CASE STUDY: NNIP AND OPEN DATA IN DETROIT

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NATIONAL NEIGHBORHOOD INDICATORS PARTNERSHIP

The National Neighborhood Indicators Partnership (NNIP) is a network of organizations in three dozen cities across the nation. Local partners work to make data about neighborhoods more accessible and help local stakeholders apply data to tackle issues in their communities. Over the past three years, with the support of the John D. and Catherine T. MacArthur Foundation, the NNIP network explored how its partners relate to the open data movement and the potential for the two communities to work more closely together in the future. The report Putting Open Data to Work for Communities documents the broader lessons from the project. This case study relates how the local NNIP partner, Data Driven Detroit (D3), in Detroit, Michigan, engaged with the open data movement in their community. Based on the author's conversation with Erica Raleigh, the organization's director, it presents a rich picture of the information environment and how it is shaped by the local institutional and political context. We hope it provides lessons and inspiration for other localities interested in using open data to improve their communities.

CONTEXT FOR OPEN DATA

Detroit has faced great challenges throughout the second half of the 20th century, including rapid and extreme declines in population and investment, rising crime rates, local government corruption, and high levels of racial tension. Local government has felt the effects of these shifts through falling tax revenue and subsequent declining quality of services. In March 2013, Michigan Governor Rick Snyder declared the city in financial emergency and appointed an emergency financial manager. Kevyn Orr, the financial manager, took over all city financial matters and subsequently filed for Chapter 9 bankruptcy, making Detroit the largest American city to do so; this was also the largest municipal bankruptcy filing in US history. Since this time, numerous city departments have seen severe staffing cutbacks.

Despite its current challenges, external forces have helped Detroit make progress on open data over the past couple of years. In 2012, Detroit was selected as a site for a Code for America Fellowship. During the program's year, the Detroit team created LocalData, an app to standardize location-based data collected by data analysts and community groups. Since the end of the fellowship, some of the team members started Local Data/Amplify Labs, which has data available through an online mapping interface. While it is not local, it touches on local issues, and can be useful in community planning efforts.

The city still does not have a formal policy, but is currently taking a significant step forward in the realm of open data. Mayor Mike Duggan has recently worked with a "Tech Team" of municipal officials from around the country as part of an effort by the Obama administration to find ways to use technology to support economic recovery.[1] At the recommendation of this team, Mayor Duggan recently hired Beth Niblock as Chief Information Officer (CIO). Coming to Detroit from Louisville, KY, Ms. Niblock sees the opportunity to centralize government data sources as both a movement toward higher data accessibility, but also as a cost-saving measure, taking the burden off severely understaffed city agencies currently overwhelmed with Freedom of Information Act requests.

According to Erica Raleigh[2], the Director of D3, data access in and around Detroit has been challenging. She observes that open data is not a well-known concept in Detroit, and the release of data is often tempered by division within city government, and competition for limited resources. In fact, as Ms. Raleigh noted during a recent interview, some departments charge fees for releasing data as a source of revenue, especially those at the parcel- or other small-area level. For example, the office of information technology services currently charges for GIS maps, which are available in paper or digital form. For data not for sale, access is often dependent on personal contacts, again due to limited staff hours.

The metropolitan and state-level contexts provide little extra support. On a regional level, the Southeast Michigan Community of Governments collects and uses data on land use, the environment, the economy, and transportation, but very little is publicly available—the exception is limited environmental and land-use shapefiles.

The state runs two open government websites: Open Michigan,[3] and the State of Michigan Data Store.[4] Open Michigan offers links to state "dashboards" that provide selected state-level statistics in a number of categories, as well as basic visualization. These data are available for download as excel files. The data store has minimal data hosted at its site; it primarily lists links to other departmental and related data sources. For what is there, navigation is challenging unless the user knows the exact name of the dataset she or he wants.

PROGRESS IN OPEN DATA

D3 was founded in 2008 with funding from The Skillman Foundation and The Kresge Foundation. D3's mission is "to provide accessible, high-quality information and analysis to drive informed decision-making [with the vision] that essential and unbiased information is used by

[1] http://www.whitehouse.gov/blog/2014/04/29/new-steps-build-innovative-21st-century-detroit
[2] Erica Raleigh, telephone interview by Eric Burnstein, May 9, 2014.

[3] http://www.michigan.gov/openmichigan
[4] http://www.michigan.gov/som/0,1607,7-192-29938_54272---,00.html

all."[5] Until 2012, D3 was incubated by City Connect Detroit, an organization that coordinates work between local nonprofits; government; and funders working to solve common problems affecting children, youth, and families. As such, D3 has its roots in Detroit's direct-service nonprofit community, with many direct-service organizations still being its closest partners and clients. It is now an affiliate of the Michigan Nonprofit Association.

D3 has been playing a critical role in filling the data vacuum resulting from Detroit's political and economic situation. However, the organization has to walk a fine line between fulfilling their mission and not reducing revenue streams of the city agencies that sell the data. Ms. Raleigh observed that the organization's main activities have been to find data, then make it available in a way that is useful for local planning and organizing efforts, without jeopardizing the city's revenue from those data. When negotiating with government agency staff for access to hard-to-get datasets, D3 will often offer one of two options for D3's use and release of the data: aggregation to a higher geographic level, or delaying the release by a period of time. In this way, D3 can use the more detailed and timely data for analysis that supports the public good, while also obtaining access to essential datasets.

In addition, the Detroit Data Collaborative, which included D3, Michigan Community

Resources, the Detroit Office of Foreclosure Prevention and Response, and the University of Michigan Ginsberg Center, published the Detroit Residential Parcel Survey, which recorded the status of almost every residential parcel in the city at the time of survey in 2009. This has been a critical dataset for use by community organizations and municipal departments alike in Detroit, helping them begin to address the large scale abandonment and land vacancy.

D3 teamed up with a new partner, Loveland Technologies, in late 2013 to update the parcel data. Loveland Technologies, a tech firm based in the city, that "work[s] with governments, neighborhood groups, development, and conservation projects to gather and present public information about properties (the physical space and legal subdivisions that define the world) in clearer, more actionable ways."[6] As an example, Loveland became involved in campaigning for the Wayne County (Detroit's parent county) tax foreclosure auction process to be more open and available to the public.

To support the Blight Removal Task Force, D3 and Loveland Technologies partnered to record every parcel in Detroit in the winter/spring of 2013, along with a photo and property information. This original data collection will be linked to demographic and environmental data from 20 other data sets, making it the largest dataset of its kind for Detroit.[7] The partners

[5] http://datadrivendetroit.org/about-us/mission-history/

[6] http://makeloveland.com/#about
[7] http://www.timetoendblight.com/

succeeded in making the final survey dataset open to the public at a parcel level.

Community organizations are the actors most consistently calling for open data in Detroit, but most don't yet have the lexicon or capacity to express clearly what they want, or be able to use it. Neighborhood organization and mobilization is extremely important in Detroit in advocating for services that are unavailable or of low quality from the city. For example, many involved citizens and organizations have requested higher levels of access to criminal offense data in order to call for security in their neighborhoods.

Ms. Raleigh observed that despite interest from a broad set of organizations, firms and government offices, Detroiters have been slow to adopt open data principles into their operations. In other words, while change is coming, for the moment efforts are siloed. While stakeholders do occasionally meet up, specific events are rare, and social media is not a widely-used tool on the local level.

FUTURE DIRECTIONS

For now, D3 acts as the open data lynchpin for the Detroit area. While they have not been directly involved with any advocacy to date, they have supported the movement through demonstrating the value of having open data through their interactions with nonprofits, community development corporations, and government. As Ms. Raleigh observed, "most of our conversations with outside entities touch on

this, and we do our best to lay out a good case on why they should open their files—offering means for these things to become more public, and as a result, more useful to the world around us."

D3 has just opened its open data portal in its beta stage.[8] Powered by ESRI, the portal includes an interactive mapping function, as well as approximately 30 datasets available for download as a CSV, KML, Shapefile, or API, with plans to steadily add datasets as they are available and prepared. Ms. Raleigh predicts the audience for the portal will be more technical users, as the interface doesn't have tools to guide nontechnical people.

Although D3 has played a similar role since its founding—collecting and distributing data—the organization is moving into a new phase. In the upcoming years, the organization will move into work that's "less about knocking on doors, and more and more about making meaning of data that is out." In other words, D3 has laid the foundation of proving the value of open data; now the organization can focus on making meaning of the data that is consumable to the public. This means more analysis and potentially drawing more conclusions from data, stepping into areas that include analyzing data on outcomes—that is, differences in inputs and their resulting outputs. This work will have more policy implications, although the organization currently has no plans to jump into the policy arena.

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[8] http://d3.d3.opendata.arcgis.com/

D3 currently has one new source of funding, resulting from a report from the Blight Removal Task Force that was published in May. This new funding will allow D3 to organize a long-term proposal to create a living dataset and record changes for every parcel in the city, a major innovation that would help inform this type of work for other cities doing property surveys. In addition, the project will expand to areas across city lines. D3's current funders are broadly in support of this new project.

A final piece of D3's goals in coming years is making data actionable. As Ms. Raleigh notes, D3 doesn't have the mission or capacity to make decisions for the city or its communities. Instead, the organization seeks to integrate its own "top-down" administrative data with grass-roots data contributed from other sources— particularly community based organizations. With a prototype grant from the Knight Foundation, D3 is seeking to test this approach with the Warren-Conner Development Commission and Focus: Hope. In doing so, D3 plans to provide tools to collect information, and feed them back into an online portal for making data useful and actionable for users. The challenge is to not overwhelm the lay user, while still revealing the breadth of data available within.

Despite its challenging context, D3 has developed over its five years and is now transitioning to become a more active participant in the city's revitalization efforts. As such, this will come with shifts in activities and resources. Between its new open data portal and moving further into a role as an advocate for open data, D3 will be playing an increasingly critical role in guiding Detroit's government and community-based organizations toward data-driven decision making and program development.

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