen as more likely to be responsive to the current mayor than broader and longer-term community-wide interests; and (3) perhaps for that reason, nongovernmental groups are seen as better able to obtain data from and



develop trusted working relationships with a wide variety of data providers and users, in and outside of government.

The second feature of interest is the variety of institutional types that have been selected. NNIP experience suggests that the reason is that institution type is less important in the selection than are other features, such as technical and functional competence and a history of trust in the community. For example, in some cities a local university center may have both the requisite technical and policy skills and a long-standing relationship of trust with city leadership and neighborhood groups. In other cities, there may be no university center that is trusted to give sufficient priority to community interests.

Some of the strongest NNIP partners are freestanding organizations whose work focuses only on the NNIP functions described in section 1. However, other NNIP capacities are set up as a program within a strong, ongoing local institution (such as a large multipurpose nonprofit, a university, or a community foundation) rather than as a freestanding entity. The main benefit of this model is the prospect of sustainability over the long term, in part because of financial benefits (e.g., some overhead and in-kind support provided by the larger institution).

### Size and Sources of Support

NNIP partners' organizational budgets are quite varied in scale. A 2009 survey showed an average annual budget of \$322,000, but the total was below \$150,000 for one-third of them and above \$500,000 for 29 percent. However, the basic NNIP functions (assembling and cleaning data from a number of sources, entering them into an orderly system and releasing them to the public over the web in various forms) have a sizable fixed-cost component. Except for extreme cases, these costs do not vary much with the size of the city.

All of them received funding for general support (mostly from local philanthropies or broader institutions of which they are a part) and for projects (fees received from various clients for conducting studies or performing other specified services). On average, project funds accounted for 58 percent of total revenues, but there was considerable variation in that figure. Analysis showed no systematic differences between university-based intermediaries and those housed in other types of institutions in terms of total scale and funding composition; there was considerable variation within both groups.



**Table 2.1**

**THE PARTNERS IN NNIP**

**Austin, Texas**

Children’s Optimal Health

**Atlanta, Georgia**

Neighborhood Nexus

**Baltimore, Maryland**

Baltimore Neighborhood Indicators Alliance,  
University of Baltimore

**Boston, Massachusetts**

The Boston Foundation and  
Metropolitan Area Planning Council

**Camden, New Jersey**

CamConnect

**Chattanooga, Tennessee**

Ochs Center for Metropolitan Studies

**Chicago, Illinois**

Chicago Metropolitan Agency for Planning

**Cleveland, Ohio**

Center for Urban Poverty and Community  
Development, Case Western Reserve  
University

**Columbus, Ohio**

Community Research Partners

**Dallas, Texas**

Institute for Urban Policy Research,  
University of Texas at Dallas

**Denver, Colorado**

The Piton Foundation

**Detroit, Michigan**

Data Driven Detroit

**Des Moines, Iowa**

Child and Family Policy Center and  
United Way of Central Iowa

**Grand Rapids, Michigan**

Community Research Institute,  
Grand Valley State University

**Hartford, Connecticut**

HartfordInfo

**Indianapolis, Indiana**

The Polis Center at IUPUI and  
United Way of Central Indiana

**Kansas City, Missouri**

Center for Economic Information,  
University of Missouri-Kansas City and  
Mid-America Regional Council

**Louisville, Kentucky**

Network Center for Community Change

**Memphis, Tennessee**

The Center for Community Building and  
Neighborhood Action (CBANA), University  
of Memphis

**Miami, Florida**

The Children’s Trust

**Milwaukee, Wisconsin**

The Nonprofit Center of Milwaukee

**Minneapolis-St. Paul, Minnesota**

Center for Urban and Regional Affairs  
(CURA), University of Minnesota

**Nashville, Tennessee**

The Neighborhoods Resource Center



**New Haven, Connecticut**

DataHaven

**New Orleans, Louisiana**

Greater New Orleans Community Data Center

**New York, New York**

Furman Center for Real Estate and Urban  
Policy, New York University School of Law

**Oakland, California**

Urban Strategies Council

**Philadelphia, Pennsylvania**

Metropolitan Philadelphia Indicators Project  
and The Reinvestment Fund

**Pinellas County, Florida**

Juvenile Welfare Board

**Pittsburgh, Pennsylvania**

Pittsburgh Neighborhood and Community  
Information System, University of  
Pittsburgh

**Portland, Oregon**

Institute of Portland Metropolitan Studies,  
Portland State University

**Providence, Rhode Island**

The Providence Plan

**Sacramento, California**

Community Link Capital Region

**St. Louis, Missouri**

Regional Housing and Community  
Development Alliance

**San Antonio, Texas**

CI:Now (Community Information Now)

**Seattle, Washington**

Public Health—Seattle and King County

**Washington, D.C.**

NeighborhoodInfo DC



## Section 3

# INTERMEDIARIES AND THE NEW ENVIRONMENT

In 1995, the NNIP approach represented a major breakthrough in data availability and use. But there have been dramatic changes in the data environment and important ones in the policy environment since then. In the paragraphs below, we note major environmental changes that have occurred, how they have affected the NNIP role, and how NNIP is adapting to them.

The authors discuss the environment in NNIP cities based on knowledge gained in their regular interactions with NNIP partners. Comments on the environment in non-NNIP cities are based largely on interviews with local actors in interested cities (see table 4.1) over the past year.

### The New Data Environment

***Technology has led to truly dramatic reductions in the costs of data assembly, storage, manipulation, and display.*** Local partners have used these advances to raise the cost-effectiveness of their own work in a number of ways. First, they have all substantially increased their data holdings. This includes data on new topics, but it also includes expansions in the amount of data they store on individual topics. For example, most now have extensive information on individual properties, such as sales, building permits, code violations, demolitions, and so forth. Four either have or are working on integrated data systems (IDS; with data on individuals and families from the administrative records of a number of public programs), and several others are exploring the idea. Because of the technological advances, the trend is toward their being able to spend less on data assembly and more on practical applications and catalyzing effective data use more broadly (major functions 2 and 3, discussed in section 2).

The sheer amount of relevant data available to the public has been vastly expanded. Three types can be distinguished.

- The open data movement and other efforts at the national level have led to the release of a number of federal government datasets that offer valuable, consistently defined, and





annually updated information for small areas (often neighborhood-level) nationwide.

Examples include the Home Mortgage Disclosure Act dataset and the Census Bureau's American Community Survey.

- Many new nationwide commercial datasets with address-level data have become available as well. Examples include property sales data from firms such as Experian; U.S. Postal Service vacancy data; and business data, such as InfoUSA.
- At the local level, the open data movement in a number of cities has been able to get local agencies to release more of their administrative datasets directly to the public over the web. (See discussion of the open data movement in Tauberer 2011.)

Several NNIP Partners have also been at the forefront of promoting the open data movement in their cities. For example, our Milwaukee partner's director serves as chair of the local committee that is bringing agencies and developers together to decide about next steps for open data there. In addition, the research and technology director of our Oakland partner is a nationally recognized leader in the open data movement and has taken a number of steps to further it locally (*Next American City*, April 2012).

As was pointed out in section 2, although government datasets released in response to open data campaigns will be the basis for many important innovations, most are likely to be directly usable only by people with a high level of technical expertise (e.g., hackers) in most cases. Four types of assembly work by local data intermediaries will still be essential: (1) transforming many individual datasets to make them easier for stakeholders with less expertise to use, (2) archiving released data that are overwritten by city operations (so historic trend information will not be lost), (3) holding confidential individual-level data to enable analysis that does not reveal raw data, and (4) bringing together data from multiple source files for integrated policy analysis and performance assessment (see discussion of changes in the local policy environment).

National data visualization platforms and automated tools have been developed that make it easier for users to work with data from the national files. As will be noted in section 5, UI NNIP staff, among others, have repackaged federal datasets to make them more usable for neighborhood analysis (see also Kingsley and Pettit 2011a). They and the local NNIP partners have also been active in using these new national datasets. A number of examples are documented on the NNIP web site ([www.neighborhoodindicators.org](http://www.neighborhoodindicators.org)).



Several data visualization platforms are now available (e.g., PolicyMap, Tableau, Google Public Data Explorer, and Esri's ArcGIS Online) with which users can create and share maps and/or charts, either from their own data or drawn from the national files for individual neighborhoods of their choosing anywhere in the country. And there is considerable potential for the development of automated tools that can apply data from the national files so as to directly produce components of needed local analyses and plans (e.g., market analyses). These developments are discussed in more depth in section 6 of this report.

The national data files, visualization platforms, and data tools are all extremely helpful in local work, often saving a great deal of time for local analysts. In some cases, they are enough in and of themselves to support a credible product for local use. However, most of the work done by NNIP partners requires application of their own local datasets (e.g., data on properties, school students, births), although they may mix in some information from the national files when appropriate.

There are powerful reasons local datasets on some topics differ from each other from city to city. There are a number of important datasets, such as land parcel data or student-level education data, for which it is impractical to expect nationwide standardization in the short term. The need for local data system development is strong at the moment and is likely to remain so.

***A number of local governments have markedly improved their own data capacities.*** This has included important progress in staff knowledge, data collection, and program/policy applications. Examples include (1) internal integration of parcel-level data from multiple departments to create Enterprise geographic information systems (GIS) (Fleming 2005); (2) development of data-intensive performance management programs (such as CityStat, see Behn 2008); and (3) development of extensive open data platforms, increasing the use of data within and outside government (Howard 2012; Hanson 2012).

Could the work now being done by NNIP partners be turned over to a local agency, such as the city-planning department? The answer is yes and no. To be sure, as the capacities of local agencies grow, they can handle a sizable number of tasks that previously could be done only by NNIP partners. In fact, NNIP wants to help them take on more. An important addition to the NNIP partner role in the new environment has been spending more time collaborating with other local entities, acting as a catalyst to spur the strengthening of data capacities and use outside



their own organizations. This has been particularly true in collaborations between NNIP partners and local government agencies. In these cases, the NNIP partners work with agency staffs on joint projects and help them strengthen the agency's own data work.

However, the work of the NNIP partners is still seen as essential. Demand for their work in cities currently in the network appears to be growing in almost all of those cities, and we have talked with representatives of groups in a number of other cities who have expressed interest in developing similar capacities.

Recent interviews suggest that the desire of civic leaders for a long-term data intermediary outside of government remains strong, even where city government capacity has been improving. Such leaders recognize that even though a new data/analytic unit may have been created in the current mayor's office, they cannot be sure that capacity will be continued by the next mayor. In addition, there are current NNIP functions that are simply very difficult to perform inside city government (including some forms of community partnering, as well as accessing and integrating data from other levels of government and special agencies that do not report to the mayor). New policy interests (see discussion on changes in the local policy environment) are in fact generating needs for data and analysis that are more and more complex and dependent on deep qualitative, as well as quantitative, knowledge of the city and its neighborhoods. Civic leaders seem to want to be sure basic NNIP data capacities are present over the long term and fully responsive to broad civic interests.

***There are now more outside consultants to help locals take advantage of these new capacities.*** These consultants have a variety of expertise and approaches. For example, NNIP partners have successfully collaborated with the Code for America Fellowship program, which places talented technologists in city governments to develop innovative applications. Other examples of consulting organizations promoting data-driven decisionmaking include DataKind, which organizes "Data Corps" in various cities to match data experts with nonprofits; the Results Leadership Group, which provides technical assistance and software tools to help organizations implement Results-Based Accountability principles; and The Reinvestment Fund, which provides services such as real estate market analyses and program assessments.

With respect to outside consultants, it makes sense for NNIP partners to encourage local leaders to use the good ones more and to work in collaboration with them to assure positive



“leave-behinds.” However, these consultants are not in a position to replace the need for a trusted local intermediary who will be there reliably to help with a full range of data development and application tasks over the long term.

### Changes in the Local Policy Environment

In addition to progress in data and technology, the policy context around neighborhood development has evolved since the founding of NNIP. Most prominently, many American cities have been deeply shaken by the effects of the foreclosure crisis and the Great Recession. With tightening budgets, officials have to work to increase efficiency in government operations, but they also have to address the problems of low-income neighborhoods that have been particularly hard hit by these crises. Both tasks are heavily dependent on the use of data from multiple local sources, and NNIP partners are being called upon to assist.

Several places are realizing that the use of neighborhood-level data with a regional perspective can help practitioners and policymakers coordinate efforts and pool resources to address problems such as foreclosure. The Capital Area Foreclosure Network (CAFN) in the Washington, D.C., area is just one example. Analysis of small-area foreclosure and mortgage delinquency data by the local NNIP partner revealed the extent to which the foreclosure crisis was affecting the suburban communities in the area and recommended the region coordinate foreclosure prevention responses at the regional level. The partner worked with the Metropolitan Washington Council of Governments and the Nonprofit Roundtable of Greater Washington to form CAFN to help support foreclosure prevention counseling organizations, do collective fundraising, and raise the community’s awareness about the availability of counseling. CAFN has relied on data updates to adjust strategic priorities.

At the federal level, the Department of Housing and Urban Development (HUD), Environmental Protection Agency, and the Department of Transportation launched the Sustainable Communities Initiative to address a wide range of issues, such as sprawl, disinvestment, congestion, equitable development, and air quality. NNIP partners in Atlanta, Boston, Chicago, and Kansas City are Sustainable Community grantees and using data to drive their agenda and monitor progress. This regional approach is even more important as more low-income families move to the suburbs (Kneebone 2010). Several NNIP partners are reaching out to organizations



working on the challenges facing the inner suburbs. These areas often have less governmental and nonprofit capacity than do their central cities but have the same need for information to identify problems and target resources.

With respect to neighborhood improvement, there is increased pressure for integrative solutions that break down past programmatic silos and deal with neighborhoods and the families within them in a holistic manner. These themes have been central to some recent foundation-sponsored efforts (e.g., the Local Initiatives Support Corporation's [LISC's] Building Sustainable Communities Initiative) and to new place-based programs being implemented by the federal government (Promise Neighborhoods, Choice Neighborhoods, and the Neighborhood Revitalization Initiative; see White House 2011). All of these programs urge or require planning based on analysis of trends in neighborhood conditions in a number of topic areas and then performance management based on monitoring of the indicators used in planning plus other program-specific measures. In other words, these efforts are much more demanding in terms of local data capacity than federal programs have been in the past.

Another important development on the policy front is the concept of "collective impact." This entails mobilizing many programmatic actors in a field and obtaining their agreement to adopt a common strategy and be held accountable under a common set of performance measures (Hanleybrown, Kania, and Kramer 2012). Probably the most prominent example is the Strive partnership, which focuses on education; it was first implemented in Cincinnati but now is under way in several other cities (see discussion in The Bridgestone Group 2012). Although not necessarily oriented to improving individual neighborhoods, collective impact shares two key features with the federal programs just noted: (1) the effort to break down programmatic silos that are seen to have frustrated progress in the past, and (2) a strong emphasis on developing and operating powerful data systems.

In short, the local policy environment today is emphasizing innovative approaches that require much more information just as the data environment is accelerating the amount of relevant information available. This should benefit many local institutions. In the short term, local NNIP partners have elected to perform a considerable amount of this work because they have important natural advantages: already assembled data from multiple sources, experience in managing and analyzing large datasets, and experience in doing data work in collaboration with community organizations. For example, NNIP partners in 16 cities have worked on supporting



local Promise Neighborhood programs, and so far, five of them have been the central data partners in cities that have been awarded Department of Education Promise Planning or Implementation Grants.

### The Environment in Non-NNIP Cities

As noted, as of early 2013 we are actively talking with representatives of groups interested in NNIP capacities in 10 cities that are not yet a part of NNIP, with more casual inquiries from 8 other potential cities. Although these cities may not be representative of non-NNIP cities overall, we believe these interviews have provided useful information.

First, these cities are making progress in improving their data capacities. We find that more local groups are working with data and using the new tools now than even five years ago, but these efforts typically remain partial and fragmented. The open data movement has not made substantial progress in many places as yet. In a few cities, public sector data work appears to be moving forward rapidly on the way to NNIP-type synergy, but in many others it is not.

These environments typically still suffer from major inefficiencies. Would-be users have to go to many different sources to try to assemble data, which likely discourages them from using data at all. In most cases, no one is working to coordinate local data work. Project-by-project data work does not feed into a longer-term system, so re-use of processed data for other purposes is limited, and historical data may not be archived. Knowledgeable respondents suggest that civic leaders in these places still have much to learn about the benefits and potentials for data-driven decisionmaking—insufficient demand for it now means the pace of adoption is slower than it needs to be.



## Section 4

# STRATEGY FOR ADVANCING THE FIELD

## The Case

During this time of serious fiscal constraint at all levels of government, finding cost-effective ways to encourage localities to work smarter than they do now is more critical than ever to national well-being. Expanding the prospect for sound data-driven decisionmaking at the local level will be important to that outcome.

As discussed in the previous section, partners are adapting to the changes in the data and policy environment, but their roles in developing and supporting the use of neighborhood-level data are still relevant in this new age. The ongoing revolution in information technology and data availability makes this a time of tremendous opportunity for achieving that end. However, simply increasing the supply of data will not automatically ensure improvements in decisionmaking. Local stakeholders need guidance, training, and tools to enable them to use the data effectively. In short, civic leaders everywhere need some trusted data-savvy professionals in their own communities to help them in these ways.

To be sure, there is a substantial need to strengthen the data capacities of local government agencies as well, but existing networks such as the National Association of Counties, the National League of Cities, the International City and County Managers Association, and the American Planning Association are well positioned to provide training and disseminate case studies of local governments' effective use of data.

The NNIP experience, however, indicates high potential payoff from such capacities outside of individual government agencies, bridging across and serving them as well as many other local stakeholders. Local data intermediaries can be thought of as a part of the “institutional infrastructure” that is needed to run America’s urban areas. Because of the positive externalities created, all infrastructure (e.g., water supply systems and major highways) warrants some



subsidy and local data intermediaries, thus warranting support of this kind (public and philanthropic) as well.

Accordingly, in this paper we recommend a much expanded national effort to strengthen local data intermediary capacity where it now exists and to develop it where it could be beneficial but does not yet exist.

### Geographic Scale: Current Coverage and Potential Applicability

A strategy for advancing this field requires analysis to determine the appropriate scale for its objectives and operations. NNIP experience suggests that local data intermediaries would be beneficial in all urban areas large enough to have recognizable groups of neighborhoods and varying conditions between them. These are places where the well-being of the area as whole as well as its parts will be affected by how well local decisionmakers monitor neighborhood differences and take them into account in their policies and programs.

In 2010, the largest 100 U.S. metropolitan areas had a total population of 202 million, 65 percent of the nation's 308 million total (their individual populations ranged from 514,000 to 18.9 million). There were 266 other metropolitan areas in the country; populations totaling 57 million (another 18 percent of the U.S. population), ranging individually from 55,000 to 514,000.

The metropolitan areas now served by NNIP partners are all among the top 100; their populations totaled 116 million (38 percent of the national total). The smallest metro now served is Chattanooga (rank 97, population 528,000). In table 4.1, we identify eight other metro areas as NNIP "prospects." These are cases where either local institutions have talked with us about developing NNIP capabilities or we have become aware that promising data work is under way. These nine have a total population of 30.8 million. Their addition would bring the total for NNIP metros to 146.6 million, 48 percent of the U.S. total population.

How many metros meet the criterion we stated earlier in relation to the need for a local data intermediary (i.e., being large enough to have recognizable groups of neighborhoods and varying conditions between them)? There is no one scientific answer to this question because the local differences in the evolution of the social, institutional, and built environment could alter the result. However, conversations with knowledgeable individuals in a number of smaller areas





suggest that many metros with populations in the range of 150,000 to 200,000 identify neighborhoods and spend time on issues that arise because of differences between them.

In 2010, the U.S. had 250 metros with populations of 160,000 or more. The NNIP approach may not be right for many of them. But there is a sizable gap between 36 (the number of metros with an NNIP partner) and 250. We believe the best way to move forward will be to mount a sizable information campaign to promote the NNIP model to civic leaders in metropolitan areas and then prioritize assistance to those in the top 250 that express interest.

We believe leaders in smaller places (small metros and nonmetropolitan towns and rural areas) also need some local professional assistance to help them with data and analysis but that those needs can be handled without each small area having its own independent local data intermediary. This is explored more in section 5.

### The Core Strategy

Given the discussed analysis, we believe that the most important need in advancing this field at this point is to **expand and strengthen local data intermediary services and capacity in metropolitan areas**. Accordingly, this will be the central tenet of our strategy and the major goal of NNIP over the next few years. Efforts in response are explained in this section 5 of this document.

This will involve two major areas of work. This first is mounting a national information campaign that will significantly expand knowledge about the local data intermediary approach and its benefits among policymakers and funders at the local, state, and national levels. This effort will also entail engagement with staff at federal and state agencies to discuss ways that they can incentivize local investment in building and sustaining data intermediary capacity. This strategy will be jointly planned and implemented by UI staff and the local partners.

The second area involves expanding and upgrading services provided by the NNIP network: (1) planning for a strategic expansion of the network, including developing a curriculum for helping cities get started in the network and offering a group of consultants who can provide technical assistance; (2) taking steps to strengthen services to all NNIP members with a new emphasis on training; (3) developing new cross-site action initiatives through more regular and in-depth



engagement with partners around emerging issues and consultation with the civic networks during the information campaign; and (4) preparing new tools and guides based on best practices.

Still, we recognize that NNIP's efforts along these lines are not all that needs to be done to advance effective local data use. Success will also depend on actions by other actors at the national level. There is an important opportunity to ***build a national support system to enhance data-driven decisionmaking in all local communities***. Our ideas and recommendations about what this system should contain are explained in section 5 of this document. We suggest that NNIP serve as a collaborator and participant in this work but not take the lead at this level.

As we see it, this effort will entail (1) pressing national and state governments to make many more of their datasets (with small-area, neighborhood scale data) available to the public (i.e., aligned with and furthering the agenda of Data.Gov); (2) transforming those datasets to make them easier to use and releasing them to the public (UI has done some of this over the years); (3) expanding online visualization platforms using national or user-provided datasets and developing and disseminating automated *tools* to facilitate data application by local stakeholders; and (4) developing curricula based on NNIP capacities that can be logically added to the curricula of professional schools of public administration, urban planning, and other relevant disciplines.

To jump-start the development of these supports, we suggest that NNIP perform an initial objective assessment of the status of all the mentioned elements in 2013–14 and identify important gaps that need to be addressed. In section 5, we offer more details about this proposal and a discussion of how the information needs of smaller metros and nonmetropolitan towns and rural areas might be addressed in the future.



Table 4.1

**NNIP AND THE LARGEST 100 U.S. METROPOLITAN AREAS**

Metro Name	2010 Population			Metro Name	2010 Population		
	Thous.	Rank			Thous.	Rank	
<b>New York, NY</b>	<b>18,897</b>	<b>1</b>	<b>N</b>	Rochester, NY	1,054	51	
Los Angeles, CA	12,829	2	P	Tucson, AZ	980	52	
<b>Chicago, IL-IN-WI</b>	<b>9,461</b>	<b>3</b>	<b>N</b>	Honolulu, HI	953	53	
<b>Dallas, TX</b>	<b>6,372</b>	<b>4</b>	<b>N</b>	Tulsa, OK	937	54	
<b>Philadelphia, PA-NJ-DE-MD</b>	<b>5,965</b>	<b>5</b>	<b>N</b>	Fresno, CA	930	55	
Houston, TX	5,947	6	P	Bridgeport, CT	917	56	
<b>Washington, DC-MD-VA</b>	<b>5,582</b>	<b>7</b>	<b>N</b>	Albuquerque, NM	887	57	
<b>Miami, FL</b>	<b>5,565</b>	<b>8</b>	<b>N</b>	Albany, NY	871	58	
<b>Atlanta, GA</b>	<b>5,269</b>	<b>9</b>	<b>N</b>	Omaha, NE-IA	865	59	
<b>Boston, MA-NH</b>	<b>4,552</b>	<b>10</b>	<b>N</b>	<b>New Haven, CT</b>	<b>862</b>	<b>60</b>	<b>N</b>
<b>San Francisco, CA</b>	<b>4,335</b>	<b>11</b>	<b>N</b>	Dayton, OH	842	61	
<b>Detroit, MI</b>	<b>4,296</b>	<b>12</b>	<b>N</b>	Bakersfield, CA	840	62	
Riverside-San Bernardino, CA	4,225	13		Oxnard, CA	823	63	
Phoenix, AZ	4,193	14		Allentown, PA-NJ	821	64	
<b>Seattle, WA</b>	<b>3,440</b>	<b>15</b>	<b>N</b>	Baton Rouge, LA	802	65	
<b>Minneapolis-St. Paul, MN-WI</b>	<b>3,280</b>	<b>16</b>	<b>N</b>	El Paso, TX	801	66	
San Diego, CA	3,095	17	P	Worcester, MA	799	67	
<b>St. Louis, MO-IL</b>	<b>2,813</b>	<b>18</b>	<b>N</b>	McAllen, TX	775	68	
<b>Tampa, FL</b>	<b>2,783</b>	<b>19</b>	<b>N</b>	<b>Grand Rapids, MI</b>	<b>774</b>	<b>69</b>	<b>N</b>
<b>Baltimore, MD</b>	<b>2,710</b>	<b>20</b>	<b>N</b>	Columbia, SC	768	70	
<b>Denver, CO</b>	<b>2,543</b>	<b>21</b>	<b>N</b>	Greensboro, NC	724	71	
<b>Pittsburgh, PA</b>	<b>2,356</b>	<b>22</b>	<b>N</b>	Akron, OH	703	72	
<b>Portland, OR-WA</b>	<b>2,226</b>	<b>23</b>	<b>N</b>	North Port-Bradenton, FL	702	73	
<b>Sacramento, CA</b>	<b>2,149</b>	<b>24</b>	<b>N</b>	Little Rock, AR	700	74	
<b>San Antonio, TX</b>	<b>2,143</b>	<b>25</b>	<b>N</b>	Knoxville, TN	698	75	
Orlando, FL	2,134	26		Springfield, MA	693	76	
Cincinnati, OH-KY-IN	2,130	27		Stockton, CA	685	77	
<b>Cleveland, OH</b>	<b>2,077</b>	<b>28</b>	<b>N</b>	Poughkeepsie, NY	670	78	
<b>Kansas City, MO-KS</b>	<b>2,035</b>	<b>29</b>	<b>N</b>	Charleston, SC	665	79	
Las Vegas, NV	1,951	30		Syracuse, NY	663	80	
San Jose, CA	1,837	31		Toledo, OH	651	81	
<b>Columbus, OH</b>	<b>1,837</b>	<b>32</b>	<b>N</b>	Colorado Springs, CO	646	82	
Charlotte, NC-SC	1,758	33	P	Greenville, SC	637	83	
<b>Indianapolis, IN</b>	<b>1,756</b>	<b>34</b>	<b>N</b>	Wichita, KS	623	84	
<b>Austin, TX</b>	<b>1,716</b>	<b>35</b>	<b>N</b>	Cape Coral-Ft. Myers, FL	619	85	
Virginia Beach, VA-NC	1,672	36		Boise City, ID	617	86	
<b>Providence, RI-MA</b>	<b>1,601</b>	<b>37</b>	<b>N</b>	Lakeland, FL	602	87	
<b>Nashville, TN</b>	<b>1,590</b>	<b>38</b>	<b>N</b>	<b>Des Moines, IA</b>	<b>570</b>	<b>88</b>	<b>N</b>
<b>Milwaukee, WI</b>	<b>1,556</b>	<b>39</b>	<b>N</b>	Madison, WI	569	89	P
Jacksonville, FL	1,346	40		Youngstown, OH-PA	566	90	
<b>Memphis, TN-MS-AR</b>	<b>1,316</b>	<b>41</b>	<b>N</b>	Scranton, PA	564	91	
<b>Louisville, KY-IN</b>	<b>1,284</b>	<b>42</b>	<b>N</b>	Augusta, GA-SC	557	92	
Richmond, VA	1,258	43	P	Harrisburg, PA	549	93	
Oklahoma City, OK	1,253	44		Ogden, UT	547	94	
<b>Hartford, CT</b>	<b>1,212</b>	<b>45</b>	<b>N</b>	Palm Bay, FL	543	95	
<b>New Orleans, LA</b>	<b>1,168</b>	<b>46</b>	<b>N</b>	Jackson, MS	539	96	
Buffalo, NY	1,136	47	P	<b>Chattanooga, TN-GA</b>	<b>528</b>	<b>97</b>	<b>N</b>
Raleigh-Durham, NC	1,130	48	P	Provo, UT	527	98	
Birmingham, AL	1,128	49		Lancaster, PA	519	99	
Salt Lake City, UT	1,124	50	P	Modesto, CA	514	100	

(N=NNIP Partner, P=NNIP Prospect)

Total

201,725



## Section 5

# THE NETWORK AND THE CAMPAIGN

NNIP has existed since the mid-1990s, when it started with six local partners. It has provided a variety of services since then to promote peer learning and advance the field, but it has remained a fairly small-scale operation. This section describes the network's recent activities and the proposed information campaign in more depth and then outlines how we would expand and improve the services provided to potential and current partners.

### Current Functions of the NNIP Network

In NNIP, a six-member Executive Committee, elected by and from the local partners, is central to planning the work of the network overall. The Urban Institute serves as NNIP's "secretariat" and works closely with the Executive Committee in planning and implementing activities.

The network's most important mechanism for achieving its objectives is peer-to-peer learning, which is implemented through three-day, face-to-face partnership meetings each year and active e-mail correspondence and work group activities in between. However, the partnership also conducts other activities to advance this field. Its overall agenda has five parts.

**1. Informing Local Policy Initiatives.** This is achieved first through NNIP's "cross-site action initiatives." These initiatives are applications of data designed to help address real local issues, but they are implemented in a comparable manner in multiple NNIP cities so as to provide lessons that offer a sounder basis for national, as well as local, policy and practice. NNIP coordinates the work in the participating cities and then documents lessons and best practices to guide other cities interested in working on the topic. Topics to date have included welfare-to-work (Turner, Rubin, and DeLair 1999), neighborhood public health (Pettit, Kingsley, and Coulton 2003), reintegrating returning former prisoners into society (La Vigne, Cowan, and Brazzell 2006), decision support tools for community development (Kingsley and Pettit 2008), early childhood development and school readiness (Kingsley and Hendey 2010), and the impact of the foreclosure crisis on schoolchildren (Pettit and Comey 2012).



**2. *Developing Tools and Guides.*** This entails preparing a series of guidebooks, tools, and presentations that advance the state of the art in this field and disseminating them over the web and through other channels. Topics range from descriptions of promising practices developed in cross-site initiatives and projects of individual partners to technical guidebooks documenting available datasets and techniques related to analysis, display, and systems operation. There is currently a sizable backlog of innovative practices and policy ideas that remain to be documented in this way, and NNIP intends to address them as resources become available (see discussion of tools and guides under "Expanding and Upgrading NNIP Network Activities").

**3. *Strengthening Local Capacity: Developing Capacity in New Communities.*** NNIP has had very little funding for direct work to help new partners get started. Expansion normally takes place when NNIP staff are contacted by interested organizations that have heard about the NNIP approach via the web site or presentations that have been made and are already in the process of building relevant capacity. NNIP staff then offer some coaching on the start-up process (most often by phone) and provide access to topical tools and guides. Candidates that are well along in development are invited to attend semi-annual NNIP meetings. When the new group has made enough progress to meet NNIP requirements, it submits a formal application to join.

**4. *Strengthening Local Capacity: Services to an Expanding Network.*** This category includes some services available to staffs of NNIP partner organizations only: the semi-annual meetings and participation in cross-site initiatives, topical work groups, and web chats. The latest effort is related to open data—reflecting on how open data are influencing the conceptual and business model for local partners, documenting the roles our partners are playing currently, and looking forward to the potential for future collaboration between the two movements. However, it also includes services available to broader audiences interested in this work. Such services include maintaining and updating the NNIP web site, an interactive e-mail list-serve (*NNIP News*, with several hundred subscribers), and occasional conferences and webinars open to outside groups. In addition, UI staff and NNIP partners make frequent presentations about the network and its activities to government agencies and at the conferences of various national and regional interest groups. Finally, UI continues to streamline national datasets with data on small areas and make excerpts available to partners and others for local use.



**5. Leadership in Building the Field.** The job of building capacity and strengthening practice in this emerging field is sizable. The task is not one NNIP could or should take on solely on its own. Rather, NNIP attempts to catalyze a broader effort, partnering with a number of other national organizations whose missions revolve around the use of indicators and development of local capacity. For example, NNIP leaders have always been active participants in the Community Indicators Consortium. Over the past few years, they have been working more actively with several other groups to find better ways to use indicators in the planning and evaluation of community development and social service programs. These include the Local Initiatives Support Corporation (LISC), the Federal Reserve Board of Governors, and the National League of Cities (NLC).

### The National Information Campaign

As noted, the first element of our strategy is mounting a national information campaign that will significantly expand knowledge about the local data intermediary approach and its benefits among policy makers and funders at the local, state, and national levels. NNIP has promoted the approach in a variety of ways over the past 15 years but mostly at low levels in a fairly passive mode. What we plan for 2013–14 is a significant expansion of the intensity and spread of our promotion activities.

The campaign will aim to notably increase awareness among local leaders nationwide of both the importance of, and new opportunities for, data-driven decisionmaking at the local level. It is therefore intended that the campaign make an important contribution in this way—a permanent upgrading of awareness and understanding.

Specifically, the campaign has the following goals:

- Reinforce existing and foster new support from local funders and governments for existing partner organizations;
- Work with local funders and agencies to identify local data intermediaries in additional cities; and
- Encourage national networks to incorporate NNIP principles, including the importance of building local intermediary capacity and neighborhood-level data, into their initiatives.



***Partnering with other organizations.*** A key strategy of the campaign will be to conduct it in partnership with a number of national organizations that share similar goals and whose work is often aligned with and can be enhanced by that of local data intermediaries. At this point, we have identified organizations that are potential participants: associations representing local funders, other relevant national interest groups, and the two national foundations that have been the main supporters of NNIP over the past few years. These organizations are listed here.

#### LOCAL FUNDER NETWORKS

- Council on Foundations-Community Foundation Branch
- United Way
- Grantmakers for Effective Organizations\*
- Grassroots Grantmakers
- Neighborhood Funders Group
- Chamber of Commerce

#### NATIONAL INTEREST GROUPS

- National Association of Counties
- National League of Cities\*
- Association of Metropolitan Planning Organizations
- International City and County Managers Association
- American Planning Association
- Coalition of Urban Serving Universities
- Community Indicators Consortium\*
- Federal Reserve Bank Board of Governors and Regional Banks\*
- Actionable Intelligence for Social Policy
- Kids Count Network (Annie E. Casey Foundation)\*
- Local Initiatives Support Corporation\*

#### NNIP KEY FUNDERS

- Annie E. Casey Foundation
- John D. and Catherine T. MacArthur Foundation



As noted, we are already working closely with LISC and the Federal Reserve Board along these lines. We also have connections with several other organizations (see groups marked with \* in the list of organizations) and leads into others (such as the community foundations) through our current partners and their active local funders. Our national foundations will play an active role in helping us design and carry out the campaign.

If the thousands of individual members of the local funders and national interest groups we have identified become more aware of new opportunities for productive local data use (in and out of government) it should create a major reinforcement of the NNIP idea in and of itself. If these people are exposed to these messages with great frequency over the next two years, it should create a “buzz” that will place NNIP in a new position. Activities to make this happen include:

- Meetings between NNIP leaders from UI, local partner organizations, and the leadership of each of these organizations to make the case and talk through plans for the campaign.
- Scheduling presentations by NNIP leaders at the conferences and webinars of these organizations.
- Preparing special articles on the work of local data intermediaries for the publications of these organizations. These would not only explain the basics but also highlight cases where this work has made a substantive difference: stimulating collaboration on new initiatives, changing laws and policies, and improving program performance.

We would target efforts to create a stream of fresh content that would yield coverage in these publications more than once over the next two years. This will be supported by new NNIP efforts discussed in more detail in this report: documentation of a sizable number of new best practice case studies, a new NNIP newsletter, and the publication of a new book based heavily on NNIP experience (*Strengthening Communities with Neighborhood Data*, targeted for publication in early 2014).

The difference between what we have termed “Local Funder Networks” and “National Interest Groups” is that the former have, in effect, branch offices in many of the localities where we hope to engage civic leaders in support of our goals. Local offices of these groups are already important funders of existing NNIP partners. Several of their representatives have attended





NNIP meetings and have expressed interest in serving as advocates for NNIP within their associations.

For the local funders' associations, we will also ask their representatives in specific communities to contact us if they would like an NNIP team to talk with them further about the possibility of NNIP in their own cities. Our process for developing new partners through this outreach is described later in this report.

Although our outreach will target a limited number of national networks over the next two years, the process will enhance our overall communications materials and capacity. We will plan ways to regularly engage the full set of national networks, whether informally or through a formal mechanism such as an advisory board. We also want to think about broader dissemination practices, such as improved web site marketing and webinars or conferences that are open to the public.

***Federal and state support for local data intermediaries.*** Our information campaign will also be designed to encourage the federal and state governments to support building local data intermediary capacity—support that would augment and incentivize expanded investment by local and national philanthropies. Most communities do not have these capabilities. In the cities that do have them, more resources are needed to assure sustainability and allow intermediaries to pursue new ideas for creative, cost-saving applications—applications that could serve as valuable models for others.

One way this can be done is to make sound local data work a criterion for awards of competitive federal grants and to assure that those grants provide sufficient funding for such work. This is already happening in some programs. Probably the best example so far is the U.S. Department of Education's Promise Neighborhoods Initiative (Comey et al. 2013). The Department has given considerable emphasis to the use of data in both planning and implementation. There are clear requirements for development of indicators and detailed performance tracking systems, and the Department is providing technical assistance and other resources to help local implementers meet those requirements. Because they are well equipped for such assignments, several NNIP partners have been funded to play important roles in local Promise Neighborhoods efforts at all stages of the work.



Stronger and clearer incentives along these lines should be added to other federal programs. HUD's Choice Neighborhoods and Community Challenge Grant programs already support data development, but they could go farther in recognizing the importance of systematic neighborhood-level information. Two other new federal efforts also offer potential in this regard: the HUD Secretary's Award for Community Foundations and the White House Council for Strong Cities, Strong Communities. Both of these should give explicit recognition to the development of local data intermediary capacity as discussed in this report.

Other ways federal agencies can promote the work of local data intermediaries are to include descriptions of innovative NNIP applications in their newsletters and other publications, recognize such work in their award programs, and build it into their technical assistance programs. There are several examples of this happening in the past, but more is warranted.

Finally, broader ongoing support should be considered through the Community Development Block Grant (CDBG) program and the Social Innovation Fund (SIF). Explicit support for data-driven decisionmaking would seem not only consistent with, but also important to, the goals of both.

### Expanding and Upgrading NNIP Network Activities

The most important role for NNIP leadership (Executive Committee and UI staff) over the next two years will be in managing the information campaign described in this report. They will assume lead responsibility for engaging all partners and planning and implementing all aspects of this effort. The campaign will advance all of the network's goals, and we plan to simultaneously reinvigorate all our activities to take advantage of the momentum the campaign will create.

***Developing Capacity in New Communities: Strategic Expansion of the Network.*** In the past, the NNIP has expanded mostly in an ad hoc manner, through organizations contacting us directly after they learn about us through presentations or the web site. This is followed up by one or more phone conversations with UI staff. On rare occasions, UI or NNIP staff members visit the city and are more involved in the development process. When the UI staff considers the group ready for admission, the organization completes an application and submits local references. The materials are reviewed by the Executive Committee and the entire partnership



to maintain our standards for membership. We plan to be more proactive and efficient in how we develop partners in new cities both in recruitment and in our technical assistance.

Regarding recruitment of new candidates, we expect that the information campaign described will expand interest and uncover leads in several cities. UI staff and the NNIP Executive Committee will prioritize cities, consulting with national advisors as appropriate. Looking beyond the information campaign, we would like to identify and proactively reach out to several cities each year to review their information infrastructure and help them move toward NNIP membership. These will be chosen based on the likelihood of gaining traction, aligned initiatives (such as Promise Neighborhoods or LISC Building Sustainable Communities cities), and our interest in size and geographic diversity.

Assuming the campaign will generate more interest than we have experienced in the past, we need to revamp our response to new partner inquiries. We propose to use the next year to consolidate the wisdom we have gained over the past 15 years and develop a set of principles, approaches, and tools that can be used when assisting a city to develop NNIP capacities. The toolkit would give advice on institutional choices, funding requirements, and data acquisition. In some cases, it will require new research, such as in-depth case studies of some partner organizations to try to determine the staffing and minimum funding needed to perform the NNIP functions. Developing this package will ensure a consistent approach, save innumerable hours in re-creating introductory materials, and enable us to delegate outreach responsibilities to representatives beyond UI staff with confidence. Of course, the standard materials will need to be customized, depending on the candidate city's stage of development and local issue interests.

The first step will still be a phone conversation between UI staff and a prospective city. We still plan to offer telephone and webinar assistance at no charge. For places in need of additional help, we would assist in planning the best strategy for a site visit—likely a combination of a presentation to a group and select individual meetings. Depending on the interest in the city and network resources, we could provide this for free or charge a standard honorarium plus travel costs. The expenses would be minimized by having the standard materials at hand.

The Urban Institute will manage and deploy this on-site assistance initially, but it is not ideally structured to serve as a technical assistance (TA) provider if the scale increases substantially.



As the demand exceeds UI staff capacity, we will enlist NNIP partners or other consultants to also conduct the initial assessments and design technical assistance programs to match the needs of the candidates.

***Strengthening local capacity.*** NNIP plans to continue all of the services it regularly provides its expanding network of partners over the next two years (many of these services are driven by content developed under the cross-site initiative work and the development agenda for tools and guides discussed below). However, a major expansion is planned in the provision of training to local partners. This will begin with a survey of the partners to find out what topics and approaches would be most helpful to them.

One topic we already know to be a high priority among the partners is business development and management. Our information campaign will be designed to notably expand awareness of the work and promise of data intermediaries in all cities. In this component, we will draw on UI and local partner staff to help the partners advance their own capacities to take advantage of this new awareness in an effective manner. This will include guidance on proactive efforts to engage new funders as well as to increase levels of support from existing funders. It will also include more guidance to improve grant writing skills and other fundraising and business management techniques for partners who need assistance at that level.

***Informing local policy: incubating new cross-site initiatives.*** Some of the most important advances NNIP has been responsible for are products of its cross-site action initiatives—work that has driven real policy change and programmatic payoffs and has yielded innovations in data applications. In the next two years we plan a notable expansion of the partnership's output in this area.

This will first require a more proactive effort by NNIP leaders in probing local work in all partner cities. Partners already post reports on their activities on the NNIP web site. In the future, these reports will be followed up by calls in which staff learn more about the details of innovative work that might be the basis for new cross-site initiatives. Concept papers on promising ideas will be prepared and, via work with the Executive Committee, further developed into funding proposals and action plans. We will also explore leveraging the staff expertise of the Urban Institute, particularly in areas of housing finance, social determinants of health, and the intersection of schools and neighborhoods.



We already know about several topic areas for which the potential seems high for this type of work. For example:

- What to do about **housing markets** in neighborhoods most affected by the foreclosure crisis seems to have fallen off the radar screen of many policymakers after the demise of the HUD Neighborhood Stabilization Program. NNIP partners note that in several cities the market forces operating in those neighborhoods now differ in important ways from what existed five years ago. Fresh data work will be required to understand these forces and devise up-to-date response strategies.
- There has been growing national interest of late in the **social determinants of health**, particularly the effects of living in distressed neighborhoods. The availability of address-based data on health conditions is still far from ideal, but it is now much richer than it was a few years ago. Several NNIP partners are eager to take advantage of the new data in work with local health officials and practitioners to rethink neighborhood-level approaches (new approaches to prevention seem to be an especially high priority at this point).
- Recent work by NNIP partners in a few cities with **early childhood and education** data (some motivated by their work on Promise Neighborhood implementation) is provocative. It is not too early to begin to think through the way such data could be used in more NNIP cities to support new initiatives; for example, initiatives related to the reduction of chronic absence and hypermobility of children.
- An important technical and institutional breakthrough in a number of NNIP cities has been the development of **integrated data systems (IDS)**, which bring together the records for the same individuals from several different institutions (social service programs, schools, and so forth). These systems might be used to show how school proficiency scores and graduation rates for youth participating in certain remedial programs or those involved with the juvenile court system differ from those for others. Attractive initial applications in the NNIP context would involve analyzing how various indicators related to program performance and effects relate to other indicators of neighborhood conditions and trends derived from existing NNIP data systems and then seeing how those relationships compare across several cities.
- A cross-site effort already in planning that we hope to accelerate is the **NNIP shared indicators system**. In this system, the partners will regularly extract data from their local systems (under rigorous guidelines to assure comparability) and submit them to the Urban Institute (Kahn, Kingsley, and Taylor 2012). The possibility of collecting such rich information



across a sizable number of cities offers the potential to substantially improve understanding of how neighborhoods change in varying city environments and thereby serve as a much-improved basis for policy, both locally and nationally. To date, we have drafted a national analysis of neighborhood disparities based on indicators derived from the American Community Survey and explored options for the design of the system and protocols for data collection.

***Tools and guides: documenting best practices.*** We noted that NNIP is considerably behind in documenting successful data applications by NNIP partners that have been reported to us. This is true for innovative work in policy analysis and technical innovations by our partners as well. Therefore, we propose a major expansion of work in the Developing Tools and Guides component of the agenda in 2013–14. The information campaign itself will be more successful and gain more attention nationally if it is fed by a stream of new compelling content that will capture the attention of the audiences we hope to reach. The outputs of this work will include illustrations and guidance materials shared through our web site and presentations. These materials will accelerate peer learning among our existing partners and be part of the library of examples we will use when working with potential new partners. As a special focus, we could highlight how partners are evolving in the new data and policy environment, such as stories about how they are successfully partnering with outside consultants or local open data advocates.



## Section 6

### A NATIONAL SUPPORT SYSTEM

The future of the community information field appears promising. New forces—the growing desire of local decisionmakers for good neighborhood-level data coupled with continuing improvements in the technology—have given it momentum, even though national efforts by NNIP and others to facilitate this progress have been comparatively modest.

Still, these capacities are available to only a small fraction of America's localities at this point. Steps need to be taken to accelerate the pace. One of them involves the NNIP-led campaign to seed and strengthen local data intermediaries, as discussed in the previous section.

Other activities can be done at the national level that would substantially enhance and facilitate the local work. The effort amounts to creating a national support system to help all local data users, which will enrich the data resources and use potentials for communities of all sizes, whether or not they have data intermediaries. Many organizations will have to be involved in developing this system. We suggest that NNIP serve as a collaborator and participant but not take the lead at this level. In this section, we outline what we think the agenda might contain.

The main tasks are (1) pressing national and state agencies and private data holders to make their data accessible to the public, (2) transforming such data into forms that make it easier for local decisionmakers to use, (3) making mapping and other visualization tools of the data available to the public over the web and developing standardized tools locals can use to manipulate the data to perform useful tasks, and (4) inserting lessons on how the new data environment can improve public policy and community building into the curricula of relevant professional schools (e.g., public management, urban planning) and professional association training courses.

Some activity is now under way in each of these areas, but it does not add up to momentum toward a coherent system at this point. To put this movement on a stronger path, we suggest that NNIP take an important initial step, performing an objective assessment of the status of all the mentioned elements in 2013–14 and identifying important gaps that need to be addressed.



At the end of this section, we offer a discussion of how the information needs of smaller metros and nonmetropolitan towns and rural areas might be addressed if a national support system such as this were more fully developed.

### Making Government and Proprietary Datasets Accessible

The first area entails pushing all levels of government to release their existing nonconfidential datasets in usable formats. The introduction mentioned the growth of the local open data movement. Campaigns by the Sunlight Foundation and Code for America highlight open data champions at the state and local levels and create political pressure for other governments to follow suit. To date, reviews of open data at the state level have focused on legislative or budget data (see Davis, Baxandall, and Pierannunzi 2013 or the Open States web site for good examples). More information is needed about other data, such as education, health, housing, and public assistance. Additional research could document how the states are making progress opening up a broad array of data, including data that can be disaggregated for census tracts, cities, and counties.

At the national level, many existing datasets already cover the country as a whole and either include neighborhood-scale data or are address-based so data can be aggregated for small areas. These files can be very useful in analyzing local conditions, especially when used in conjunction with local data systems such as those maintained by NNIP partners.

Some of these national files are based on surveys, such as the Census Bureau's decennial census or its American Community Survey. Others are the administrative records of federal agencies, such as the data maintained by HUD on public housing projects or by the IRS on income tax returns. Administrative data systems of state agencies could also yield useful data at the neighborhood level. Finally, there are proprietary datasets that could be extremely useful to local decision makers, notably those maintained by companies that keep or assemble records on the status of residential mortgages.

The effort needed here parallels the work of local open data and open government movements: pressing the responsible entities to release much more of their internal data to the public directly over the web with reasonable rules to protect confidentiality. Although the current advocates have often focused on legislative, budget, or city services data, access to datasets needed for





community and program planning should be added to the agenda. The federal government has taken explicit positions favoring these directions (see Orzag 2009 and the White House 2009), and considerable progress has been made through the data.gov web site.

In addition to promoting new releases, advocacy is required to preserve current national data collection and dissemination efforts. For example, the Census Project played a critical role in mobilizing constituents during the threat to the funding and mandatory status for the American Community Survey. In the current political climate, dedicated advocates must monitor and organize stakeholders because legislative or agency decisions are being made that affect access to critical data sources.

Despite the growing recognition of the benefits of open data, there are still many city and county governments that either sell their assessor or recorder of deeds' files directly or license the data to private firms, both resulting in the data being prohibitively expensive for local users. This revenue is especially tempting given the contraction in city revenues. The public has already paid for the original creation of the data within government and on principle should not have to pay a second time to access it. To make the financial case, we also need evidence to demonstrate that the long-term and widespread benefits that the city can gain by having public and private decisions informed by open housing data will outweigh the limited and short-term income from selling the files. The federal agencies and national networks can reinforce this message and require that nonconfidential data development under their funding must be open to the public.

Finally, we stress that federal action is likely to be required to secure the release at low cost of several types of data now held by private firms. For example, data on mortgage status are also being assembled by a number of private entities, but there are at least three concerns: (1) the high price to users; (2) questions about data quality and coverage that cannot be checked externally; and (3) the many differing files do not add up to a coherent national system for monitoring mortgage performance at the national level, let alone for localities. In this area, a high-level task force is probably called for to devise a workable policy and approach to implementation.

National organizations and federal agencies can play a role in making proprietary data available for public purposes without threatening the business model of the firms. As one example, the



U.S. Department of Housing and Urban Development has summarized U.S. Postal Service data quarterly on occupied and vacant addresses at the census tract level. This data, released with only a three-month lag, is invaluable in characterizing the housing market to plan appropriate neighborhood stabilization strategies or track a neighborhood's housing market for a comprehensive change initiative. As another example, LISC transforms proprietary indicators on foreclosure and mortgage delinquency rates to relative indices and releases the converted data by zip code through the [Foreclosure-response.org](http://Foreclosure-response.org) web site.

### Transforming National Datasets to Make Them Easier to Use

In Section 2, we noted that many local government datasets released in response to open data campaigns will be in a form that only technical experts (e.g., hackers) will have sufficient skill to use directly. This is also true of the national datasets noted in the previous paragraphs.

As was the case at the local level, needed here are efforts to transform these datasets to make them easier to use. The Urban Institute has done this type of work on several national files over the past decade. A good example is their transformation of the annually released *Home Mortgage Disclosure Act (HMDA)* datasets. Originally established to monitor discrimination in the mortgage market, these files contain data that can provide a broader understanding of neighborhood change: for example, on mortgage origination rates and changes in median loan amounts by race and other characteristics of the borrowers. The annual HMDA files of individual mortgage applications are multiple gigabyte files. Among other things, the UI transformations involved summarizing the raw data to create census tract-level records on a selected number of indicators of interest to housing researchers and community development practitioners (Pettit and Droesch 2009).

UI has done similar work with the National Center for Education Statistics Common Core of Data, ZIP Business Patterns, and the American Community Survey. Annual updates have been created, and the streamlined files are now released to the public over the web. Given additional resources, there are other files, such as IRS individual tax return data or summarized Local Employment Dynamics data, that could be shared in this way as well. Data files are temporarily being shared via the UI *MetroTrends* web site, but UI is revising its dissemination strategy and exploring a partnership with the National Historic GIS program.



The source agencies should be encouraged to release the data in more usable forms to the extent feasible. In the meantime, UI hopes to continue to update and release these files and encourage local applications. As new data from the internal records of other national and state agencies are released, there will be a need and opportunity for other groups to undertake similar work in other topic areas.

### National Datasets: Visualization and Tools

Some local entities, such as NNIP partners, planners, and researchers, have the capacity to manipulate the datasets mentioned and can benefit greatly from them. However, there are many other local users who need something simpler still. They may need to look only at a data exhibit (table, chart, or map) depicting one or a few specific indicators for a specific neighborhood, group of neighborhoods, or city. New online visualization tools with and without preloaded data are emerging to fulfill this need. Some web sites, such as Tableau, GoogleData or ESRI's ArcGIS Online, already provide visualization tools for user-uploaded data.

Operated by The Reinvestment Fund in Philadelphia, *PolicyMap* is probably today's most well-known example of a site combining curated data with visualization. The web site offers free-of-charge access to mapping and charting of indicators from national public datasets such as those we have noted previously, but it also offers other commercial data and advanced features to subscribers for a fee. The mapping features are interactive, allowing users to select the geographic level and area that interest them. Users can layer point data, such as schools or public housing and geographic boundaries, over thematic maps. Users can download and export maps and other exhibits, and subscribers can upload their own data, which can be integrated in visualizations with other *PolicyMap* data.

Beyond visualization of the data, the development and dissemination of automated tools can facilitate application of the data by local stakeholders. Such tools are standardized processes using neighborhood-level data to produce selected components of needed local analyses and plans at very low cost.

HUD's new *eCon Planning Suite* is a good example. This *Suite* is defined as a "collection of new online tools to help grantees create market-driven, leveraged housing and community development plans" (HUD, Office of Community Planning and Development 2012). All localities



that want to receive HUD grants under a number of programs are required to submit a “Consolidated Plan.” The new software standardizes and automates much of the work of preparing and submitting those plans. Local planners initiate the process and provide some information on standard formats. Then the exhibits on housing needs and market conditions are automatically populated from census and other national datasets. The *Suite* also offers a mapping tool that can provide tract-level maps of key indicators to support strategic decisions in the plan.

A nonprofit example is the National Low Income Housing Coalition’s (NLIHC) online housing portal. Developed in partnership with the Public and Affordable Housing Research Corporation (PAHRC), the portal was created to help preserve existing federally assisted homes. PAHRC and NLIHC launched the National Housing Preservation Database at [www.preservationdatabase.org](http://www.preservationdatabase.org), and it includes information which is updated tri-annually on more than 4.5 million units in more than 75,000 federally assisted properties. Users can access information on properties receiving assistance from various affordable housing programs in customizable formats, export the data in Excel, and map these properties in one central location.

Many other tools could be developed to take advantage of the national datasets and similarly simplify and improve the quality of local decisionmaking. Some could be fairly straightforward, such as a mapping viewer and extract tool for a given dataset. Alternatively, they could be quite complex, such as simulation models that predict changes in neighborhood conditions under varying assumptions about economic conditions and program actions. (See Kingsley and Pettit 2008.)

### Strengthening Professional School and Training Course Curricula

All universities and community colleges that train people for careers in local policy and program development (primarily schools of public management and urban planning) already have courses in GIS and quantitative methods. However, approaches to data-driven decisionmaking such as those that are emerging in NNIP partner cities are typically too new to have found their way into those curricula.



These approaches go far beyond basic statistical concepts and techniques. They are rooted in policy analysis but also include how analysts and planners set the stage for strategic decisionmaking in complex institutional settings. They demonstrate how the richer array of neighborhood indicators now becoming available can support more nuanced and realistic situation analysis (fact-based assessments of strengths, weaknesses, opportunities, and threats) than was possible in the past. They also cover more effective methods of quantitatively weighing alternative courses of action to address different community situations and making choices based on those analyses.

In section 4, we proposed a major program to document new approaches and techniques that are emerging from real decision situations in NNIP cities. The more detailed materials could be easily adapted for use in courses at universities and community colleges. These could also be combined with successful models of service learning courses. We can draw on the experiences of our many university-based NNIP partners to craft and promote the content. In addition, the materials could be used in training courses offered by groups ranging from the International City-County Managers Association to NeighborWorks and LISC.

#### [Toward Coherence: An Initial Status Assessment by NNIP](#)

How can the contribution of these components be advanced? There is no obvious institution to put in charge of doing so. As is true of local data intermediaries, this system is infrastructure that can provide important public benefits and warrants public support. The first element of releasing public datasets requires government action, and it is doubtful that the second element (transforming datasets for ease of use) will be sustained without some form of ongoing subsidy. The third (visualization and tool development) warrants at least some subsidy to expedite developments and make them affordable and relevant to lower-income users.

Clearly, all of the pieces do not have to be built by government. In fact, groups in and outside of government are already at work to some extent on each of them. But current actions in each area are fragmented and not well documented. There is no basis for assessing whether this work is proceeding as effectively as it could. Information that might suggest how to best prioritize interventions is lost because the work in these areas is not examined together.



In this situation, we recommend that NNIP take the next step by conducting a formal assessment of the state of all components of the system. The assessment would identify progress made so far in each area: cataloging the release of small-area, national government datasets of use to community strategies; the list of such datasets that have been transformed for ease of local use; innovations in visualization and tool development; and adoption of materials on innovative approaches to community data use in university and training course curricula. Looking across these areas, the assessment would then identify useful work that remains to be done and discuss priorities for addressing those gaps. It would also outline alternative approaches to building this system.

Assessment results would be actively disseminated, and special efforts would be made to explain those results and their implications to the groups involved in the NNIP information campaign proposed in section 4 as well as to national-level actors. Nationally, the institutions whose work focuses on the improvement of community in distressed neighborhoods will be a priority in these presentations, including, for example, representatives from NeighborWorks, the Local Initiatives Support Corporation, the Enterprise Foundation, and the Center for Housing Policy, as well as federal officials from HUD and other agencies that have been involved in the White House's Neighborhood Revitalization Initiative.

#### [Addressing Information Needs in Smaller Metros and Nonmetropolitan Towns and Rural Areas](#)

We have suggested that at some level, urban settlements are too small to justify the development of independent neighborhood-level information systems of the type developed in NNIP. These areas still have spatial issues to confront, but they involve, for example, the allocation of resources and the assessment of economic development opportunities across towns in a county, rather than across neighborhoods in a city.

Much of the data needed to support decisions about such issues can be addressed by local government agencies. Yet at this level, work by community improvement groups outside of government is extremely important. The Community Indicators Consortium (CIC) is a national organization that promotes the use of indicators in local decisionmaking at all levels. Several NNIP partners are members, but other CIC members work at the county or town level. They



assemble indicators across topic areas in a manner similar to that of the NNIP partners, but the indicators are usually for towns as a whole, rather than smaller subareas.

With indicators for larger areas, the technical work of data development is less demanding. However, some key functions are the same, particularly the idea of regularly reviewing a mix of indicators to assess changes in community well-being and using what is learned from those reviews as a basis for adjusting policies and programs. These strategies relate to resources and networks that are available in smaller communities, not the denser network of organizations and services to be found in metropolitan areas.

Clearly if the national support system defined was better developed, the work of groups facilitating data-driven decisionmaking at this level could be much enriched at a low cost. The NNIP network would not provide the type of hands-on support for these smaller groups that it plans for new partners in larger places (see section 4). However, these groups would have access to all of the new information products planned by NNIP, and many such products would be relevant to these smaller groups. Further, their leaders would be invited to major conferences convened by NNIP. We expect that the advancement in their work would be supported by training, technical assistance, and other assistance provided via other existing national networks, such as the United Way, CIC, and the National Association of Planning Councils (NAPC).



## Section 7

# CONCLUSION

National Neighborhood Indicators Partnership (NNIP) leadership undertook its strategic planning process and this companion paper to examine the role of local data intermediaries in a new era and hold inclusive deliberations about the directions for the network. The results have reinforced our conviction that the NNIP model remains sound almost two decades after its conception. In part due to the national and peer support facilitated by the NNIP network, local capacity to integrate data and analysis into local decisionmaking has spread and deepened since the launch of the network. The network still has a valuable role to play in encouraging new data intermediaries in more cities, fostering the existing community of practice, and implementing cross-site initiatives to inform local and national policy. NNIP UI staff, the Executive Committee members, and the other local partners will continue to shape the NNIP network so that it can thrive as it grows in size and influence. Partnership-wide conversations and findings from an upcoming independent assessment of the network will help to guide the effort. The information campaign, improved communications, and development of additional resources for partners will require an expansion and diversification of sponsors for the network, which will be a focus for NNIP leadership over the next year. We will share progress on these network activities through our NNIPNews listserv and web site throughout the year.

The vision for a national support system acknowledges that NNIP is just one of the components needed to build local capacity to use information. The review of the field suggested in the previous section would identify strong and weak areas in the national support system for local decisionmaking. A meeting of foundations, key government agencies, and national nonprofits would provide a forum to discuss the proposed framework, connect existing efforts to strengthen various elements, and consider how to fill any gaps. NNIP staff and local members are committed to collaborating with others to nurture the broader field of community information.

The next few years represent an important time in the development of local capacity for data-driven decisionmaking in America. Advances in data availability and technical tools are inevitable, but in and of themselves, these will not guarantee marked improvements in local





policies and programs. Skilled professionals with knowledge of local context will be needed to help residents and civic leaders achieve the payoff from progress on the technical side. Individual funders and networks such as the Grantmakers for Effective Organizations, Neighborhood Funders Network, or Living Cities could further the agenda to build local capacity for decisionmaking in multiple ways: documenting success stories, hosting in-depth discussions on barriers to using information, and directly investing in local capacity and national supports. Coordinated and deliberate actions by funders and other concerned stakeholders would ensure the continued advancement of the community information field.



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