

## Full Circle neighborhood mapping and planning project - Project Narrative

### **Problem:**

Marginalized publics often are disconnected from the planning and development decisions that shape their neighborhoods. This disconnection all too often results in displacement or dilapidation at the local level, and disappointing outcomes at the regional level.

Neighborhood assets (such as available land near transportation, jobs, greenspace or community institutions) are well known to local residents, but less well known to regional planners. Unfortunately, neighborhood residents have inadequate tools for tracking, mapping, discussing and articulating the present and future contours of their local environment. As a result, local ideas and local concerns often remain unheard, are superseded by regional plans (formulated with insufficient neighborhood input), or are swept away by market forces. Public meetings held to discuss neighborhood plans are less effective than they could be, since residents have neither the tools nor the training to create well-grounded plans before they are confronted with (and asked to quickly respond to) sophisticated blueprints drawn up in technology-heavy formats. Initiatives undertaken by Chicago's Departments of Housing, Development and Cultural Affairs have had positive impacts, but local stakeholders could take fuller advantage of these initiatives if they possessed the tools and expertise to target their resources more effectively. Specifically:

- Residents of disadvantaged neighborhoods and small municipalities often lack access to the technological tools used in modern planning, asset-mapping and data gathering. Planning and modeling tools currently available do not support the level of detail required for the development projects that shape neighborhoods in many ways. Small-scale neighborhood plans, designed to bring business and affordable housing opportunities to local residents, often fail to gel or are not represented in the formats used by planners, due to a lack of technological tools and expertise.
- Neighborhood development initiatives that reach implementation stage often struggle with a lack of awareness of the opportunities these projects can provide (in housing, business, etc.). For example, affordable housing developments may struggle to find qualified buyers because they lack the Web-based marketing used by for-profit real estate agents.
- Meanwhile, regional planners struggle to find accurate, current data at the parcel level. Vacant, abandoned, city-owned or other developable properties are difficult to identify. In a region of eight million people, only the neighborhood residents have good knowledge of which parcels are available at any given time for development or community uses.
- Many Chicago neighborhoods have experienced rapid expansion of high-cost housing and upscale businesses, but have had little say in how development unfolded. City and neighborhood initiatives designed to encourage development of housing at a variety of price points, served by a mix of new and existing businesses, have enjoyed some success--but would benefit greatly from parcel-level mapping and planning tools. Market forces have, in some cases, fostered an environment where property became so expensive that lower- and middle-income residents and businesses were forced to relocate. Meanwhile, other

neighborhoods seem unable to attract housing and commercial development—resulting in a vast disparity between market “hot spots” and market “orphans.”

### **Problem scope:**

Uneven development is a regional phenomenon, affecting dozens of neighborhoods in Chicago, its suburbs, and in other population centers (see Appendix P). While rapid development has brought an exciting dynamism to our region, many neighborhoods have experienced a deterioration of the fabric that binds residents into communities. This feast-or-famine growth has left a pattern of stark economic segregation that marginalizes those who cannot afford to participate in the neighborhood renaissance. From a regional perspective, greater Chicago has experienced:

- Displacement of middle-income families who previously enjoyed stability, convenience and affordability in metro Chicago’s many renowned neighborhoods;
- A shortage of decent, safe, affordable housing near jobs and transportation, forcing families to choose between quality housing and available employment opportunities;
- Rapid development of farmland, depleting water and other natural resources throughout the region, while many urban and suburban neighborhoods struggle with abandonment;
- A pattern of economic (and concomitant racial/ethnic) segregation that breeds cynicism and a lack of engagement in civic affairs.

The Chicago area is not alone in this problem. Metropolitan areas from California to New York have witnessed uneven development, displacement and unsatisfactory regional outcomes.

### **Remedies:**

Chicago-land communities, and the region as a whole, would benefit from a more intensive, continuous flow of information between planners and neighborhoods. The new planning tools must be *detailed* (down to the parcel level), *iterative* (capable of storing multiple scenarios for future development) and *collaborative* (able to be viewed and/or updated by many stakeholders simultaneously). The new communication tools must support effective public deliberation by *documenting* the process of defining goals and strategies, *connecting* local residents to one another and to community leaders, and *integrating* local issues with regional ones. The new database tracking tools must be easily *updated* so that neighborhood evolution is reflected quickly, *granular* so that parcel-level data can be quickly and accurately aggregated to higher geographic levels such as census tract, and *queryable* so that users can get the information they need out of the system when they need it.

Through this process, neighborhoods will gain the ability to improve the quality of their environment. Planners will gain the detailed information they need, as well as regular input from an engaged constituency. This approach is called “Full Circle” because it creates an ongoing flow of information from the neighborhoods to decision makers and back again. Specifically:

- (1) *Provide interactive online GIS (geographic information systems) mapping and planning tools to neighborhood organizations.* Local stakeholders should be able to “paint a picture” of their neighborhood’s future--and change that picture reiteratively as the development process unfolds, using interactive GIS (geographic information systems) tools.

- (2) *Provide online tools (and hand-held devices when appropriate) for parcel-level mapping of neighborhood assets—which would feed into online planning databases.* Accurate, detailed mapping of neighborhood assets (such as available land, transportation routes, major employers and public institutions) is a valuable tool for both neighborhood stakeholders and regional planners. Local residents are in a better position than anyone else to accurately map the neighborhood as it changes.
- (3) *Gather input from online neighborhoods on a regular basis.* Technological tools can facilitate the kind of deliberation needed for thoughtful development planning. These tools can also help planners to gather extensive information about the concerns, hopes and intentions of local residents. Whether the concerns have to do with housing, retail business, traffic patterns or a new park, local voices should be heard and considered along with regional concerns. Tools such as instant surveying and “electronic townhall meetings” can be of great value in gathering such important input.
- (4) *Provide online access to housing and business opportunities generated by local development projects.* Many local development projects suffer from an inability to reach the people who could benefit most from them. For example, a CDC might assemble 12 parcels for new housing construction, but find only three qualified buyers. People in the community may not realize that they qualify for incentives and subsidies offered by the CDC and its partners, or they may not be aware of amenities offered by the development project. The Web and other online communication tools can help.
- (5) *Provide and coordinate online communication tools such as listservs, threaded discussions and loosely linked email networks.* Neighborhood residents have long relied on block club meetings or public gatherings to exchange views, air concerns and reach consensus. But important segments of the public (such as elderly and disabled persons, as well as parents of young children) might not be able to leave their homes for these traditional meetings. Electronic tools can help to keep these important but marginalized publics connected to the mainstream of public planning.
- (6) *Provide hands-on training for neighborhood residents and community organizations wishing to use planning, mapping, database and communication tools to better their neighborhood.* Community technology centers have rapidly become anchors of opportunity within many neighborhoods. They provide training, access to online resources, connectedness and valuable, up-to-date information. These centers can bring the tools of the planning and community development process directly into the hands of local residents—the people most affected by planning and development projects.

### **Example of system usage**

A CDC (community development corporation), a housing developer, a local bank and a funding intermediary target a ten-parcel block for mixed-income housing with a few retail spaces. The members of this informal team log onto the data Web site to view maps of the target area. They query the database to generate a list of available properties in the target census block, along with recent sales prices for each. They click on individual parcels to view both baseline information

(from the county assessor and other entities) as well as custom information (such as building condition) entered by staffers at the local CDC (via handheld digital devices). Over a period of six months they discuss several potential scenarios, occasionally querying the database to monitor the availability of adjacent parcels as well as changing property values (comparables). In this way they track the changing feasibility of their proposed project. Satisfied that the project is economically feasible, they log onto the Web site and design a development scenario by clicking on various parts of the map and coding some parcels as affordable housing, others as market-rate housing and others as retail or playground space. They then post a notice on the neighborhood listserv, encouraging neighborhood residents to view the scenario and submit comments. Based on public comments, the charrette adjusts its scenario and schedules a public design meeting, at which residents give further input. After reaching consensus, they begin acquiring property and filing the required reviews (environmental, zoning, codes). As each parcel is acquired and developed, members of the team log on and enter status updates as they occur. Regional planning agencies could also log on to view progress. Because the system is on the Internet, all stakeholders can easily follow the project's changing shape and status.

### **Strategy:**

#### **(1) Identify a small number of target areas**

Select about five pilot neighborhoods in greater Chicago where local participants will be trained in online data-gathering, planning, mapping, marketing and communication tools. These neighborhoods would be chosen through an RFP (request for proposal) process. CDCs (community development corporations) and similar organizations would be invited to propose plans for coordinating and facilitating the Full Circle agenda in their communities.

Neighborhoods responding to the RFP should meet the following conditions:

- An economically disadvantaged and/or otherwise marginalized population;
- At least one well-established community technology center in the target area;
- A strong, anchor organization (such as a CDC) to coordinate the project locally;
- Some prior experience or familiarity with asset mapping or data gathering is preferable.

Partners such as the Midwest Technology Access Group (MTAG) will leverage existing relationships with community organizations across our region to engage (and assess) potential Full Circle candidates. To maximize the diversity of Full Circle participants, the target areas will be selected from candidate organizations dispersed throughout the region as follows: Chicago south, Chicago west, Chicago north, Chicago inner-ring suburban municipality; and a population center outside the immediate Chicago environs (e.g., Aurora).

#### **(2) Start a new kind of conversation**

Launch a set of informational meetings within each of the target communities, to set the stage for an ongoing process of planning, data collection and asset mapping. These meetings would be based on NIPC's Common Ground forums (loosely based on the America Speaks model) and would employ digital surveying tools as appropriate. Provide threaded discussion sites and similar tools to document the concerns, hopes and intentions of local residents.

#### **(3) Strengthen and extend the network**

Many communities already possess pieces of a communications network, but disadvantaged communities typically do not have sufficient infrastructure for participatory planning on complex issues. NIPC will commit modest but meaningful resources to upgrades at the target sites.

#### **(4) Link community technology with community development**

We agree with the first recommendation from a new Ford Foundation report on community technology centers (CTCs): “Foster an orientation that is broad enough to encompass a community development agenda, for example, via asset mapping and place analysis” (from “Community Technology Centers as Catalysts for Community Change” - see Appendix Q).

#### **Outcomes:**

We expect that the Full Circle project will result in

- More effective targeting of public and private investments in neighborhood development;
- Higher levels of public participation in neighborhood planning activities;
- Better regional planning based on clearer inputs from neighborhoods to municipal and regional planning/development agencies.

We expect that Full Circle target areas will experience an increased level of ownership over planning and development activities. We believe that the best planning is done in close partnership with an engaged public. We hope to encourage a lasting interest in planning, documenting and mapping the elements that make up our communities: housing, business, industry, cultural amenities, educational opportunities and greenspace.

#### **Community involvement**

Community involvement is, one might say, the whole point of the Full Circle initiative. The regional planning process tends to rely heavily on econometrics, population forecasts, and complex transportation and housing models. Planners heed public input in various ways, but have neither the tools nor the resources to pursue extensive public consensus building. Development tends to be driven primarily by market forces, partly because neighborhoods and small municipalities struggle to design coherent development scenarios based on current, accurate data and designed to protect what is most valued by the community. The Full Circle program puts in place not only technological tools and training, but a proven process for integrating these tools into a thoughtful process for collaboratively setting goals and strategies.

For these reasons the Full Circle program will be implemented mainly by community organizations, not by NIPC itself.(See appendix G for petition from housing organizations.)

NIPC has woven community input into the Full Circle project design by listening carefully to what our intended end-users have said about early versions of the toolset. Open meetings and targeted on-site demos were held during the past six months to solicit input into the Web-based housing database and the GIS-based precursors to Full Circle’s data and modeling tools. The Common Ground process has been refined over the past 12 months of intensive public forums.

The Full Circle project team includes the following partners:

- *Midwest Technology Access Group (MTAG)* – conduct an RFP (request for proposal) process and outreach to community development organizations (CDCs) across the region. Make recommendations on the best CDC/CTC candidates.
- *Center for Neighborhood Technology (CNT)* – assess the physical/technical infrastructure of the selected Full Circle sites, recommend upgrades as needed.
- *Asset-Based Community Development Institute (ABCD)* at Northwestern University – train participants and staff in the selected target areas in community asset-mapping.
- *Stuart Graduate School of Business, Illinois Institute of Technology (IIT)* – in conjunction with NIPC, develop GIS-based applications for neighborhood planning and mapping.
- *Voorhees Center at the University of Illinois at Chicago (UIC)* – evaluate usage and impact of the Full Circle toolset and processes.
- *Four to six community technology centers/community development corporations (CTCs/CDCs)* selected through RFP process – implement parcel-level data collection and asset mapping. Identify goals and strategies for neighborhood development. Use scenario-modeling tools to articulate development plans.

### **Feasibility**

The Full Circle project, for all its emphasis on human dialogue, is built around technical tools. Some of these tools (such as the marketing Web sites) are based on existing models with which NIPC is very familiar, while others will break new technical ground. We are very comfortable with the technical challenges, for the following reasons:

- NIPC *already* maintains a powerful Webserver linked to a powerful data server running Microsoft SQL Server, an ArcImS mapping server, MS Exchange email server, attached storage device for aerial photos, a firewall, and a full T1 Internet connection.
- NIPC serves as a regional repository for the US Census Bureau, hosts the Greater Chicago Housing and Community Development Web site, has been a key player in regional environmental analyses, employs two metadata specialists and several expert GIS (geographic information systems) analysts.
- Parcel-level mapping and database tools will be built upon a foundation that is already nearly complete in NIPC's Greater Chicago Housing and Community Development Web site. The Cook County Assessor has *already* provided detailed parcel-level data and GIS files, as have HUD, the Chicago Department of Housing and the Illinois Housing Development Authority.
- NIPC Web systems manager Greg Sanders served as Technology Director at the Cleveland Housing Network from 1999 through 2002, overseeing CHN's Technology Link 2000 (T2K) project (see TOP Web site for details).
- NIPC's Common Ground manager, Hubert Morgan, has implemented an innovative and successful series of public planning forums in our region. He serves on the board of the Illinois state chapter of the American Planning Association. He was recruited as a floor facilitator responsible for 25 tables at the Ground Zero visioning process in Manhattan.

- NIPC has had detailed preliminary conversations with EcoInteractive of Davis, California about developing the core components of the Full Circle interactive scenario modeling tool. EcoInteractive has a record of success in this realm and has collaborated with the Sacramento region and statewide California projects.
- NIPC's successful "Paint the Town" land-use forecasting tool, while not an Internet system, has provided us with a valuable prototype for interactive GIS systems.

Specific technology platforms (ArcIms, Active Server Pages, MS SQL Server) were selected during a tool evaluation process for NIPC's Housing Web Site project. NIPC has learned much in recent years about how users interact with the type of applications we will develop under the Full Circle program, and we will continue to make adjustments through the evaluation process.

NIPC's insistence on engaging in face-to-face deliberation with the public might seem impractical, but through our Common Ground program we have learned how to make grassroots involvement work. NIPC recognizes that this approach can fail if our CDC/CTC partners are not carefully chosen, well prepared, and given sufficient resources and training. Therefore, our budget includes resources for staffing, training and monitoring CDC/CTC involvement.

### **Innovation**

*Innovative tools* – Web-based scenario modeling tools are innovative in several ways. They allow an unprecedented degree of collaboration among partners; they allow for revisions to be made without overwriting earlier scenarios; and they can be viewed and commented upon by local residents throughout the planning process. A few cities, such as Sacramento, have adopted some form of interactive Web-based scenario modeling tool. We intend to pursue further evolution of the Sacramento model, adapted for non-governmental use.

*Innovative partnerships* - The Full Circle project will tap into a remarkable synergy between NIPC and the Stuart Graduate School at the Illinois Institute of Technology (IIT). NIPC is a leader in data analysis and GIS mapping; the Stuart School has a national reputation for its focus on geospatial planning for sustainable communities and a sustainable environment. Our project will unite IIT's academic mission with NIPC's real-world planning agenda to produce a series of state-of-the-art planning and mapping applications. Students in the program will learn valuable new skills, and they will gain a first-hand look at how real planning is done in a major metropolitan area. NIPC will benefit by taking ownership of GIS components designed by some of today's best students.

*Innovative process* - NIPC's Common Ground process is a breakthrough application of the America Speaks model of public deliberation. Common Ground starts out from the principle that even in a metropolis of eight million people, regional planning must derive from face-to-face conversations with individuals. By employing technology tools such as "electronic town-hall meetings" and hand-held polling devices, large numbers of participants generate specific information inputs to be used in the planning process.

*Innovative approach to asset mapping* - We are fortunate to have a very innovative team of trainers in the Asset-Based Community Development Institute (ABCD) at Northwestern

University. ABCD's approach has been praised by many community development practitioners for its emphasis on human resources as well as economic ones, focus on assets rather than deficiencies, and reliance on internal neighborhood processes rather than external actors.

### **Dissemination and sustainability**

Our region comprises some 272 municipalities, six counties and 77 "community areas" (statistical planning areas within Chicago). We expect the Full Circle project to result in a solidly successful model that could be extended to the entire region.

Moreover, the Chicago region is not so different from other urban centers in its need for better neighborhood planning and mapping tools. Any metropolitan region that has experienced uneven market-driven development and associated issues (sprawl, housing crunch, displacement of lower-income residents) could benefit from the Full Circle tools and processes. We are especially optimistic about the value of this toolset in helping CDCs to identify the best sites for development under various subsidy programs, adaptable to virtually any market.

Just as we have absorbed the lessons and best practices offered by Cleveland, Sacramento and other cities, we hope to make our experience available to other regions contemplating similar problems and solutions. NIPC's strong connections with fellow planning agencies (through the American Planning Association) and community groups position us well to share our strategies.

The Full Circle toolset will be sustained as one important piece of an ambitious multi-faceted program of technology development and public participation initiatives. Full Circle applications will utilize many of the code modules and databases already under construction in the Housing Web Site and our successful Paint the Town mapping tool. NIPC and its partners are committed to all these programs and have earmarked funds for their maintenance well into the future.

### **Evaluation:**

The Voorhees Center has been asked to provide two kinds of evaluation: measurement of how well our toolset is received during the implementation phase, and measurement of how well the program furthers our desired outcomes. Our first measure of success is in the usage of the tools we provide. The Voorhees Center will provide regular feedback on adoption levels, weak spots, and user suggestions (see Voorhees memorandum of understanding for more details). Questions:

- How many users are logging onto the systems?
- Which systems and which modules enjoy the highest levels of usage?
- Which systems or modules have the users rejected, and why?
- Document examples of cases in which the system provided value to the users.

The second and final measure of our success will be in the realm of outcomes: when all is said and done, did we have the desired impacts on the target neighborhoods?

- Did the Full Circle tools and processes result in a more efficient and/or effective targeting of public and private investments in the neighborhood?
- Have we seen increased levels of public engagement in planning processes?
- Are regional planners able to tap into current data generated by neighborhoods?