PARTNER'S PERSPECTIVE:
NNIP AND OPEN DATA IN MILWAUKEE

TODD CLAUSEN

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 *Partner's Perspective* relates how the local NNIP partner, the Data Center Program of the Nonprofit Center of Milwaukee, in Milwaukee, Wisconsin engaged with the open data movement in their community. Based on the author's personal experiences as of June 2013, 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

Milwaukee has long been a data-rich environment for researchers and community organizers alike. Through government, university, and nonprofit social service agency efforts, a wide range of data has been available for decades to planners, grant writers, and those trying to strategically improve conditions in the city and the region. Over the years, there have also been short-term collaborative efforts and data committees formed around and by various community change initiatives.

Dr. Michael Barndt conducted one of the earliest studies into open government data in Milwaukee, on behalf of the Milwaukee Urban Observatory in 1976. It catalogued data systems under development and maintenance by the City of Milwaukee, Milwaukee Public Schools, the County and Southeast Wisconsin Regional Planning authority, as well as a few large social service agencies. It was the first catalog of its kind in Milwaukee and inventoried the various datasets, responsibilities for maintenance, and technical details of the computer hardware and software on which the data was maintained.

Among the issues covered by the assessment were data quality, secondary uses and problems, and efforts to collaborate across departments and agencies, particularly sharing data. The study found structural issues in how the data were maintained and formatted. More importantly, it discussed the legal, philosophical,

and political barriers and the competition between agencies that limited inter- and intra-agency sharing. Unfortunately, many of these barriers continue today.

In the 1990s, the city first released its Master Property File (MPROP) publicly on CD-ROM, making it available to various city departments as well as researchers at the University of Wisconsin–Milwaukee. The MPROP was developed beginning in 1975 with a grant through the Housing and Community Development Act of 1974. It has more than 90 elements on each of the over 160,000 parcels in the city, and its structure has remained largely unchanged to the present, making it an invaluable resource for studying long-term property trends. The current version, as well as annual snapshots back to 1975, is available for download from the city's web site. Among the more comprehensive and useful open data initiatives in Milwaukee was COMPASS, begun in 2001. The National Institute of Justice (NIJ) chose Milwaukee as the second place in the country to implement the program and provided a three-year demonstration grant. The goal of COMPASS was to foster community collaboration by providing data and information to match problems and opportunities under the assumption that "shared data is integral to good collaboration and problem solving."

The Milwaukee COMPASS project consists of several components, including an ESRI ArcIMS Web "Community Mapping" site with a wide range of crime and property data containing historic crime data. A community "Query and Download" portal allows users to view and download tabular data by a range of geographies. Another valuable application is a series of "Report Cards," with a variety of data available at several geographies from census tracts to ZIP Codes to political districts, with demographic, crime, and property data all in an easy-to-read format.

The project was funded by grants from COPS (2003–2004), a component of the Justice Department to advance community policing in jurisdictions across the country, and the Community Development Block Grant Administration (2005–2010). The COMPASS project as of this writing is still available to the public with regular data updates, but is not actively undergoing continued development due to funding constraints.

From 2004 through 2006, the Milwaukee Data Consortium met regularly through sponsorship of the Annie E. Casey Foundation–funded Making Connections Milwaukee Initiative and the United Way of Greater Milwaukee. It was composed of researchers and data analysts from social service agencies, city government, and local medical facilities, many of whom were partners in the COMPASS project. The consortium benefited its members as a networking opportunity, but very few tangible results came out of this collaborative.

PROGRESS IN OPEN DATA

Led by Mayor Tom Barrett and implemented most recently by his Chief Information Officer Nancy Olson, the city already has released great deal of nonconfidential administrative data. For example, the Department of City Development has made construction and occupancy permits available as PDFs (2005–2012) or Excel spreadsheets (2013), and the City Assessor's Office has published property sales data (on a mapping platform as well as Excel downloads). A wide range of other licensing and permit data is also available from the License Division.

The Data Center Program of the Nonprofit Center of Milwaukee (an NNIP partner since 1999) was originally created in 1991 as a U.S. Census Bureau partner to disseminate information from the 1990 Census. The Center was co-founded by Barndt, and has long been a local champion of open data and particularly Public Participation in Geographic Information Systems (PPGIS). The Center has built a comprehensive internal data warehouse with longitudinal census, housing, crime, and other administrative datasets from the 1970s to the present. The Data Center's specialty is creating report templates that allow custom reporting at any geography within the city or county, often with corresponding maps. It has a long history of collaboration with both government and community entities. Through the Center's provision of data analysis and GIS services, it has earned the trust of city departments (including the Health Department) and social service agencies of all sizes.

Other open movements have recently had success in building momentum outside of traditional constituents. BarCamp Milwaukee held their first un-conference in October 2006 that, along with other "meetups," has brought together communities of interest. These and other efforts brought together a diverse group of interested people and led to the formation of the Milwaukee Data Initiative (MDI). The MDI was originally formed with members from traditional data and research communities then was energized by the addition of programmers, Web developers, and others interested in "civic hacking" and even the potential of building small businesses around open data.

The Milwaukee Data Initiative is an advocacy group working to "change the way Milwaukee uses and shares critical data" and has built a Web portal with links to existing data and applications and includes a community data and apps "wish list." One of the goals of MDI is to suggest the data community adopt open standards, including Web Application Programming Interfaces (APIs) and other accessible open formats such as comma-separated values (CSV) for distributing datasets. It also promotes designing systems that are interoperable and that allow data portability. In February 2013, MDI hosted the Milwaukee event for the International Open Data Hackathon and built two Web applications that make data locked in PDFs and other administrative data

easily accessible to the public. They host monthly meetups bringing together data people, designers, and other interested persons from the community.

The Data Center Program has long benefited from relatively easy access to local government data and as a result scores of local nonprofit organizations have had access to long-term longitudinal data in formatted reports and maps since the program's inception.

Access to open data over the years has allowed numerous nonprofit agencies, from small neighborhood block clubs to social service agencies with multimillion dollar budgets, to have similar access to data and information for planning and evaluation purposes. The Data Center has been at the forefront of making data accessible to the Milwaukee Community for more than 20 years, and intends to continue to update its internal data warehouse and advocate on behalf of open data policies.

It also plays new roles through MDI, such as sharing experiences in working with various administrative datasets. This includes consulting with developers to prioritize datasets that members of the wider community are interested in, but also issues of reliability of particular data fields, reporting issues, and geocoding anomalies in crime incident data. Although there are some current funding challenges for the program, these are leading to more opportunities for collaboration with new partners and potential funding, particularly in providing

leadership and guidance for a new generation through the Milwaukee Data Initiative.

FUTURE DIRECTIONS

Changes over the past few years have raised questions about Milwaukee's open government data and easy access. Recently, changes in funding from state and national government sources have been challenging budgets within city departments. Datasets that only a few years ago were updated on a weekly basis are now available only sporadically or by request. Although it is unlikely that policies at the city level will become regressive toward open data, the situation may change with new leadership at both department and mayoral levels.

The city does have a strong and growing open data community, particularly through MDI's advocacy efforts. In addition to the Open Data Hackathon, MDI participated in the June 2013 Day of Civic Hacking and is working to bring a Code for America Brigade to the city, among other projects.

Action in Milwaukee may also be spurred by progress elsewhere in Wisconsin. The City of Madison became the second city in the country to approve an open data law in June 2012 and implemented their Open Data policy and portal in January 2013. The author of that ordinance, Alderman Scott Resnick, is pushing a similar piece of legislation at the state level. Locally, the Milwaukee Data Initiative is taking the lead on similar legislation and has preliminary support at both the city and county government levels.

REFERENCES

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