SMART COMMUNITIES— FORMATIVE EVALUATION

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EXECUTIVE SUMMARY

The Smart Communities Program aims to build a culture of technology use and digital excellence in five low and moderate-income community areas of the city of Chicago: Pilsen, Humboldt Park, and Southwest Chicago (which is a collaboration between the Englewood, Auburn Gresham, and Chicago Lawn neighborhoods). The program is funded through a $7 million federal Sustainable Broadband Adoption (SBA)[1] grant for the purpose of increasing broadband adoption in underserved communities through outreach and training.

This formative evaluation reviews the progress of implementation from the award of the federal grant at the end of March 2010 through June 30, 2011, which is the end of the second quarter of 2011 for purposes of federal reporting. The report is intended to provide information for continuing the process of implementation, for consideration of future projects, and for the later outcome evaluation.

The Smart Communities program consists of several component programs designed to reach multiple constituencies throughout the target neighborhoods:

- **FamilyNet Centers** for EveryDay Digital training and drop-in assistance;
- **Technology Organizers** within each of the community areas who do outreach and conduct Civic 2.0 training for community organizations;
- **Business Resource Networks** that offer assessments and assistance for neighborhood businesses with less than 500 employees;
- **YouMedia programs** for youth established in neighborhood libraries;
- **Digital Youth Network** after-school programs, with locations in each of the community areas;
- **Digital Youth Summer Jobs** available to participants from the Smart Communities areas;
- **Community Portals** supported by portal managers (in each of the 5 communities)

Additionally, these programs are supported by an awareness campaign across the communities, and by an earned computer program that will benefit some of the training participants.

The program is an ambitious one, with multiple organizations and activities spread across five communities. All programs have now been implemented, and most of the programs were operating by the end of 2010. Some were late, however, particularly the awareness campaign, the YouMedia programs, and the Englewood FamilyNet Center, all of which began in late summer of 2011. The delays for these projects were due to contract issues in some cases, although in others there were changes in leadership in collaborating organizations.

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[1] The Sustainable Broadband Adoption grants are part of the Broadband Technology Opportunities Program (BTOP), or broadband stimulus grants of the American Recovery and Reinvestment Act (ARRA).
[2] The Sustainable Broadband Adoption grants are part of the Broadband Technology Opportunities Program

Demand for training was higher than anticipated, and waiting lists formed at the FamilyNet Centers as they began to offer classes in late 2010. Centers have devised ways to pace outreach and manage waiting lists, but the training continues to be popular, with few dropouts. The classes are free, and taught in Spanish as well as English. FamilyNet Center participants often have some experience online – a little over half have used the Internet somewhere, and a little over one-third have Internet access at home. But, they report low levels of skill when they enter the programs, and more than one-quarter of the participants have a formal education at the eighth grade level or below. Only 15 percent of participants are currently employed. Other training programs – the Civic 2.0 programs for community organizations – attract residents who have slightly more experience online, as well as others who have no familiarity with technology. Across sites, both staff and consultants spoke about the powerful differences the programs make in the lives of residents, opening new doors and conveying a new sense of empowerment through their Internet skills. By any account, there are many successes evident in the program.

Across programs, there are some clear strengths, as well as some areas for further attention in the course of implementation.

Strengths

- A theme that emerged across programs was the importance of building relationships within the communities in order to achieve program goals, whether that was with other community organizations, residents, or businesses. When programs worked well, this was often the lesson drawn by respondents as a key ingredient for success.
- Implementation across various sites has been coordinated by LISC and aided by a Master Plan.
- LISC earned praise from community partners, with high consensus about their responsiveness and supportive role. For the most part, programs have followed the Master Plan and three community plans (affordable broadband is an exception discussed below).
- There has been sufficient flexibility in the curricula and other aspects of the program to make adaptations during the course of implementation. For example, when some participants initially struggled with the training, both the centers and consultants made appropriate adaptations.
- The Spanish courses, while not available initially, clearly have been important in three of the communities
- The decentralized, neighborhood-driven approach allows for differences in outreach and training responsive to the contexts of the neighborhoods.
- The portals are popular with respondents across the neighborhoods as an expression of community identity, and as a way for residents and organizations to tell their stories.
- The Civic 2.0 classes have been used in different ways, including some collaborative projects with community organizations.
- In January 2012, online modules for the Digital Youth Network will be added to community portals, adding resources for youth across the communities.

- In most programs, there have been peer exchanges that have been helpful for sharing ideas and learning, according to respondents.

Issues for Attention

- One of the assumptions made in the grant proposal and the Master Plan was that affordable broadband would be available in at least two of the neighborhoods, through an infrastructure project that did not receive federal funding. The cost of broadband is a major barrier in these low-income neighborhoods, and there are questions about the extent to which the outreach and training programs will lead to broadband adoption at home, the goal of the federal program. The Smart Communities are trying to address this issue through financial counseling, consumer education, and outreach for the discounted Internet Essentials Program (for which some residents are eligible). Many other grantees are facing a similar dilemma, and it will be important for Smart Communities representatives to discuss these issues with the federal agency administering the project. This is especially so in light of some ambiguity about how to measure broadband adoption.
- Federal reporting requires measures of broadband adoption on a quarterly basis, but there are no data available on such a frequent basis. The City has tried to obtain aggregate data for the communities from incumbent providers, but has not been successful so far.
- Program management has been an issue, with fewer resources originally devoted to this area than needed for such a broad and complex project. This is being remedied with extra staff being hired.
- Financial reimbursement has been slow, and the process complicated. Backlogs are now being cleared up, but procedures should be streamlined, to the extent possible within federal requirements.
- The Efforts to Outcome (ETO) database is important for tracking participation and for program evaluation. This has been used inconsistently, and some respondents felt that they did not have enough training. Correcting these problems very soon is critical for federal compliance, outcome evaluation, and future decisionmaking. Some respondents also felt that procedures for tracking at the Business Resource Networks could be improved as well.
- The Business Resource Networks have been underutilized. Although there are some instances in which staff can point to successful work with local businesses, in some communities there are few business organizations, fewer relationships with business to draw upon, and other issues that are a higher priority for business. The part-time positions make the outreach needed a challenge as well. More analysis of the types of businesses that have responded – like start-ups and businesses most likely to market outside the neighborhood – may help for strategic and targeted outreach for the remainder of the grant period.
- The hours for the Portal Manager position need to be increased, or workload changes need to be made. A lack of attention to this issue may undermine the important public face of the program.

- Spanish translation is an important need for the portals in the three communities with high percentages of Spanish speakers. Pilsen has Spanish content, but the others do not.
- The Technology Organizer balances outreach and instruction, and some discussion may be needed to clarify the extent to which outreach should be done for programs other than Civic 2.0.
- There has been some turnover in staff, although it is not clear whether this is due to issues that deserve attention across the program.
- The Digital Youth Network and YouMedia programs employ innovative models of learning that can be an asset to the Smart Communities, but assistance with outreach may be needed, as these have been underutilized in some of the neighborhoods.

The report includes data on participation across sites, as well as more detail on the program goals, organizations, accomplishments and challenges.

INTRODUCTION

The Smart Communities Program aims to build a culture of technology use and digital excellence in five low and moderate-income community areas of the city of Chicago: Pilsen, Humboldt Park, and Southwest Chicago (a collaboration between the Englewood, Auburn Gresham, and Chicago Lawn neighborhoods). The program is funded through a $7 million federal Sustainable Broadband Adoption (SBA)[2] grant for the purpose of increasing broadband adoption in underserved communities through outreach and training. The grant award was announced in late March of 2010, and the first "launches" began to roll out across the community areas in October of 2010. There are discussions about the possibility of sustaining some efforts locally after the federal grant period ends.

This formative evaluation reviews the progress of implementation based on data compiled through June 30, 2011, which is the end of the second quarter of 2011 for purposes of federal reporting. Interviews were completed in September, 2011, with the exception of December 2011 and January 2012 interviews for the Digital Youth Network and YouMedia. The report is intended to provide information for continuing the process of implementation, for consideration of future projects, and for the later outcome evaluation. The first section of this report describes the program and its goals, followed by an overview of initial implementation and cross-cutting issues. Following this, we discuss the FamilyNet Centers, EveryDay Digital curriculum, Tech Organizers, Civic 2.0 classes, community portals, and Business Resource Networks. Because the EveryDay Digital and Civic 2.0 training programs have been the largest part of the Smart Communities in terms of participants, we examine citywide data on the participants from these programs. We close with a summary of issues and some recommendations.

This report is based on a number of sources. Thirty-two interviews were conducted between May and January 2012, with most of the interviews completed by September. Site visits and interviews were conducted at the 6 FamilyNet Centers and the 4 Business Resource Networks. Phone interviews were conducted with 4 Tech Organizers [in Pilsen the Tech Organizer had just been appointed as the new Smart Manager], with the 4 Smart Managers, and 5 portal managers. Additionally, we spoke to members of the citywide partnership, from the City of Chicago, Local Initiatives Support Corporation, Blue Ocean Logic, YouMedia, Digital Youth Network, and Smart Chicago.

Other sources of information include data from the Efforts to Outcomes (ETO) database, from the quarterly reports submitted to the National Telecommunications and Information Administration (NTIA), budget data, site visits conducted by Smart Chicago (a funders collaborative housed at the Chicago Community Trust), participation in the bi-weekly SBA implementation meetings, and the community portals. Background information was obtained from the Master Plan and 3 community plans, program Fact Sheets, and baseline interviews with 26 key partner organizations across the 5 communities conducted in 2010. These interviews occurred before the Smart Community launches (and some

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[2] The Sustainable Broadband Adoption grants are part of the Broadband Technology Opportunities Program (BTOP), or broadband stimulus grants of the American Recovery and Reinvestment Act (ARRA).

occurred early in 2010 before it was known that the federal grant had been awarded), but they are relevant for depicting some differences between the Smart Communities areas in terms of organizational resources.

DESCRIPTION OF PROGRAM, GOALS, AND ASSUMPTIONS

The federal SBA program that funds the Smart Communities has a goal of increasing broadband subscribership in underserved communities. This is therefore an important goal for the Smart Communities as well, although not the only one. In keeping with the idea of promoting broad, community-level change, the program embraces a number of activities reaching multiple constituencies, such as residents, community organizations, businesses, and youth. Cross-cutting outreach and awareness activities connect these different initiatives, and community portals serve as vehicles to promote information technology use within the neighborhoods. The components of the Smart Communities include:

- **FamilyNet Centers** for EveryDay Digital training and drop-in assistance (6 centers, with 2 in Humboldt Park);
- **Technology Organizers** within each of the community areas who do outreach and conduct Civic 2.0 training for community organizations (5, with 1 in each community area);
- **Business Resource Networks** that offer assessments and assistance for neighborhood businesses with less than 500 employees (4 networks, with 1 in each community area except Englewood);
- **YouMedia programs** for youth established in neighborhood libraries (3, 1 in each of the 3 project areas, Pilsen, Humboldt Park and Southwest/Englewood);
- **Digital Youth Network** after-school programs, with locations in each of the community areas;
- **Digital Youth Summer Jobs** available to participants from the Smart Communities areas;
- **Community Portals** supported by portal managers (in each of the 5 communities)

Additional support for the project includes:

- Earned computers with software distributed to 1,500 residents and businesses through training and the Digital Youth Summer Job programs;
- An Awareness Campaign to be carried out through fliers, media ads, and advertisements on buses and bus shelters throughout the target communities.

Despite these many components, there is recognition that this is a pilot program utilizing the varied conditions across the 5 neighborhoods to test approaches that would contribute to the creation of a culture of technology use. The grant proposal sets targets for serving 500 businesses, and 5,400 residents through the FamilyNet Centers, reaching 11,000 residents overall through word-of-mouth, resource sharing, and ads. While activities throughout the community and social networks are expected to contribute to broader awareness and use of technology, the scale is still modest in comparison with

the number of residents without broadband, which are estimated to range from more than 15,000 in Englewood to more than 34,000 in Auburn Gresham (see Table 1 later in this report).

What are the assumptions made about what would be needed to create a culture of technology use? The Master Plan (Smart Communities 2009) lays out component activities for the Smart Communities related to this goal:

- Build awareness of the power of digital technologies.
- Expand digital education and training for individuals, families, and businesses.
- Improve access to technology and the Internet at home and in the community.
- Generate local content and improve access to neighborhood news and resources [online].
- Help existing businesses grow and attract new businesses [through technology use].

These activities are based on assumptions about the drivers for "digital excellence," or universal, meaningful participation in technology, which include: awareness and evolving mindsets; effective and affordable Internet access, hardware, and software; training and technical support; and relevant programming and content (Smart Communities 2009; Mayor's Advisory Council on Closing the Digital Divide 2007). The Smart Communities program is designed to take a first step toward achieving digital excellence, with programs that affect these attitudes and resources, or "drivers," in order to achieve greater information technology adoption and use in the community.

The later summative evaluation will focus on outcomes within three programs in particular, because they constitute the training and technical assistance that are the most intensive "treatments" for adults in the program: the FamilyNet Centers, Civic 2.0 training, and the Business Resource Networks. The logic models for each program are shown later in this report. These models identify the inputs, activities, and outputs that are assumed to lead to desired outcomes.

CHANGES IN THE COMPONENTS OF THE PROGRAM: AFFORDABLE BROADBAND PROVISION

One of the assumptions in the federal Sustainable Broadband Adoption programs is that the training and outreach programs will lead to broadband subscribership. Training and outreach alone, however, may not be sufficient to encourage adoption if affordability is a barrier. The Smart Communities program has taken a more comprehensive approach than training alone, offering assistance with financial planning and employment search to address cost barriers. In the process of implementing the program, consumer education has been built into the EveryDay Digital curriculum, to help trainees to understand the available choices and issues such as bundling or hidden fees.

Still, the question posed by many of the respondents delivering training or technical support is whether their activities will be sufficient to induce many participants to subscribe to broadband in their homes or businesses without subsidies or discounts. It was originally assumed that related proposals would offer affordable broadband; that the SBA grant would be supplemented by an infrastructure

grant providing low-cost access in at least in some areas.[3] The failure to secure an infrastructure grant has changed the expected implementation in some ways.

Despite federal requirements to measure program success in terms of broadband adoption, there may be a mismatch between program goals and resources if this is intended to mean home broadband subscription. Research has shown that the cost of broadband is a major hurdle in low-income communities in Chicago.[4]

Other respondents who were interviewed are confident that the programs that are available through the Smart Communities will change the perceived value of broadband, and that services such as financial counseling will help participants to budget for this expense. Additionally, the Smart Communities partners are spreading the word about the Comcast Internet Essentials discounts for those who qualify for the $9.95 per month broadband subscriptions that are available to households with children in the free lunch program. This may be useful to a number of program recipients, and we will examine the effects of this program as well in the summative (outcome) evaluation.

The extent to which home (or even mobile) broadband adoption increases is an important question for the evaluation going forward. While it is not yet clear how the lack of affordable broadband options will influence adoption, it is important to recognize this as a shift from the original plan that occurred during the course of implementation.

Despite the federal emphasis on broadband subscriptions, it will be important to track other outcomes as well. Because the Smart Communities program relies heavily on training and outreach, there may also be an increase in residents who use the Internet outside the home, or others who have broadband at home, but now have increased proficiency online. The follow-up surveys conducted as part of the outcome evaluation will include questions about Internet use anywhere and activities online, as well as about home broadband adoption. Data from open lab sessions at the FamilyNet Center, and usage at Public Computer Center locations in the Smart Communities may also be useful for understanding impacts on use beyond home broadband adoption.

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[3] The Smart Communities SBA grant was one of three related proposals submitted to the federal government by the City of Chicago and its partners. Only two were funded: the SBA grant for training and outreach and a Public Computer Center (PCC) grant for public access throughout the city. The PCC grant supports some additional public access in these target neighborhoods as well. The infrastructure proposal that would have offered affordable high-speed broadband, however, was not funded.

[4] A study of Internet use in Chicago in 2008 showed that income was the strongest predictor of either Internet use at home or broadband adoption at home, and that cost was a critical barrier in low-income neighborhoods. Estimates of barriers to home Internet access in the five Smart Communities show that cost was cited as the most prevalent barrier in 4 of the 5 communities, although skills and interest affected home access as well (Mossberger and Tolbert 2009; also Smart Communities Master Plan 2009).

COORDINATION OF ACTIVITIES AND COMMON FRAMEWORKS

The goal of community-level change is a broad and ambitious one, reflected in a project design that has many component programs that are fragmented across 5 community areas. There are also many organizations involved as partners. This reflects a desire to involve community-based organizations for grass-roots leadership, responsiveness to community needs, and sustainability after the grant. By investing responsibility in many organizations across the 5 communities, the program allows for adaptation in response to differing neighborhood contexts and needs. However, the multiple programs and partners introduce greater complexity for coordination than programs involving fewer organizations. Decentralization may lead to greater success in achieving outcomes, but it also raises the possibility that some programs will falter if there are wide differences in capacity. The structure of the Smart Communities program seeks to strike a balance between grass-roots initiative and more centralized accountability and program support.

The Smart Communities Program is rooted in an earlier initiative, the Digital Excellence Demonstration Communities (DEDC) program, which was funded by the MacArthur Foundation, and grew out of an earlier Mayor's Advisory Council to Address the Digital Divide.[5] The DEDC began in 2009 about 9 months before the federal grant was awarded, and it laid a foundation for the Smart Communities program. Before the federal grant was awarded, Smart Managers in each of the target neighborhoods worked to form partnerships with other organizations around technology issues, took stock of assets in their communities, and engaged residents and community organizations in planning. This provided a framework in the target neighborhoods, and the SBA grant proposal added resources for training and additional outreach.

How the Smart Communities Are Organized

At the neighborhood level, coordination of the Smart Communities program is achieved through a lead agency that is responsible for program implementation. There is a lead agency in each of the 5 community areas, and each of them is also designated as the lead agency for LISC Chicago's New Communities Program (NCP), which has received major funding from the MacArthur Foundation. The NCP is a comprehensive community-building initiative involved in multiple issues such as economic development, housing, health, and education, and the ties between the NCP and the Smart Communities program offer both the opportunity to integrate technology with other community-building activities and to take advantage of existing relationships with community residents and businesses. Within the 5 Smart Communities, other neighborhood organizations deliver many of the services, housing the FamilyNet Centers or Business Resource Networks, for example (see Appendix A for a list of program partners involved in implementation). But, the lead agency is responsible for

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[5] See *The City that Networks,* the 2007 report of the Mayor's Advisory Council to Address the Digital Divide, available online at www.cityofchicago.org. The drivers of digital excellence were first defined in the report, and have guided the assumptions of the Smart Communities Program.

implementation and has a Smart Manager that coordinates the efforts across the various programs located in the neighborhood.

The key staff for the program within the neighborhoods consists of the following:

- Four Smart Managers who coordinate the various programs for the community area or project area. Originally, there were three Smart Managers (one FTE position each in Humboldt Park, Pilsen, and Southwest); during 2010, one Smart Manager was added for Englewood.
- Five Tech Organizers, one FTE for each of the five community areas; the Tech Organizer does outreach for the Smart Communities and teaches the Civic 2.0 curriculum for community organizations.
- Six FamilyNet Center Directors, one FTE for each of the FamilyNet Centers.
- Four part-time Business Resource Network Directors, funded at $12,500 plus fringes for each of the 4 networks.
- Five part-time Portal Managers (10 hours per week), one for each of the community area portals.

The Chicago Local Initiative Support Corporation (LISC) is responsible for citywide administration, coordination, training, and technical assistance, working with the lead agencies and partner organizations. While each of the three project areas has its own plan, there is also a master plan, and the Center for Working Families is a common platform for the FamilyNet Centers.[6] With the master plan, FamilyNet model, common curricula for the training programs, and a consultant that works with all of the Business Resource Networks, there are some consistent frameworks and central supports for implementation. Data collection and reporting are standardized through the Efforts to Outcomes (ETO) database used for the FamilyNet Centers, and EveryDay Digital and Civic 2.0 training, as well as through federal reporting requirements.

Although implementation of the project was often slower than anticipated in the original plans, the prior working relationships and planning were strengths that enhanced implementation. The connection to the NCP and the prior work of the DEDC has offered some advantages, building upon existing relationships in the neighborhoods. The Local Initiatives Support Corporation (LISC), is responsible for citywide implementation of the NCP as well, and has experience working with the lead agencies. The Smart Community managers, partnerships, and plans were in place by the time that the grant was awarded. This has assisted in getting a complex variety of activities off the ground.

While the Smart Managers and the lead agencies are responsible for coordinating activities within the target neighborhoods, some activities have been implemented citywide rather than within each community area. LISC and the lead agencies have shared administration of the Digital Youth Summer Jobs Program. The administration of other youth programs have been citywide as well: the Digital Youth

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[6] The CWF, however, is a model for service delivery rather than an organization, and it is carried out by different community-based organizations in each neighborhood.

Network after-school program and the YouMedia programs located in three public library branches in the Smart Communities neighborhoods.

The project is a blend of decentralized, neighborhood implementation (especially in the adult training programs and outreach) along with some centralized coordination and common models. We explore differences in the neighborhood contexts and issues at the citywide level before turning to the implementation of the component programs.

Neighborhood Context

The neighborhoods present different contexts for implementation. Among residents, there are differences in the populations and barriers to adoption. As shown on the left in Table 1, the populations of Auburn Gresham and Englewood are almost entirely African-American, and Pilsen is predominantly Latino, while other neighborhoods are more diverse. Poverty rates vary across neighborhoods with more than 43 percent below the poverty line in Englewood, although all target communities exceed the city average. High school graduation rates are lowest in Pilsen (at 56 percent) and are highest in Auburn Gresham and Englewood, with around three of four residents having a high school diploma.

Shown on the right in Table 1 below, in the 2008 Chicago survey (Mossberger and Tolbert 2009), Auburn Gresham (with its older population) and Pilsen have the lowest rates of home broadband use. All of the Smart Communities are below the city average in citing lack of interest as a reason they do not have the Internet at home, although it is mentioned by 33–41 percent. Cost is a major reason in all communities and the most prevalent one cited everywhere but Englewood. Although difficulty using the Internet is slightly lower in the Smart Communities than reported for citywide averages, respondents were asked whether this was a reason they did not use the Internet at home—not whether they had difficulty performing activities. Pilsen, with its low graduation rates, has somewhat higher skill barriers, as does Auburn Gresham and Chicago Lawn.

Table 1. Broadband Adoption and Barriers in Smart Communities (Numbers shown are percentages unless otherwise noted)

| | | Demographic Characteristics | | | | | Internet Use | | | | |
CCA	Total Population (in thousands)	Black	Latino	Asian	Poor	High School Grad	Home Broadband	Residents without Broadband (in thousands)	Reason: Cost	Reason: No Interest	Reason: Difficult to Use
Auburn Gresham	55,258	99	1	0	27	78	38	34,260	49	41	35
Pilsen	37,477	3	82	1	30	56	39	22,861	62	39	41
Humboldt Park	57,763	43	53	0	34	63	43	32,925	53	33	29
Chicago Lawn	56,019	56	37	1	27	68	51	27,449	50	39	32
Englewood	35,186	99	0	0	43	73	56	15,482	35	39	18
City Avg.	2,868,060	34	27	5	20	79	61	1,118,543	52	48	43

*of employed population only

Source: Mossberger, Tolbert, and Franko (in progress). Census data from the 2005–2009 American Community Survey (aggregated by Community Area by the Great Cities Data Visualization Laboratory, University of Illinois at Chicago) and broadband data from the 2008 Chicago Survey (Mossberger and Tolbert 2009), and Smart Communities (2009).

At the community level, there are also differences in the organizational resources for conducting the program. The Smart Communities model draws upon existing relationships in the community for program outreach. Often community groups other than the lead agencies housing the activities of the FamilyNet Centers or Business Resource Networks, so both lead agencies and other key partners affect the organizational capacity for implementation.

In 2010 we conducted baseline interviews with the 5 lead agencies and with organizations identified by Smart Managers as up to 6 or 7 key partners in their area. These include organizations such as Association House or St. Sabina, which later hosted FamilyNet Centers, as well as organizations that have collaborated with the project in other ways (for example, the Westside Writing Project). In interviews with 26 organizations, it was clear that there are different patterns across communities for organizational experience and size.

Comparing organizational age and staff, Humboldt Park ranks highest among the communities, and Englewood ranks lowest, with a wide distance between them. On average, Humboldt Park has the oldest organizations (averaging 44 years), with Pilsen averaging 25 years and Southwest organizations averaging 9 or 10 years depending upon the community area in the Southwest. The Englewood lead agency, Teamwork Englewood, was only founded in 2003. Staff also followed similar patterns, with 88 full-time staff and 35 part-time staff on average in Humboldt Park. Pilsen was again in the middle, with an average of 25 full-time staff and 22 part-time staff. Agencies in the Southwest have the lowest averages, with only six full-time employees and three part-time employees. Within the Southwest collaborative, Chicago Lawn organizations have on average 10 full-time workers and 5 part-time workers, in comparison with the average of four full-time workers in Englewood. The Chicago Lawn lead agency was established in 1974, but overall the Southwest community organizations are smaller and younger, particularly in Englewood.[7]

Adaptations that are responsive to these contexts have been made in the course of implementation. These include the formation of an advisory committee in Humboldt Park and the addition of a Smart Manager in Englewood.

The Humboldt Park Advisory Committee provides a structure for partnership. In Humboldt Park, with its many community organizations, partnership processes that are inclusive and participatory are important. Humboldt Park was added later to the Smart Communities project, and the lead agency adapted a newly-revised NCP Quality of Life Plan to the Smart Communities project rather than undertake a new planning process. Although many organizations and residents had participated in the NCP plan, some of the Smart Communities respondents later wished that there had been a planning process involving organizations more directly in the Smart Communities. This may have made it easier

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[7] We asked for estimates of steady volunteers in agencies. While it is difficult to tell how precise these estimates were, they followed similar patterns for age and staff, with an average of 38 steady volunteers per organization in Humboldt Park, 8 in Pilsen and 5 in the Southwest communities. Chicago Lawn organizations report on average 10 steady volunteers compared to 5 in Englewood.

later to approach organizations for involvement in the program, given the value placed on participatory and democratic processes by the many community organizations that populate Humboldt Park. Since implementation began, however, the advisory committee has offered a way for other groups to participate in governance.

The addition of a Smart Manager in Englewood is responsive to needs in that community, and to the difficulties of managing many programs across three community areas. In the interviews, it was clear that Englewood in particular is in the process of forming important relationships in the community rather than being in a position to draw upon established ties. The need for outreach was emphasized in Englewood by several respondents. The delay in opening the FamilyNet Center has made it more difficult to do broad outreach for classes, or among community organizations for the Civic 2.0 classes, although the staff have been resourceful in finding alternatives. This has meant that Englewood has had some catching up to do. Additionally, it became clear in the interviews that having multiple programs in each community across three different neighborhoods made coordination demanding for the Southwest collaborative. The three-community collaboration was originally developed prior to the federal funding that established the multiple training and outreach programs. Several respondents have commented that it may be ideal to have a program manager for each of the community areas, but it is unclear whether that is possible at this point.

Citywide Smart Communities Partnership

There is also a multi-partner citywide structure for monitoring implementation and for handling the grant funds. Citywide implementation meetings include the City of Chicago's Department of Innovation and Technology, Smart Chicago, and the subgrantees implementing the project, LISC, the Digital Youth Network, and YouMedia.[8] The federal grant was awarded to the City of Chicago, but Smart Chicago is the fiduciary agent for contracts with LISC and the Chicago Public Library Foundation (for YouMedia). The contract with DePaul University for the Digital Youth Network was negotiated directly with the city, which simplified the contractual relationships.

Several issues were raised by respondents collaborating at the citywide level regarding program management, compliance, and cash flows. Some respondents felt that the timeline that was set forth to implement the multiple projects may have been unrealistically short, and implementation was about a quarter behind what was anticipated in the grant proposal. Overall, many of the challenges mentioned by respondents have been handled in the course of implementation, but lessons have been learned for how to structure similar efforts in the future.

Changes have been made to improve program management. The Chicago Community Trust conducted site visits over the summer, and highlighted some issues for compliance, including the need

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[8] Evaluators from UIC participate in these meetings as well.

for a system to track and manage risks. The City, LISC, and other partners have been working with the Trust to implement changes.

More resources for program management were needed than were allocated in the beginning. Because of the breadth of the program, more resources were needed for program management. The City is adding a position to assist with management of both the SBA and PCC programs. One lesson learned is that more resources should have been devoted to legal, audit, and program management needs at the citywide level.

Need for more federal guidance on compliance, especially on measuring broadband adoption. Respondents have said that the federal government needs to provide more guidance on compliance, and clearer answers on what is required. One prominent example is the lack of a clear federal definition of what "broadband adoption" means although it is now more than a year and a half after the initial award of the grants.

Issues remain for tracking broadband subscribership. Currently, the NTIA is requiring documentation of broadband subscribership on a quarterly basis. For SBA programs, this means that data need to be obtained by tracking participants through programs or by obtaining data through Internet providers. Follow-up surveys will track participants at the end of the program, but are not helpful for quarterly reporting. The City has repeatedly tried, but has not been successful in getting access to the data from broadband providers.

Complicated financial management has caused delays. The original plan was to advance funds for programs. Adopting a reimbursement-based approach instead has slowed down cash flow. Layers of financial management involving both the City and Smart Chicago have produced a process that has been complicated and lengthy, according to a number of respondents. LISC did not have an executed contract until November, 2010, over seven months after the grant was awarded. By the end of the second quarter of 2011 (June 30, 2011), less than a half million dollars of the over $7 million in federal funds had been expended. Over time, some changes have been made. The backlog of reimbursements is now clearing up. But, it is important for partners to continue to examine the financial processes and to look for ways to streamline them.

Foundation resources have been critical for keeping implementation on track. When there were delays in processing contracts and payments from the federal funds, LISC was able to use funding from the MacArthur Foundation to start implementation months earlier than would have been possible otherwise. Additionally, there was no federal funding to support the Smart Managers beyond the MacArthur grant for the DEDC that ended in summer 2011, but LISC was able to get funding from the MacArthur Foundation to extend the positions. With the consent of the MacArthur Foundation, LISC dedicated a portion of the MacArthur NCP grant to add a fourth Smart Manager and to continue the positions after the original grant supporting them had finished.

OVERVIEW OF IMPLEMENTATION

Overall, there have been few major changes to the program other than the lack of low-cost broadband that was anticipated. Neighborhood respondents felt that the goals were clear and the plans were valuable. All of the programs have now been implemented and all of the centers are operating. There have been some challenges during implementation, including turnover in staff, delays in renovations, a delayed opening of one center, and problems with servers and facilities. In general, however, there is much that has worked well and provides a model for implementation of similar programs.

Initial Implementation

Most training programs were underway at the close of 2010. While implementation was slower than expected in the original grant proposal, most of the activities had begun by the end of 2010, less than 9 months after the grant was awarded in late March 2010. In the grant proposal, LISC had anticipated a 6 month program development timeline, so many projects were implemented close to the expected schedule. One activity during the initial months included the Digital Youth Summer Jobs program, which enrolled 59 high school students in the summer of 2010. By the end of the year, five of the six FamilyNet Centers had been launched, three of the four Business Resource Network sites were operating, the Digital Youth Network was running an after-school program in five middle schools, all five community portals were online, and curricula for EveryDay Digital and Civic 2.0 training were complete. By February 2011, the Pilsen Business Resource Network was opened and all four BRNs were operating.

A few programs began only during the latter half of 2011. The Englewood FamilyNet Center was not fully functional until August 2011 but was able to offer classes through temporary arrangements in Kennedy-King College computer labs in the interim. The YouMedia program began in August 2011 at the first branch and launched in the third branch in November 2011. Contract negotiations delayed the start of YouMedia, and agreement for use of the Kennedy-King site delayed the opening there.

There has been an outpouring of demand for EveryDay Digital classes, creating waiting lists. The FamilyNet Centers and EveryDay Digital classes have attracted more demand than expected, and the Civic 2.0 classes have been busy as well. Hundreds of residents attended the Smart Communities launches last year, including 350 in Humboldt Park, 400 in Auburn Gresham, and 200 in Pilsen.[9] Waiting lists soon formed at all of the FamilyNet Centers, which received 12 computers apiece from the federal grants. Centers have been running multiple classes, including evenings and weekends. At one point some centers tried to enlarge the classes to 30 or 40 participants (some sites had other computers), but because of the need for intensive assistance, the class sizes have dropped back down to around 12 or only incrementally larger. Centers have tried to manage the demand by pacing outreach, adding extra classes, or referring residents for other services or programs, so as not to lose them with long waits.

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[9] From reports on portals.

Most training occurred during 2011, and the federal compliance reports for the first two quarters of 2011 list 1,748 residents who have received training.

The awareness campaign and YouMedia began operations late. Components of the program that were later to begin included the YouMedia Program and the awareness campaign. The YouMedia Program was stalled because of delays in the contract and hiring, but began during the summer of 2011 with well-publicized and well-attended launches. YouMedia was also delayed because of construction schedules in the branch libraries. The program in the Richard M. Daley branch began in a brand new building in August 2011. The Lozano branch waited for a build-out of existing space and launched operations in September, and the Thurgood Marshall branch program opened in November 2011.

The awareness campaign was originally delayed based on feedback from the Smart Communities neighborhoods, and later further delayed due to contractual issues. Suggested changes were taken into account in the final ads and materials. Bilingual advertisements prominently displayed on bus shelters and buses feature Smart Communities participants and are now highly visible in the communities. Yet, the ads began in mid-September 2011, nine months after most of the programs had begun operating. Plans for advertising through other media were scrapped because of the expense. Some community respondents mentioned that it would have been useful to have fliers and other materials to promote the program in the beginning. Even without the citywide awareness campaign, classes were filled to capacity. It will be interesting to see whether demand for training increases with the introduction of the new ads, although they are intended to also connect residents with public access in the communities and to encourage broadband subscribership at home.

The Englewood FamilyNet Center began late, and held its ribbon-cutting in September 2011. This center opened very late because of difficulties in negotiations with Kennedy-King College. A change in leadership at the college upset plans to open in the spring, and then months more were lost in the time it took to renovate and furnish the space for the FamilyNet Center. Jane Addams/Hull House, which is operating the FamilyNet Center, conducted classes utilizing computer labs at Kennedy-King during part of this period. The problematic opening, however, added to uncertainties in the community about whether the program was going to operate. This created greater difficulty in doing outreach in a community where several respondents said there has been a legacy of broken promises and lack of trust in neighborhood organizations. Added support for the Englewood community area may help to overcome this rough start.

Strengths Supporting Implementation

Despite the delays mentioned above, there are important accomplishments to date. The interviews revealed that there is an underlying philosophy across the programs about the need to build relationships in the community in order to achieve program goals. There has also been an ability to adapt and to learn, and neighborhood programs credit LISC with playing an important role in supporting implementation.

Relationship-building is the key for community-based digital organizing. A consistent message across respondents and projects was the importance of relationship-building with residents, businesses and community organizations. We heard this from Tech Organizers who were hired to do outreach, but this was also echoed throughout as a theme, in nearly every interview. A premium was placed on the community-based nature of the organizations implementing the program, and the staff and consultants who were hired who also had local roots. An important resource has been the existing networks of the lead agencies and partner organizations within their neighborhoods, and respondents credited these established relationships with producing the surge of demand for the classes. Where these existing relationships have been somewhat weaker, this was described by respondents as a central challenge.

Flexibility and adaptation are evident in many areas. The program has been flexible enough to accommodate some differences across communities in organizing strategies, adaptations to the curriculum, and some reallocation of resources, as discussed later in this document. When residents struggled with basic training, some centers moved more slowly through the curriculum, and eventually a new introduction to the mouse and keyboard was added as an optional module. The Civic 2.0 programs have differed in content and constituencies across the neighborhoods. Although originally there was a single Smart Manager for the three Southwest Smart Communities, an additional program manager was added later in Englewood.

LISC's support role is an important strength. By a wide majority, community respondents praised LISC's role in providing support for implementation. They are seen as responsive and highly capable in providing assistance.

Staff and consultants are highly motivated by responses from participants. Respondents used words like "empowering" and "life-changing" to describe the effects of the program. Stories emerged about participants who found jobs, parents who could now supervise their children online, and graduates who cried when they received their certificates. Participants who took Civic 2.0 in Chicago Lawn came back to help teach later. One instructor tells participants who have no experience with the Internet, that they are opening the door to a whole new world. It is clear that the personal triumphs of participants have motivated many of those who are responsible for implementing the program. While anecdotal, these constitute some initial evidence of potential impact.

Peer exchanges across communities have helped foster learning. For most programs (with the exception of the portals), there have been regular meetings of staff across community areas, and there were many comments about how useful those peer exchanges were. Several respondents named specific instances in which these discussions gave them new ideas or helped them to solve problems. One FNC director created forms such as sign-in sheets, enrollment forms, calendars, cover letters that go out to participants and shared them with other FNCs.

Some Cross-Cutting Issues for Attention

Several issues emerged that cut across programs and deserve consideration for implementation going forward. Data collection has been problematic, and this will introduce problems for both federal reporting and evaluation. There has been some turnover in key participants, and it may be useful to consider whether this is due to more general issues that need to be addressed. The earned computer program has been a source of confusion for some, although that is now being implemented and may be resolved.

Use of the ETO database is inconsistent and urgently needs improvement; more training may be needed. As the ETO data used later in this report indicate, collection and entry of participant data have been inconsistent at times. Some of the Association House data have been collected, but are not in the database. No data from the Chicago Commons (West Humboldt Park FamilyNet Center) was turned over to us for this report. Some locations seem to be collecting partial information. For example, there are many times more respondents for the age question for St. Sabina participants than for other items. In the course of our interviews, we found that there was some frustration with the database, and two FamilyNet Center respondents mentioned that they felt they needed more training. This seems like a small number, but this accounts for one-third of the FamilyNet Centers, through which most of the "traffic" is flowing, and others have not been keeping up the database. The Smart Chicago team has also expressed concern about the tracking of participation in the centers and database. This will be important for federal compliance, program evaluation, and decisions about future projects, and needs to be addressed soon.

Tracking for business participants may need further attention. One of the Business Resource Network staff expressed a desire to use the ETO database, and felt that currently there was no good way to track participants. There may be options other than the ETO database as well. While not all BRNs mentioned this as a problem, this may warrant discussion and some assessment of how adequately the BRNs are tracking participation.

Staff turnover may be a concern in some places or programs. Pilsen now has a full implement of staff, but had two Smart Managers leave. The West Humboldt Park FamilyNet Center manager left Association House at the end of June 2011, and classes were cancelled throughout the summer. The portal managers unanimously believe that their jobs require two to three times more than the 10 hours per week currently allotted, and if this is not addressed there may be turnover in this area as well.

Reallocation of funds may be needed for some equipment. Some FamilyNet Centers (as well as Tech Organizers and BRNs) mentioned that there is a need for projectors or whiteboards, and that some of the software money might be reallocated for this purpose.

The criteria for earned computers have not always been clear, especially because qualified participants far exceed the supply. Each community area will receive 125 earned netbooks for the FamilyNet Centers, 125 for Civic 2.0 participants, and 20 desktops for Business Resource Networks.

There has been uncertainty about the requirements for qualifying for an earned computer and the extent to which this should be uniform. Some FNCs have advertised them, whereas others have not publicized the program. Because there are so many more participants than netbooks, and many of the participants take more than the three core courses, some FNCs are requiring more courses in order to qualify. This may not be problematic as long as there are consistent rules within locations, but some respondents were waiting for greater clarity citywide about how to distribute the netbooks.

Randomized assignment for netbooks could improve later evaluation, but was not possible. The earned computers reduce upfront costs for broadband adoption, as well as providing incentives for completion of the program. With only some of the qualified participants receiving netbooks, there is the potential to compare the difference that netbooks make in sustained home broadband adoption. The best way to measure this difference would be by randomizing the award of netbooks (by lottery, for example) among those who meet the criteria established by the program. Researchers requested randomization in at least one center, but the netbooks are being awarded on a first-come, first-serve basis. This may limit what can be said about the effects of the netbooks on adoption, because those who enroll and complete the program first may differ from other participants in important ways. For example, they may well be more enthusiastic about learning to use the Internet, and it may be this characteristic that makes the difference rather than the netbook. Given that there will be some participants who would have otherwise qualified but live outside the neighborhood, some comparisons will be made on this basis. But, there may still be systematic differences that will not be measured in this comparison, and it will be difficult to know with certainty whether or not the netbooks are responsible for differences in adoption. Random assignment allows evaluators to separate the effects of a particular treatment—netbooks in this case—from other possible influences on adoption.

Implementation of FamilyNet Center Programs

The FamilyNet Centers (FNCs) are situated within the Centers for Working Families, which are run by different community organizations across the 5 communities. The operating agencies are St. Sabina in Auburn Gresham, Jane Addams/Hull House in Englewood, Southwest Reach in Chicago Lawn, El Instituto del Progreso Latino in Pilsen, Association House in Humboldt Park, and Chicago Commons, a satellite location in West Humboldt Park.[10] The Center for Working Families model includes services such as financial counseling. Most of the organizations have a variety of other services available, especially for employment or adult education. These include other computer classes in some cases.

- The centerpiece of the FamilyNet Center is the EveryDay Digital training, described in more detail below.
- Drop-in assistance is also provided, with one-on-one support as well as open use of the computers and equipment.

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[10] Chicago Commons is not a Center for Working Families

- Financial counseling and planning is offered to participants, in order to facilitate home broadband adoption.
- Each FamilyNet Center is allotted 125 netbooks to distribute to participants who complete at least 3 modules of the EveryDay Digital modules with a passing score of at least 70 percent. While the classes are open to anyone, only residents who live within the Smart Communities boundaries are eligible to receive earned computers.

Resources are reported to be sufficient by most FamilyNet Centers, with a few exceptions. While there is heavy demand, respondents see the resources as generally sufficient to deliver what was promised. Association House has been able to use an Americorps volunteer to help, and to leverage some additional grant funds, in order to accommodate heavy demand at that center. The drop-in assistance has been problematic, however, with equipment breaking down due to heavy use. There is also need for more Spanish-speaking staff for drop-in assistance at Association House.

There have been some interruptions in training as well as problems with equipment and renovations. The Instituto in Pilsen, where both the FamilyNet and BRN are housed, suffered a roof collapse over the summer. St. Sabina's server went down during the summer after a thunderstorm. The FamilyNet Center director quit at Association House at the end of June 2011, making it necessary to cancel classes for several months until a replacement could be found. Some renovations have run behind as well, including air conditioning that still was not installed at Association House during summer 2011.

EVERYDAY DIGITAL CURRICULUM

EveryDay Digital classes have been a success in terms of the demand for the free classes, but also have been an example of the program's ability to adapt in the process of implementation. The modular nature of the EveryDay Digital curriculum has provided a flexible platform to accommodate different needs across centers and participants, according to respondents. While some participants need the most gentle of introductions to computers, there are other participants who are able to take the more specialized courses for intermediate learners from the beginning. The modular nature of the curriculum permits individuals to be placed according to their skills. Among the courses offered are introductory EveryDay Digital courses such as Internet Basics, Understanding the Basics of Broadband, Internet Safety and Security, Email Basics, and Online Banking. More advanced "Digital 2.0" courses include Word, Excel, Social Networks, Using Communication Vehicles, Using Open Source Software, and using PowerPoint.

Community input has been built in throughout the process, and there has been an attempt to respond to new needs as they arise. The courses were designed by consultants Blue Ocean Logic with input from the communities. When it became clear after initial implementation that a more basic introduction was needed, the consultants developed a module introducing the mouse and keyboard. Blue Ocean Logic worked with community groups to navigate the differences between Mexican and

Puerto Rican Spanish. A decision was made to use English technology terms so that participants would be able to use those terms on the job. Additionally, Blue Ocean Logic has added a new website with information about Internet safety that will be available to participants after they have finished classes (and that will be linked to the Smart Communities portals). This was developed because of the needs that the consultants saw, even though this wasn't part of the contract.

Centers have adapted the curriculum as needed. With implementation it became clear that for many participants, the courses were too fast or intimidating, the centers responded first, by making adaptations such as slowing down instruction. Some increased each module to three hours rather than two. Others built in review and quizzes to reinforce lessons. All six centers made some adaptation to help participants with little knowledge of the Internet or computers. Instructors reported that they could also use the modules as a platform, but incorporate different explanations. These changes, combined with the adaptations made by Blue Ocean Logic, have led to training that respondents believe is appropriate and flexible.

Spanish language courses were developed later, but are popular. The Spanish language courses were developed after the English courses, but there has been heavy demand for courses taught in Spanish. (Ideally, Spanish language courses would have been available earlier.) Some centers had bilingual instructors who taught in Spanish even before the materials were developed. There seems to be high demand for technology courses in Spanish, which may not be widely available in the communities, according to respondents.

The popularity of courses has meant that the durable and high-quality manuals that participants keep are running out. Participants use these manuals to practice and to refer to later. But, the budget for manuals has run out and now the centers will be reproducing them instead. These won't be as durable.

In general, there has been little dropout. Many participants take all of the courses taught in the centers, and sometimes they repeat courses they have passed because they want extra practice and reinforcement of skills. Individuals sometimes drop out because they have gotten jobs utilizing the initial skills they have gained and can no longer attend the courses.

There have been efforts to put incentives in place other than the earned computers. Most respondents felt that the incentives provided by the netbooks were secondary (and at some centers they were not advertised). There have been efforts to develop other incentives for the program, including credentials. Blue Ocean Logic has developed certificates for those who complete three courses, and feels that this is highly valued for its documentation of skills that are useful for jobs. Englewood FNC uses a system of bytes (or points) to earn other incentives. In general, many of the respondents felt that the sense of accomplishment that participants gain is reward enough.

The earned computers are seen as an opportunity for follow-up, but there may be other ways to keep in touch with participants to provide continuing support and to involve them in the community.

Tech Organizers and Smart Managers mentioned the desire to provide follow-up. Since email addresses are issued with earned computers, this is one way follow-up can be pursued. Because not all participants get netbooks, there may be other ways as well. Pilsen has been keeping in touch with graduates on Facebook, and this seems like a perfect way to create an online community and to reinforce the skills from classes.

There may be opportunities to link the training more directly to jobs. Association House has been able to send participants to vocational computer courses at Wright College once they complete the EveryDay Digital Curriculum, and they see the potential for doing more around employment, including computer repair and A+ certification. In Auburn Gresham, the Tech Organizer has worked with the Illinois Department of Employment Services and would like to explore ways to introduce employers to course graduates.

TECHNOLOGY ORGANIZERS AND OUTREACH

The Technology Organizer position is an interesting one in terms of the potential to connect different activities and to engage community organizations and residents. Beyond training programs, it is a component that is logically related to creating a more general culture of technology use in the neighborhoods. The Tech Organizer has responsibility for doing outreach and for teaching the Civic 2.0 classes. The job combines different skills—community organizing, technology savvy, and the ability to teach. Several of the Tech Organizers stressed that their strengths were in their community ties, while others were discovering how to do the outreach. In general, however, all of the individuals seemed to have made some important connections with neighborhood organizations and were enthusiastic about their work. While strategies for outreach differed, most of the communities are being broad in their outreach for FamilyNet and Civic 2.0, including school groups, block clubs, churches, and other nonprofits. We discussed outreach with both the Smart Managers who coordinate programs and the Tech Organizers.

The first step for organizing is building on existing relationships. Several Smart Managers mentioned that outreach began with organizations who were partners or who had existing relationships with lead agencies, and that outreach branched out from there. Having said this, most communities talked about the need to engage some groups that were not yet responsive. One organizer mentioned the difficulty of finding block group contact information because it is held closely by the alderman's office. Another felt that more needed to be done to reach schools, especially because they have technology resources that could assist the community. In another neighborhood, large community organizations have been more difficult to reach. While there are some existing relationships that have assisted organizing in each community, all communities mentioned organizations and constituencies that were not yet involved.

Strategies for organizing are clearly responsive to strengths or priorities in those communities. The Tech Organizers have used different strategies across communities, in a way that demonstrates the flexibility of the program and its sensitivity to different community contexts. For example, in Pilsen, the

classes are announced at Sunday Mass at one of the large churches in the area. In Chicago Lawn, the Tech Organizer has chosen four of the strongest local school organizations and has focused on training parents active in the school groups for Civic 2.0. In Auburn Gresham, day care and senior organizations are sites for outreach. Englewood has reached out to food pantry volunteers and is helping food pantries to go online to enroll recipients for SNAP benefits.

Outreach to organizations presents opportunities for integrating technology into activities throughout the neighborhood, as examples from the communities show. For example, in Humboldt Park there has been collaboration between the Smart Communities program and the Employment Skills Action Committee, prisoner re-entry initiatives, and a safety committee. Auburn Gresham mentioned efforts to connect the program with employment programs, and Englewood has worked with food pantries to secure government benefits for recipients. These are not "technology" programs per se, but represent the spirit of integrating technology throughout the community and to benefit neighborhood residents.

More clarity may be needed about the role of the Technology Organizer. The Tech Organizer has multiple roles, and there are some differences in how these roles are prioritized – for example, recruiting for and teaching Civic 2.0 versus broader outreach. In some communities, the organizer spoke about working to do outreach for the various programs. In others, the outreach seems to be focused on recruiting for the Civic 2.0 classes. In these neighborhoods, some other programs, such as the Business Resource Networks, felt that they were not receiving the support that they needed. For the portals in particular, Tech Organizers could be especially helpful, soliciting news items and entries for directories. But, there doesn't seem to be a consistent view of the Tech Organizer role. Should it focus on Civic 2.0 or be more general? Should this simply vary by neighborhood?

CIVIC 2.0 CLASSES

The Civic 2.0 classes are an innovation for technology training programs, because they are intended to reach community organizations or residents who are active in their communities.

- The Civic 2.0 classes, also developed by Blue Ocean Logic with community and LISC input, consist of two modules. One lesson concentrates on access to government services online and contacting officials, while another focuses on researching issues online.
- Each community area also has 125 earned computers to distribute among participants who complete the Civic 2.0 modules. As with the FamilyNet Centers, there are more eligible participants than earned computer incentives.

Teaching the Civic 2.0 class is one of the responsibilities of the Tech Organizer, and in most of the communities they are utilizing the FamilyNet Centers, but also teaching them at other locations in the community. Interviews with the Tech Organizers and a review of the ETO data revealed some trends within the Civic 2.0 program.

Many Civic 2.0 participants lack the basic technology skills needed for the courses. Although these are often community activists taking the Civic 2.0 classes, there are many who have little or no experience online. Tech Organizers have needed to refer some participants to the EveryDay Digital classes first. The data discussed later in this report comparing the EveryDay Digital and Civic 2.0 participants indicate that there are indeed many Civic 2.0 participants who lack basic skills.

The classes offer a platform for creative use, including collective projects. The classes have been taught in different ways across communities. Some Tech Organizers have used the class to do group projects such as a basic website or Facebook page. Common adaptations have been to do more with social media. In other cases, organizations have wanted to learn more about video or how to set up a blog. In one community, there has been an emphasis on using the Civic 2.0 classes to organize parents in the schools, while in other areas the outreach has been broader.

Some additions have been made; one community developed a social media module. Chicago Lawn has developed a module on social networking for community organizing. They have been teaching it to demonstrate how participants can advocate for the community on the Internet. This shift was because of feedback from residents in the neighborhood. Other Smart Communities may want to consider whether this additional module is useful for their Civic 2.0 training.

Organizational requests for website help have been common. In some communities, organizers have worked with groups to help with websites. For example, the BRN in Auburn Gresham has helped nonprofit organizations, and Southwest tech organizers have mentioned working on websites as projects for Civic 2.0. In other communities, there was demand from neighborhood groups for assistance on their websites, but there was not necessarily the time or expertise to fill this demand for technical assistance, which went beyond the Civic 2.0 training. Whether or not the Smart Communities program is able to help with this need, providing such technical assistance is an area where some consideration might be given to programs in the future.

COMPARISON OF FAMILYNET AND CIVIC 2.0 PARTICIPANTS

The first table shown below, Table 2, is drawn from the federal reports for Quarter 1 and Quarter 2 of 2011 (from January 1 to June 30, 2011). The table shows participation in the EveryDay Digital classes taught at the FamilyNet Centers and in the Civic 2.0 training conducted by the Tech Organizers at a variety of sites. Because few sites had many participants in 2010, the 2010 quarterly reports are not included here.

Table 2. Attendance at Classes, January–June 2011, by Site

Q1+Q2 2011	Everyday Digital	Civic 2.0	TOTAL
St. Sabina	243	—	243
Chicago Lawn—Southwest REACH	765	—	765
Chicago Lawn—SWOP	—	247	247
Englewood	383	43	426
Humboldt Park—AH	297	—	297
Humboldt Park—Bickerdike	—	94	94
Humboldt Park—Chicago Commons	292	—	292
Pilsen—IDPL	586	—	586
Pilsen—TRP	—	25	25
TOTAL	**2,566**	**409**	**2,975**

Table 2 shows that the EveryDay Digital training predominates, with about six times as many participants as the Civic 2.0 classes. This is not surprising, given that the Civic 2.0 classes are intended for community organizations and activists. In Chicago Lawn, however, there are a large number of Civic 2.0 participants. Our interviews indicate that the Tech Organizer there has taught classes for parents active in several schools in that neighborhood. We could not find any data on Auburn Gresham for Civic 2.0 in the report, although interviews with the Tech Organizer there indicated that he had been doing training with neighborhood groups. Chicago Lawn and Pilsen have trained the most residents in the EveryDay Digital courses, with 765 and 586 participants respectively. Overall, the table shows that in the first half of 2011, nearly 3,000 residents had taken part in the two largest Smart Communities adult training programs.

What are the characteristics of the participants in these programs? Are programs reaching the intended target populations? The ETO tracking system that is used for the FamilyNet Centers and Civic 2.0 participants include demographic data and some history of Internet use. The FamilyNet Centers include both open lab use as well as classes. Only demographic data are collected for open lab use, but information on prior Internet use is gathered for EveryDay Digital training. The Civic 2.0 participants may take the classes at FamilyNet Centers, or at other sites. While information was collected on a variety of topics, we focus on three particular areas in this report – the demographics of participants, their technology connectivity and experience, and self-reported skills. Information is collected when participants first enter the program and register. For individuals, this data will provide a baseline for comparison with the follow-up survey, and will be used to measure change in the outcome evaluation.

The tables shown here aggregate the ETO data across the various neighborhoods, showing the trends for participants overall, for FamilyNet Centers, and for Civic 2.0. Appendix B includes identical tables, with data broken down by site. Some summary information from these appendix tables will be discussed in this section.

Table 3. Demographic Information for Program Participants

	TOTAL	FamilyNet	Civic 2.0
Gender	*n* = 1,080	*n* = 765	*n* = 315
Female	64.8	60.4	75.6
Male	34.9	39.6	23.5
Other	0.3	0.0	0.9
Age	*n* = 3,174	*n* = 2,873	*n* = 301
Less than 18	1.4	1.5	0.0
18–30	24.3	25.7	10.3
31–50	58.6	59.7	48.2
51–65	13.2	11.6	28.9
Older than 65	2.5	1.5	12.6
Education	*n* = 1,212	*n* = 921	*n* = 291
Highest grade 0–8	24.6	26.7	17.9
Highest grade 9–11	11.5	10.5	14.4
Highest grade HS grade	24.2	25.2	21.0
Some college/AA degree	30.5	30.1	32.0
Bachelor's degree	7.8	7.2	10.0
Postgraduate	1.4	0.3	4.8
Ethnicity	*n* = 999	*n* = 768	*n* = 231
Non-Hispanic	53.1	55.7	44.2
Hispanic	46.9	44.3	55.8
Race	*n* = 1,168	*n* = 860	*n* = 308
African-American/Black	55.8	55.2	57.5
Asian	0.6	0.7	0.3
Caucasian/White	26.9	31.0	15.3
Hawaiian/Pacific Islander	0.1	0.1	0.0
Other	16.7	12.8	26.8
Is the participant working now (at program entry)?	*n* = 688	*n* = 523	*n* = 165
No	85.9	85.1	88.5
Yes	14.1	14.9	11.5

   Missing data and limitations. The demographic data, which should cover all participants, was available for only about 2,000 of the nearly 3,000 program participants who received training. Looking at the different "n"s or numbers of respondents for each question, it is apparent that there are significant differences across questions because of missing data. While it isn't unusual for respondents to refuse to answer some questions, there are substantial differences that raise concern about how adequately information is being collected. For example, there are huge differences for the age category in FamilyNet, with a large number of responses from St. Sabina that were coded only for age (see Appendix B, Table 1). There are other centers with missing data as well. Additional data from Association House is being entered now. We did not find any information for Chicago Commons, which is the East Humboldt Park FamilyNet Center. Despite these limitations (which are a concern for the baseline for follow-up

surveys and for the accuracy of federal reporting), there are some trends in the data that fit the impressions gained from the interviews. We asked respondents from the various programs about who they were training.

Women outnumber men in the programs, comprising 60 percent of the FamilyNet participants and three out of four residents in the Civic 2.0 classes.

More FamilyNet and Civic 2.0 participants are between ages 31–50, compared to other age groups. Nearly 60 percent of FamilyNet respondents are in this age category, and nearly half of the Civic 2.0 participants are. The Civic 2.0 participants tend to be a bit older, with 29 percent between ages 51–65.

There are many participants with no more than an 8th grade education, but the most common educational category is some college or an associate's degree. Surprisingly, nearly a third of participants in both programs have an associate's degree or some college. The next most common category for education is 8th grade or less, and this applies to 27 percent of the FamilyNet participants, but only 18 percent of the Civic 2.0 participants. Fewer of the residents active in community organizations have the lowest level of education, but otherwise the two groups don't look much different in educational attainment.

African-Americans comprise slightly over half of participants, and Latinos are slightly under half. There are somewhat more Latino participants in the Civic 2.0 classes (56%) than in the FamilyNet Centers (44%).[11]

Only a small percentage of participants are currently working. Less than 15 percent of the participants are currently working. Some centers mentioned that they did not have classes available at times that are convenient for working people. Englewood has consciously reached out to the employed, with Tech Fridays that keep the center open until 8 p.m. It may also be, however, that the unemployed are most motivated to seek technology skills.

The next table (Table 4) compares Internet connectivity and experience across the two programs.

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[11] Ethnicity and race are asked separately on intake forms; Latinos may be of any race, including multiple races.

Table 4. Internet Connectivity and Experience

	Total	FamilyNet	Civic 2.0
Do you ever use the Internet in any place (home, work, school, anywhere else)?	*n* = 678	*n* = 445	*n* = 233
No	36.4	40.9	27.9
Yes	58.1	54.6	64.8
Don't know	5.5	4.5	7.3
Do you use your cell phone to send email or to use the Internet?	*n* = 495	*n* = 378	*n* = 117
No	80.0	84.9	64.1
Yes	11.3	11.4	11.1
Don't know	8.7	3.7	24.8
How many years have you been an internet user?	*n* = 639	*n* = 422	*n* = 217
0–1 years	35.4	39.1	28.1
2–5 years	22.8	23.0	22.6
6–10 years	14.2	13.5	15.7
More than 10 years	6.9	4.7	11.1
Don't know	20.7	19.7	22.6
Do you have a working computer?	*n* = 662	*n* = 439	*n* = 223
No	60.1	61.0	58.3
Yes	39.0	38.7	39.5
Don't know	0.9	0.2	2.2
Do you have an Internet connection at home?	*n* = 671	*n* = 444	*n* = 227
No	61.0	64.2	54.6
Yes	38.5	35.8	43.6
Don't know	0.6	0.0	1.8
If you don't have an Internet connection at home, why not?	*n* = 445	*n* = 312	*n* = 133
Privacy/Security concerns	1.1	1.3	0.8
Cost	61.3	60.6	63.2
Don't know how to use it	20.2	22.8	14.3
Don't know	17.3	15.4	21.8

The majority of participants have used the Internet somewhere. But, 41 percent of the FamilyNet and 28 percent of the Civic 2.0 participants have not used the Internet. So, there are substantial minorities with no experience at all.

The majority lack either a working computer at home or an Internet connection. For both programs, approximately 60 percent of those who responded lack a working computer. Slightly more FamilyNet participants are without home Internet access (64 percent) compared with Civic 2.0 participants (55 percent). Cell phones are not replacing home Internet access (as only 11 percent in both programs use them to go online).

Cost far outstrips other reasons as a barrier to Internet use. More than 60 percent of respondents in both programs cite cost as the reason they don't have an Internet connection at home. Cost predominates by about 3 to 1 over lack of knowledge about how to use the Internet.

However, the self-reported skills of the FamilyNet respondents (see Table 5 on the next page) are particularly low. Slightly more than half need help using the mouse and typing, and over 80 percent would need assistance to use word processing, spread sheets, upload photographs, download forms, or create a website. In the Civic 2.0 group, still 36 percent would need help with the mouse, and over 70 percent need assistance with word processing, spreadsheets, or creating websites. Sixty-two and 67 percent would need help with downloading and uploading forms, respectively.

Summary: Comparison of FamilyNet Centers and Civic 2.0. Overall, the Civic 2.0 residents are somewhat more skilled than the FamilyNet participants, but neither group has much skill online. The education levels reported are somewhat surprising, showing there is wide demand even outside of the least-educated residents. Women and middle-aged residents make up the core of the participants, who are overwhelmingly unemployed. The Civic 2.0 and FamilyNet participants are not radically different from each other.

In general, the classes are reaching people with low self-reported skills, although a little over half have some experience online. About 60 percent lack a home computer or Internet connection. So, there is potential to increase broadband adoption among participants, but cost is a major barrier.

Table 5. Skills

Please tell me if you would need assistance doing the following computer task:	TOTAL	FamilyNet	Civic 2.0
Using the mouse and typing	*n* = 627	*n* = 414	*n* = 213
No	49.0	44.9	56.8
Yes	47.0	52.7	36.2
Don't know	4.0	2.4	7.0
Using email	*n* = 644	*n* = 426	*n* = 218
No	36.5	32.9	43.6
Yes	59.2	64.8	48.2
Don't know	4.3	2.3	8.3
Locating information on the Internet	*n* = 654	*n* = 435	*n* = 219
No	29.8	28.0	33.3
Yes	64.5	69.0	55.7
Don't know	5.7	3.0	11.0
Using word processing programs	*n* = 650	*n* = 429	*n* = 221
No	18.2	16.3	21.7
Yes	76.6	80.4	69.2
Don't know	5.2	3.3	9.0
Using spreadsheet programs	*n* = 654	*n* = 434	*n* = 220
No	14.4	13.1	16.8
Yes	80.7	84.6	73.2
Don't know	4.9	2.3	10.0
Taking a class online	*n* = 651	*n* = 432	*n* = 219
No	17.7	15.3	22.4
Yes	75.4	81.5	63.5
Don't know	6.9	3.2	14.2
Downloading a form	*n* = 650	*n* = 434	*n* = 216
No	20.6	17.1	27.8
Yes	74.2	80.0	62.5
Don't know	5.2	3.0	9.7
Uploading photographs	*n* = 659	*n* = 437	*n* = 222
No	18.1	15.8	22.5
Yes	76.8	81.9	66.7
Don't know	5.2	2.3	10.8
Creating a website	*n* = 661	*n* = 437	*n* = 224
No	10.6	10.5	10.7
Yes	83.7	86.7	77.7
Don't know	5.7	2.7	11.6
Using social networking sites (Facebook, MySpace, etc.)	*n* = 651	*n* = 431	*n* = 220
No	22.9	21.3	25.9
Yes	70.0	75.6	59.1
Don't know	7.1	3.0	15.0
Downloading music	*n* = 655	*n* = 430	*n* = 225
No	19.1	17.9	21.3
Yes	73.9	79.1	64.0
Don't know	7.0	3.0	14.7

Patterns Across Communities

The tables in Appendix B show the ETO data by community for FamilyNet Centers and for Civic 2.0. Many of the results are consistent with the patterns shown for all of the Smart Communities above. There are a few interesting differences, discussed below. Again, some caution is warranted because of missing data. On some questions, there are only a handful of respondents, and we can't be sure how representative the respondents are for those questions. For example, the question about using cell phones to access the Internet has been answered by only a few people in some neighborhoods, so relatively high percentages for those communities may be due to others just skipping the question if they don't use cell phones for this purpose.

Across FamilyNet Centers:

Women clearly predominate at Greater Southwest (Southwest Reach). At this FamilyNet Center, women account for three out of four participants. The other centers are more balanced, with a slight edge for women.

St. Sabina's participants are heavily concentrated in the 31–50 age range, with 64 percent of participants in this age group. This is the most common age group across centers, however. Jane Addams/Hull House in Englewood had slightly more participation among 18–30 year olds than other centers (at 34 percent), but is also housed in a city college.

At El Instituto del Progreso Latino in Pilsen, more than half of the respondents have only an elementary school education (8th grade or less). This is much higher than in other centers, as Greater Southwest is next highest at 33 percent.

Race and ethnicity generally reflect patterns in the community. While there is some diversity of participants in Humboldt Park and Chicago Lawn, Latinos make up the majority of participants in both areas (64 percent and 70 percent respectively).

Greater Southwest has the most participants who have never used the Internet—50 percent, followed 40 percent in Pilsen.

There are many participants who have used the Internet in some place, and have some experience online. The proportion of current Internet users is particularly high in predominantly African-American neighborhoods: at 83 percent in Auburn-Gresham (St. Sabina) and 73 percent in Englewood. Chicago Lawn has the lowest percentage of participants who use the Internet, at 43 percent.

Greater Southwest participants are also the least likely to have a working computer or the Internet at home. Three out of four (75 percent) lack either of these at home.[12]

Around half of the participants in the other areas have no Internet at home. This indicates that in some neighborhoods (Pilsen, Humboldt Park and Englewood) there are many who have the Internet at home, but may not themselves be using it, or may not feel confident in their skills.

As might be expected, variation in skill is generally consistent with the patterns of experience and connectivity, with Greater Southwest having less-skilled participants. The percentages of participants lacking skills are quite high for Auburn Gresham and Englewood, given the patterns of Internet use outside the home. But, only a small proportion of the participants answered the skill questions in Auburn Gresham, so it is possible that those who answered were those who were most uncomfortable online.

Across Civic 2.0 Classes:

These community activists are overwhelmingly female – from 63 percent in Englewood to 90 percent in Chicago Lawn.

Chicago Lawn participants are somewhat younger – 76 percent are between ages 31 and 50.

Education levels among Civic 2.0 participants are lowest in Pilsen and Humboldt Park, with 35 and 34 percent, respectively, who have not completed schooling beyond 8th grade.

Many Civic 2.0 participants have some college in Englewood (58 percent) and in Auburn Gresham (45 percent).

In Humboldt Park, Chicago Lawn and Pilsen, Civic 2.0 participants are at least 90 percent Latino.

The majority of Civic 2.0 respondents in Humboldt Park, Auburn-Gresham and Englewood have used the Internet (but not in Chicago Lawn or Pilsen).

Most (nearly two-thirds) of Civic 2.0 participants in Auburn Gresham and Humboldt Park have computers and the Internet at home; but this is not true in the other communities.

For self-reported skills, the Civic 2.0 participants in Humboldt Park and Auburn Gresham are relatively more skilled. Still, one-quarter in Auburn Gresham and one-third in Humboldt Park reporting needing help to use the keyboard or mouse.

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[12]There are responses from 100 participants on Internet use anywhere for St. Sabina participants, but only 1–12 responses on other questions. It is difficult to know how representative the St. Sabina responses are on these questions, but the responses are listed in Appendix B, Table 2.

Overall, the majority of Civic 2.0 participants have modest skills online at best. One-half or more of respondents across neighborhoods need assistance with locating information on the Internet, and with every task online other than using the mouse and keyboard or email.

SUMMARY: FAMILYNET CENTERS AND CIVIC 2.0 ACROSS NEIGHBORHOODS

There are some differences between neighborhoods, such as a high proportion of women in Chicago Lawn. In the diverse communities of Humboldt Park and Chicago Lawn, a majority of participants are Latino. The patterns of Internet use across the Smart Communities programs largely reflect the trends observed in earlier data regarding the neighborhoods. Higher Internet use is apparent in the programs in predominantly African-American neighborhoods, with lower levels of experience with the Internet in Chicago Lawn and Pilsen (where many participants are Latino). With the exception of Chicago Lawn, a majority of FamilyNet Center participants have some experience online and about a quarter to half have Internet connections at home. Yet, as might be expected for those who are attracted to a training program, they have little in the way of basic skills. The results for the Civic 2.0 participants show some differences across neighborhoods, with more Internet connectivity and skill reported in Humboldt Park and Auburn Gresham. This may reflect the nature of community organizations in the area, or the specific organizations that were targeted for outreach for Civic 2.0.

COMMUNITY PORTALS

Like the Tech Organizers, the portals offer a way to connect programs and to directly contribute to a culture of technology use within the neighborhoods. While they have been built according to a common template, the content is neighborhood-driven. The portals are intended to offer calendars of events, directories of organizations and businesses, photos, videos, stories, and discussion.

The portals are regarded as a success of the program, mentioned across neighborhoods. The enthusiasm for the portals is because, as some of the respondents have said, they create "something to rally around," and a "community identity." They provide an outlet for the community to tell its stories. The portal is also a way to advertise the program and to keep people connected after the completion of courses.

Yet, we heard consistently that portal managers were overburdened and struggling to keep up with the tasks in 10 hours a week. This was unanimous—it was mentioned by every portal manager. Estimates ran to 20–30 hours per week needed for the job. Englewood is working to add an intern to help, but all of the other community areas are also facing time constraints.

Getting and keeping residents engaged in contributing is a challenge – where it works, it is a time-consuming process. Part of this is a need for outreach to businesses and organizations. One of the Tech Organizers also mentioned that many neighborhood organizations are more concerned with their own websites, and it is difficult to enlist their participation on the portal. Both of these may change over

time—as residents and organizations acquire more skill, and as organizations see the portal in use. But, in the meantime, it may take more staff time to maintain the websites.

Portal managers are doing many tasks within the program, and these vary across communities. The role of the portal manager should be clarified, especially because of the limited hours. Some portal managers are doing training for residents who contribute to portals. Others are responsible for outreach for the portals. Tech organizers and other programs within the Smart Communities could possibly help with outreach, but would need to coordinate with portal managers.

There is little sharing of ideas between portal managers, in part because of part-time positions and time constraints. This is a strength in other Smart Community programs, but has not occurred much with the portals. There is good reason to encourage more interaction between the portal managers. They have different types of expertise and backgrounds, and more sharing could be beneficial. Some have more experience with community outreach, others more with journalism.

We conducted an initial review of the portals in June 2011, and a more comprehensive review of the reading level of articles in November 2011. There are a number of possible criteria that could be used to evaluate the portals, but we checked for the extent to which the portals included the elements laid out in the plans, whether they supported activities included in training (including Civic 2.0), and some common measures of website usability and freshness.

Content

- Updated information
- Information on technology training classes
- Neighborhood data and resources
- Neighborhood and nonprofit organizations directory

Participatory Opportunities

- Contact information for public officials
- Offline events, volunteering, donating or other activities involving neighborhoods and local nonprofits
- Interactive tools such as blogs, comment forms, or social networks
- Email alerts and newsletters, RSS feeds

Accessibility

- Reading level[13] (see separate analysis below)
- Ability to access information through online search/downloading forms
- Language and disability access

Table 6. Characteristics of Smart Communities Portals

CHARACTERISTIC	AG	CL	EW	HP	PI
Content					
Updated information		X		X	X
Info on tech training	X	X			
Neighborhood resources	X	X	X	X	X
Neighborhood/Nonprofit directory	X	X	X	X	X
Participatory Opportunities					
Contact info for public officials	X				
Offline events/volunteering	X	X	X	X	X
Interactive tools (blogs/comments/social networks	X	X	X	X	X
Email alert/RSS feed/newsletter signup	X	X	X	X	X
Accessibility					
Online search/download forms	X	X	X	X	X
Language			X		

Auburn Gresham

The home page includes Government and Technology tabs. The government tab only lists senator and state representative contact information. There is no information for city and alderman contacts, but it does provide links to other sites which provide this information (localhometown.com). Job listing information is not updated. However, the calendar is updated through July 2011. The directory does not consistently provide phone numbers and website information for all listings. However, it does offer a Google map for each listing and an opportunity to leave a comment.

[13] Estimated reading level on the five portal websites is based on use of an online tool estimating the US grade level required to comprehend news articles. The articles released from September 15, 2011, to November 15, 2011, were collected from November 16, 2011, to November 17, 2011. News article with only photos, personal introductions or test pages were excluded from the assessment. The final total number of news articles on the five portal websites is 140. For each news article, the coder copied around 150 words from the beginning of the text, and then pasted them into the Online-Utility website to assess the reading level. The website would then report five reading level indices for researchers. This project uses the Flesch Kincaid Grade level index as a proxy to determine the reading level of the text for each news article. The index refers to the approximate U.S. grade level needed to comprehend the text. The free online tool can be accessed at the following website: www.online-utility.org/english/readability_test_and_improve.jsp

Chicago Lawn

The portal offers no information or links to access any government officials. The portal does offer information (news articles) on political and current events. There are no job listings on this portal.

Englewood

In June of 2011, job listings are as of February 2011; however, the calendar is updated through September 2011. This portal does not offer any information on the technology training classes. It also does not offer any information or links to access government officials.

Humboldt Park

My Humboldt Park link offers a wealth of information on everything from community history links to government leaders and election information. Information (news) can be shared via Social Networking sites such as FB and Twitter. The portal offers news articles on the Smart Communities program but not an ongoing listing of tech classes offered.

Pilsen

This portal also offers a Pilsen Community link with neighborhood specific information (history, development, etc.). The most recent news article is available in English and Spanish. There are no job listings available.

The portals consistently provide neighborhood information and directories, with news of offline events and some interactive tools. As discussed above, some sites could do a better job of updating information, and given the Civic 2.0 classes, it would be useful to have links to government agencies and public officials on the websites.

All portals offer residents the opportunity to leave comments. All comments are public and may be viewed by anyone browsing the site (e.g. comment left for a job posting is viewable by everyone).

Only Humboldt Park offers links to social networking sites. All sites offer RSS feed access, but there is no opportunity for email alerts/or email newsletters.

Improvements should be made in Spanish language access for communities with high proportions of Spanish-speaking residents. Only Pilsen provided content in Spanish at the time of the initial review.

Instructions for contributing to the portal also need to be in Spanish. To submit a contribution in Spanish on the portals, it is necessary to navigate English-language prompts and information.

Information on the Smart Communities technology training classes is inconsistent across the communities. Adding this information would be a simple step to improve the sites.

Reading levels for the sampled articles were fairly high given the levels of education in some of the neighborhoods. In the interviews we conducted, respondents in one community area felt that the portal was too challenging for residents to use. When we examined the reading levels of articles on the portals, we found some support for this concern.

Table 7. Reading Level Assessment

	Number of Articles	Minimum	Maximum	Mean	Standard Deviation
Pilsen	23	7.86	23.24	13.2535	3.83733
Humboldt	43	6.91	33.14	12.3867	4.26246
Englewood	32	5.82	18.20	12.2506	3.93585
Auburn Gresham	19	7.35	17.67	13.1589	3.34406
Chicago Lawn	23	7.86	21.49	13.2974	3.70134

Notes: 1. Two news articles in Pilsen that only include photos have been removed.
2. One news article in Englewood that only includes a photo has been removed.
3. Thirteen news articles in Englewood that are about personal introductions have been removed.
4. Two news articles in Auburn Gresham that are test pages have been removed.

The results for the 140 articles published between September 15 and November 15, 2011, are shown in Table 7 above. The average reading level was grade 12.87, at the end of the senior year in high school. The range of the reading level of news articles was from 5.82 to 33.14. The Humboldt Park portal contained the largest number of news articles and the Auburn Gresham portal had the smallest number of news articles. On average, the reading level for Chicago Lawn was highest (at grade 13.30) and Englewood was the lowest (at grade 12.25). Standard deviation is a measure of variation. Humboldt Park had the highest diversity of reading levels within the articles on its portal, and Auburn Gresham has the lowest diversity of reading levels.

Portal managers may want to monitor the reading level of some core contributions. There is a role for diverse types of contributions in order to serve many different residents and interests. Moreover, not all of the content is developed by the Smart Communities. But, communities may consider identifying key pieces on the website that should be accessible to a broad audience in terms of reading level.

In summary, while the portals appear to have been a success in many ways, there are some changes needed. Some are relatively easy, such as the addition of more information on technology training and some government contact information. Other potential changes, such as Spanish translation are more difficult, but critically important. It is also important to consider expanding the hours for the portal manager's job. In lieu of this, portal training and outreach may be assigned to others.

BUSINESS RESOURCE NETWORKS

The Business Resource Networks are located in four communities (with the exception of Englewood, which refers businesses to the other Southwest partners). There are a variety of free activities that the BRN offers to community businesses.

- The networks conduct assessments and develops action plans to address technology issues.
- Based on the action plans, the network may make referrals for classes (which may be taught either by the program or by others). Instruction offered by the BRN includes classes in Quickbooks, E-Commerce for Businesses, Networking for Businesses, and website creation in some of the communities.
- Coordinators may conduct one-on-one sessions (for example, to work on websites).
- Free assistance may be provided through program consultants—for example, to build a website.

By the end of the project period, the objective is to serve 500 businesses. As of the end of the second quarter of 2011 (June 30, 2011), the number of assessments and action plans were modest: with 104 assessments, and 77 action plans. However, 35 business-related workshops were held, and staff were trained from 122 businesses. The training increased during the second quarter, and may be an important way to reach the goal for participation in the BRN. Some services, such as website assistance in Auburn Gresham, have drawn interest in the community. Yet the Business Resource Networks have clearly not had the same outpouring of demand as the FamilyNet Centers**.**

The relationships that have supported the FamilyNet Centers do not seem to be present to the same extent with businesses. Some respondents explained this in terms of the need for more outreach to business, as sometimes nonprofit connections to business are not well established. Issues of trust were mentioned, and the short-term nature of the program raises some concerns among businesses.

Some of the community areas lack an active Chamber of Commerce. With little business organization in the area, the BRNs must start from scratch on outreach. This is difficult given the resources allocated to the program.

Resources for the program were modest, providing for only part-time staff. A lack of sufficient staff for the task was mentioned in two of the communities, given the need for outreach and relationship-building. In one of the Smart Communities neighborhoods - Humboldt Park – there is no space to have classes or consultation.

The coordination between the BRN and other programs is sometimes lacking. One respondent mentioned a lack of follow-up on resources for the business directory for the portal, for example. In another community, there was a desire to have the Technology Organizer play a more active role in doing outreach with businesses.

There were problems with the list of providers for referrals. Some places listed for classes and other referrals were outdated, even out of business. This was mentioned by several respondents.

The start-up process was lengthy, because of issues such as the need to contract with consultants. Respondents mentioned the need for more pre-planning, engaging consultants before the beginning of implementation. Allowing networks to make expenditures and be reimbursed would also speed up processes. More resources should have been available at the front end, where they were needed for start-up. There is a need for tighter program management, according to some BRN respondents.

Other concerns are often more pressing for businesses. We heard from respondents that non-technology concerns around licensing and facades, for example, are sometimes more important to businesses. Program designs in the future may consider how technology assistance can be integrated with other types of assistance. The nature of this program and the demands of the federal grant have to some extent separated technology issues from other business needs.

A closer examination of the businesses that *have* responded may be helpful for targeted outreach during the remainder of the program. During the interviews, we asked about the businesses that were being reached by the program. What we heard indicates that some businesses are more likely to want to reach markets outside their neighborhood (such as some restaurants or coffeehouses), while others rely mostly on their word-of-mouth networks within the neighborhood and don't see much reason to change. Another point we heard in some neighborhoods was that providing resources and training for free made the services accessible to new start-ups. We do not have the data on businesses that have responded, but some examination of this may be helpful for targeting certain types of businesses more strategically during the remainder of the grant period.

Several respondents mentioned the importance of engaging staff and consultants with prior experience and stakes in the community involved. They believed that this was essential, and was something their programs had done right.

A consultant has been engaged to work with the networks, and in most cases respondents described the consultant's role as helpful.

Meetings with other Business Resource Networks were helpful. Ideas have been borrowed across communities, and regular meetings have been held.

Creative ideas have been used in some neighborhoods to generate greater visibility. Pilsen uses decals for business owners, to show participation in the Pilsen Portal or Smart Communities.

To summarize, the Business Resource Networks have been slower to get off the ground. They have a need to develop relationships, especially in neighborhoods where businesses are not well-organized. Yet, they have limited staff. Small businesses are often more worried about other issues – a problem discussed in the National Broadband Plan, and certainly not peculiar to the Smart Communities. Comments from respondents suggest that integrating technology into a broader menu of services might be more effective, but the current funding for the program is focused on technology rather than business needs in general. More resources for outreach, or targeting of outreach to strategic businesses could be helpful.

DIGITAL YOUTH NETWORK AND YOUMEDIA

The YouMedia library programs and Digital Youth Network after-school programs in the Smart Communities are based on the Digital Youth Network (DYN) model of learning through the development of new media literacies.[14] The curriculum fosters core values such as creativity, collaboration, adaptability, responsibility, and identity (http://digitalyouthnetwork.org/11-core-values/pages/47-core-value-overview), through activities using different media. Activities include modules on music, video, gaming, graphic design, photography and spoken word. YouMedia offers workshops on radio and podcasting, publishing, graphic design, music, and video.

Based on research observing the ways in which adolescents use digital technologies, both DYN and YouMedia facilitate learning through "hanging out, messing around, and geeking out," (Ito et al. 2008, p. 13), with structured activities such as workshops contained within the concept of geeking out (more intense, focused learning). One of the respondents explained that students have "time to explore and discover, but then our adults are there to intervene and push them, and get a sense of their interests, and understand their skills, and guide them . . . based on what the youth are interested in. But we can push them into a deeper level of engagement."

Prior to the Smart Communities program, the DYN model had been used in middle schools as part of the regular curriculum, and had also been used in the YouMedia program for high school students at the Harold Washington Library in downtown Chicago. The Smart Communities program features after-school programs for middle school students, and YouMedia programs in 3 branch libraries. Consequently, there have been some changes made in the course of implementation, applying the model under new circumstances.

YouMedia

YouMedia programs in the Smart Communities are located in Humboldt Park, Pilsen, and Englewood (with the latter serving the southwest Chicago project area). The Humboldt Park program began in August 2011, Pilsen started in September, and Englewood launched in late November 2011. Staff members at each location consist of one mentor who teaches and one cybernavigator who facilitates activities. Program staff are enthusiastic about the work that has already been produced by students, even though the branches have only been operating for a few months at most.

By December 2011, decisions were made to change the focus of the branch programs to middle school only (rather than serving both middle school and high school students). Working with both age groups at once was difficult with only two staff members, and within the relatively small spaces of the branch libraries. Middle school and high school youth have different interests, and some activities that

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[14] For a discussion of these new media literacies or skills, which include play, performance, simulation, appropriation, multitasking, distributed cognition, collective intelligence, judgment, transmedia navigation, networking and negotiation, see Jenkins et al. 2006.

high school students engaged in were not appropriate for the younger participants. In the future, high school students will be encouraged to attend the YouMedia activities at the main Harold Washington Library downtown.

The spaces at the branch libraries present other challenges, such as the need to share spaces. At the Lozano branch in Pilsen there is a small space set aside for YouMedia, but the larger areas in the other two branches are multi-purpose rooms shared with other library activities. This raises issues for securing equipment between YouMedia sessions, and this has been handled by keeping equipment locked up on rolling carts. While this seems to be working well for sharing these spaces, it means that there is time and effort invested in setting up and taking down equipment for the sessions.

One of the strengths of the program cited by respondents is the investment made in professional development, which addresses student learning through critical thinking and creativity. The mentors are artists who have technology skills and who receive training and support to enable them to work with youth. Over the course of implementation in the fall, weekly professional development was changed to include both mentors and cybernavigators. This has helped to build more cohesive teams in each of the branches, as well as across the branches.

In the first few months, participation has been low in two of the branches. Workshop numbers have varied in Humboldt Park according to the topic, but at most attendance has been 6 or 7 students. In Pilsen, 4 or 5 students attend the sessions regularly. On the other hand, programs at the Englewood branch were immediately popular, with 15 students regularly attending, and up to 25 participants for some activities.

Further outreach is needed in Humboldt Park and Pilsen, while the number of participants in the Englewood branch may become a challenge to manage with only two staff members. So far, most outreach has been through social media and word of mouth. The YouMedia staff have met with LISC to publicize the program through the FamilyNet Centers. Efforts are also being made to advertise YouMedia through the Public Computing Center (PCC) programs. Further cooperation may be possible with other Smart Communities programs (for example, with individuals and groups engaged in Civic 2.0 as well as the Tech Organizers). One step that may be considered is to link information about YouMedia, including some of student work that can be viewed by the public, to the Smart Communities portals. There are announcements currently about YouMedia programs on most of the portals. Featuring student work or thinking about other ways to make the program more prominent on the portals may help to draw more interest.

With only a few months of experience, changes are being made in the course of implementing YouMedia at the branches. One of the respondents said that a lesson that has been learned is that in replicating the program, it may be necessary at times to "remix" the model. The extension of the program into the Smart Communities may be a good test of just how flexible the concept is, and how successfully it can be adapted to the new setting of the branch library.

Digital Youth Network

The Digital Youth Network has also made some adaptations during implementation, which is now in its second year. During the first year, there were 5 school sites in the Smart Communities. Over this time, participation fluctuated at the sites, which served 177 students in the beginning of the 2010 school year (2010 quarter 3), 221 from October to December (2010 quarter 4), 200 from January to March of 2011 (2011 quarter 1), and 185 students in April-June 2011 (quarter 2). Mentors, who taught different types of media, rotated across the locations, with one or two mentors per site. During the first year, activities were offered 4 days per week. At one school in Chicago Lawn, however, the enthusiastic and supportive principal integrated the program into the regular school-day curriculum.

In the second year, there was an expansion to 11 sites, including some community sites as well as schools. More generally, there was a desire to reach out beyond the schools. Sites were changed because of low attendance and competition with many other after-school programs. (One middle school had 25 after-school programs.)

Some sites did not have the required technical infrastructure, such as wireless Internet or up-to-date computers. There was a theft at one site. As the program was rolled out, it became clear that some places did not have the needed equipment, such as digital cameras, headphones, and microphones. There was no provision for equipment in the grant, but the DYN managed to find other resources to meet these needs.

Lessons learned have been the need to locate sites where there is a supportive culture, where rules are in place, and where there is the required technical infrastructure.

After the first year's experience, some changes were made to provide a more focused curriculum for the after-school program, given the differences with the in-school model. This year DYN sites offer two sessions per week rather than four.

Further changes will be taking place beginning January 2012. A decision was made to keep mentors in place at one site, where they will teach all of the modules. One of the goals is for the mentors to build social capital with the students, and maintaining mentors in a single site is designed to cultivate relationships.

Another change is the addition of online modules, which the DYN is making available on the Smart Communities portals in 2012. This will allow more students to have access to the curriculum, citywide as well as in the Smart Communities. The link to the portals will help to advertise the DYN programs (offline classes as well as online). Despite low attendance at some sites, the program has found that Smart Communities participants are among the most enthusiastic in the city. Students are allowed to upload their creations to a platform where they can share their work and comment on the work of other DYN participants. Smart Communities after-school students have been most active on the platform.

For both the Digital Youth Network and YouMedia, successes include the work done by the students and the development of skilled mentors, according to respondents.

Both programs have adapted to the challenges they have encountered, devising new strategies. Issues to watch at the end of the project period will be the effectiveness of adaptations, such as the middle school focus for YouMedia, and a comparison of the results from the online and offline programs for the Digital Youth Network.

Coordination and outreach through other Smart Communities Programs and other related partners (such as the Public Computer Center programs and the City of Chicago) may help ensure the success of the youth programs. FamilyNet centers are one key area for publicizing these programs, but tech organizers may also include information in their outreach with community groups. The DYN will have a presence on the portals with the online modules. Most portals now have some mention of YouMedia. Coordinating outreach in the future, however, will be an important way to assist these programs.

CONCLUSIONS AND RECOMMENDATIONS

The Smart Communities program is an ambitious effort requiring coordination across many different programs and neighborhoods. Some programs were slow to start (notably the Englewood FamilyNet Center, the YouMedia programs, and the awareness campaign). All of the plans, however, are now being implemented. The groundwork undertaken prior to the federal grant, along with the working relationships within neighborhoods, and between the lead agencies and LISC, undoubtedly assisted in getting most of the program up and running within a few months. The coordinating and supporting role played by LISC earned high marks from community respondents, and meetings across neighborhoods within most programs have also played a positive role for learning in the course of implementation.

The portals are regarded with pride across communities, and there has been an impressive turnout for the FamilyNet Centers in particular. Keys to this success, according to respondents, are the established relationships and trust between community organizations and residents that facilitated outreach for the programs. Most FamilyNet participants are unemployed and have low levels of self-reported skill. Yet, slightly over half have some experience using the Internet, and a little over one-third have some type of Internet connection at home. Prior experience with Internet use outside the home is more common in predominantly African-American neighborhoods. The availability of free classes and Spanish instruction has also filled a need in many of the neighborhoods. According to our interviews, the lack of other alternatives for Spanish speakers is a possible explanation for the high proportion of Latino participants in diverse neighborhoods such as Humboldt Park and Chicago Lawn.

The Civic 2.0 classes are also enrolling many participants, and are being used in different ways across communities. They are intended to support technology use in community organizations, especially for accessing government services, contacting officials, or researching policy issues. In some neighborhoods, organizations are working collaboratively on Civic 2.0 projects. While Civic 2.0 participants have slightly higher rates of previous Internet use and home broadband connectivity, many of these participants also

lack Internet skills or regular access, according to the data. In some neighborhoods, there is a desire to reach out to additional organizations or constituencies, and it will be interesting to see how the participants evolve over time.

The Smart Communities program has allowed for adaptation and responsiveness in the course of implementation. For the EveryDay Digital classes in particular, both the centers and the consultants made changes to the curriculum when it became apparent that many participants struggled with the basic training. Yet, the curriculum also includes some more advanced training and respondents have been thinking of ways to link it more directly to the employment that many participants seek.

Gratifying stories of empowerment, accomplishment, and self-confidence emerge from the interviews – motivating those who are working with residents and demonstrating the potential impact of the programs. With these stories appearing in ads, videos, and news articles, they will surely inspire others to get involved in the coming months.

There are some issues that deserve attention, however, as implementation moves forward.

Federal requirements for measuring broadband adoption. One problem has been the lack of data available on a quarterly basis. In addition, to this, however, is a broader question of the extent to which broadband adoption can be expected as the *primary* outcome of a program that offers awareness and training. Consumer education and information on savings through technology may help, but for some who cite cost as an issue, poverty and competing demands may still pose formidable barriers. Efforts to promote the Internet Essentials program are clearly important as one remedy for this problem, although a partial one. Nationally, most of the Sustainable Broadband Adoption (SBA) programs are in a similar situation, with limited options for addressing the cost of broadband connectivity. There are conferences and listservs that link SBA grant recipients, the mismatch between the resources and program expectations is an issue that recipients may want to discuss collectively with the NTIA.

Strengthening of program management and simplification of financial processes. As discussed, the City is taking steps to hire an additional program manager that will devote part of his or her time to the SBA program. Backlogs of reimbursements are now clearing up. Still, consideration should be given to simplification of financial processes to the extent that it is possible given grant requirements.

Improvement of data collection. The ETO database performs two critical functions: tracking participation for federal compliance reports; and providing more detailed data on participants, including baseline data on Internet use that is necessary for the program evaluation. There appears to be more participation that is reported in the federal quarterly compliance reports than in the ETO data base. Without the more detailed information that is collected for the ETO database, it is impossible to track systematically the types of information that can guide further program development, for the rest of the grant period and for future efforts. Inconsistent data collection also poses threats for the program evaluation, because the baseline information is necessary to measure *change*, and to know whether the training has made any difference in the end.

Clarification of Technology Organizer position. While there is some argument for allowing for differences that are responsive to community needs, some clarification may be needed. The Tech Organizer job includes responsibility for instruction for Civic 2.0 as well as for organizing. What is less clear across neighborhoods is the extent to which outreach and organizing in this position applies to programs beyond Civic 2.0. In some neighborhoods, other Smart Communities programs would like to see more assistance for outreach.

Additional resources for portals. The portal manager position does not seem to be adequately funded for the tasks that are expected. Those tasks also vary across neighborhoods, with portal managers often doing outreach and training. The hours of portal managers may need to be expanded beyond the 10 hours a week that is currently budgeted. One community is hiring an intern, and this is another option. Extra hours or assistance could help with the problems that some communities expressed in getting content for the portals.

Spanish language content and some refinements for portals. Another important need is for Spanish language content in the three communities with significant Spanish-speaking populations. Pilsen has Spanish content, but the other two do not. Small changes like listing the technology training or other information (such as e-government websites or contact information for elected officials) could also be made in cases where this is not currently available on a neighborhood site. Portal managers may also track the reading level of core information or key articles on the websites, in order to ensure that information is broadly accessible, even for less-educated residents.

Strengthening Business Resource Networks. We heard of some successes, such as the creation of websites for neighborhood businesses, and it is apparent from the federal compliance data that business training classes have been gaining a constituency. Yet, the overall impression we gained from interviews was that the BRN program has struggled. Some of the hurdles experienced are problems that may not be easily solved within the context of this program – a lack of business organizations in some communities, and more pressing needs outside technology. The problems of outreach (because of a lack of existing organizations and relationships) indicate that there may need to be more work devoted to this area, but there is only funding for part-time staff. We did not have data on the types of businesses that have been most receptive to the BRNs, although the interviews suggest that often new start-ups or existing businesses that were motivated to draw a constituency outside the neighborhood were attracted to services depending on broadband use, such as website assistance. Strategic targeting of efforts to certain types of businesses may help to make good use of resources during the remaining grant period.

Coordination of outreach for YouMedia and Digital Youth Network. Both of these programs are based on an innovative approach to learning through digital media, based on research and subsequent evaluation. Program staff have taken steps to adapt this approach to new settings, and believe that they have a strong team of mentors and cybernavigators, as well as some initial success with young people who have participated. The ingredients for success seem to be in place, but there has been limited turnout for both programs in some communities. There are various reasons for this, including

competition with other programs. One resource for outreach, however, may be the other partners in the Smart Communities program, and marketing through other Smart Communities activities and the portals.

Opportunities for the future. Many of the respondents had ideas for further development of programs. These included linking the training with employer outreach and with vocational certificate programs. One tech organizer had ideas for mobile training with laptops and air cards. Others have started a newsletter for organizations within the community. The kind of learning that has occurred across neighborhoods thus far offers an environment for further innovation and improvement as implementation proceeds.

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APPENDIX A. PROGRAM PARTNERS

City of Chicago, Department of Innovation and Technology (DoIT)

Smart Chicago

Chicago Local Initiatives Support Corporation (LISC)

YouMedia, Chicago Public Library Foundation

Digital Youth Network, DePaul University

The Greater Auburn Gresham Development Corporation, Lead Agency and Business Resource Network, Auburn Gresham

St. Sabina Employment Resource Center, FamilyNet Center, Auburn Gresham

Greater Southwest Development Corporation, Lead Agency and Business Resource Network, Chicago Lawn

Southwest REACH, FamilyNet Center, Chicago Lawn

Southwest Organizing Project, Technology Organizer, Chicago Lawn

Teamwork Englewood, Lead Agency, Englewood

Jane Addams/Hull House, FamilyNet Center, Englewood

Bickerdike Redevelopment Corporation, Lead Agency, Humboldt Park

Association House, FamilyNet Center, Humboldt Park

Chicago Commons, FamilyNet Center, Humboldt Park

West Humboldt Park Family and Community Development Center, Business Resource Network, Humboldt Park

The Resurrection Project, Lead Agency, Pilsen

El Instituto del Progreso Latino, FamilyNet Center and Business Resource Network, Pilsen

APPENDIX B. PARTICIPANTS BY SITE, FAMILYNET AND CIVIC 2.0

Appendix B, Table 1. FamilyNet, Demographic Information

CHARACTERISTIC	Humboldt Park, AH	Chicago Lawn, GSW	Pilsen, IDPl	Englewood, JAHH	Auburn Gresham, SS
Gender	***n* = 52**	***n* = 202**	***n* = 110**	***n* = 154**	***n* = 247**
Female	51.9	73.8	53.6	56.5	56.7
Male	48.1	26.2	46.4	43.5	43.3
Other	0.0	0.0	0.0	0.0	0.0
Age	***n* = 196**	***n* = 269**	***n* = 281**	***n* = 155**	***n* = 1,972**
Less than 18	0.0	0.7	3.6	0.6	1.6
18–30	16.8	14.5	28.1	33.5	27.2
31–50	54.1	55.0	49.1	37.4	64.1
51–65	26.0	24.5	17.4	23.2	6.6
Older than 65	3.1	5.2	1.8	5.2	0.5
Education	***n* = 55**	***n* = 231**	***n* = 177**	***n* = 105**	***n* = 353**
Highest grade 0–8	20.0	32.9	54.2	19.0	12.2
Highest grade 9–11	20.0	11.3	8.5	16.2	7.9
Highest grade HS grade	23.6	28.1	14.1	19.0	30.9
Some college/AA degree	27.3	19.0	17.5	37.1	41.9
Bachelor's degree	9.1	7.8	5.6	8.6	6.8
Postgraduate	0.0	0.9	0.0	0.0	0.3
Ethnicity	***n* = 39**	***n* = 210**	***n* = 169**	***n* = 114**	***n* = 236**
Non-Hispanic	35.9	29.5	4.7	98.2	98.3
Hispanic	64.1	70.5	95.3	1.8	1.7
Race	***n* = 66**	***n* = 210**	***n* = 170**	***n* = 152**	***n* = 262**
African-American/Black	45.5	20.5	2.9	94.1	96.9
Asian	0.0	0.0	0.0	3.9	0.0
Caucasian/White	16.7	75.7	56.5	0.0	0.4
Hawaiian/Pacific Islander	0.0	0.0	0.0	0.0	0.4
Other	37.8	3.9	40.6	2.0	2.3
Is the participant working now (at program entry)?	***n* = 10**	***n* = 180**	***n* = 106**	***n* = 77**	***n* = 150**
No	100.0	81.1	88.7	77.9	90.0
Yes	0.0	18.9	11.3	22.1	10.0

Appendix B, Table 2. FamilyNet, Internet Connectivity and Experience

	Humboldt Park, AH	Chicago Lawn, GSW	Pilsen, IDPL	Englewood, JAHH	Auburn Gresham, SS
Do you ever use the Internet in any place (home, work, school, anywhere else)?	*n* = 95	*n* = 218	*n* = 91	*n* = 29	*n* = 100
No	28.4	50.0	39.6	27.6	16.7
Yes	67.4	43.1	59.3	72.4	83.3
Don't know	4.2	6.9	1.1	0.0	0.0
Do you use your cell phone to send email or to use the Internet?	*n* = 93	*n* = 176	*n* = 91	*n* = 17	*n* = 1
No	86.0	86.9	81.3	76.5	100.0
Yes	0.0	13.1	17.6	23.5	0.0
Don't know	14.0	0.0	1.1	0.0	0.0
How many years have you been an Internet user?	*n* = 92	*n* = 205	*n* = 88	*n* = 27	*n* = 10
0–1 years	50.0	32.7	35.2	51.9	70.0
2–5 years	27.2	21.5	22.7	29.6	0.0
6–10 years	12.0	13.2	17.0	3.7	30.0
More than 10 years	4.3	2.4	9.1	11.1	0.0
Don't know	6.5	30.2	15.9	3.7	0.0
Do you have a working computer at home?	*n* = 94	*n* = 215	*n* = 90	*n* = 28	*n* = 12
No	56.4	75.3	38.9	35.7	66.7
Yes	43.6	24.2	61.1	64.3	33.3
Don't know	0.0	0.5	0.0	0.0	0.0
Do you have an Internet connection at home?	*n* = 94	*n* = 218	*n* = 91	*n* = 29	*n* = 12
No	55.3	75.2	52.7	44.8	66.7
Yes	44.7	24.8	47.3	55.2	33.3
Don't know	0.0	0.0	0.0	0.0	0.0
If you don't have an Internet connection at home, why not?	*n* = 66	*n* = 167	*n* = 56	*n* = 15	*n* = 8
Privacy/Security concerns	3.0	0.6	0.0	6.7	0.0
Cost	48.5	70.1	46.4	73.3	37.5
Don't know how to use it	28.8	23.4	10.7	13.3	62.5
Don't know	19.7	6.0	42.9	6.7	0.0

Appendix B, Table 3. FamilyNet, Skills

Please tell me if you would need assistance doing the following computer task:	Humboldt Park, AH	Chicago Lawn, GSW	Pilsen, IDPL	Englewood, JAHH	Auburn Gresham, SS
Using the mouse and typing	*n* = 88	*n* = 202	*n* = 91	*n* = 21	*n* = 12
No	50.0	36.6	60.4	47.6	25.0
Yes	46.6	60.4	39.6	47.6	75.0
Don't know	3.4	3.0	0.0	4.8	0.0
Using email	*n* = 91	*n* = 207	*n* = 90	*n* = 26	*n* = 12
No	33.0	28.5	50.0	15.4	16.7
Yes	64.8	69.6	46.7	80.8	83.3
Don't know	2.2	1.9	3.3	3.8	0.0
Locating information on the Internet	*n* = 95	*n* = 212	*n* = 91	*n* = 25	*n* = 12
No	30.5	19.8	48.4	16.0	25.0
Yes	66.3	76.4	50.5	80.0	75.0
Don't know	3.2	3.8	1.1	4.0	0.0
Using word processing programs	*n* = 93	*n* = 210	*n* = 90	*n* = 25	*n* = 11
No	21.5	8.1	0.0	8.0	18.2
Yes	74.2	87.6	32.2	88.0	81.8
Don't know	4.3	4.3	67.8	4.0	0.0
Using spreadsheet programs	*n* = 94	*n* = 213	*n* = 91	*n* = 25	*n* = 11
No	18.1	5.2	0.0	8.0	0.0
Yes	79.8	91.5	29.7	88.0	100.0
Don't know	2.1	3.3	70.3	4.0	0.0
Taking a class online	*n* = 93	*n* = 214	*n* = 90	*n* = 24	*n* = 11
No	20.4	8.9	26.7	8.3	18.2
Yes	74.2	87.9	71.1	91.7	81.8
Don't know	5.4	3.3	2.2	0.0	0.0
Downloading a form	*n* = 93	*n* = 215	*n* = 90	*n* = 25	*n* = 11
No	23.7	9.8	0.0	8.0	18.2
Yes	73.1	85.6	30.0	92.0	81.8
Don't know	3.2	4.7	70.0	0.0	0.0
Uploading photographs	*n* = 94	*n* = 216	*n* = 91	*n* = 25	*n* = 11
No	16.0	9.7	30.8	12.0	18.2
Yes	80.9	87.5	68.1	88.0	81.8
Don't know	3.2	2.8	1.1	0.0	0.0

Appendix B, Table 3. FamilyNet, Skills (continued)

Please tell me if you would need assistance doing the following computer task:	Humboldt Park, AH	Chicago Lawn, GSW	Pilsen, IDPL	Englewood, JAHH	Auburn Gresham, SS
Creating a website	*n* = 94	*n* = 214	*n* = 91	*n* = 27	*n* = 11
No	8.5	5.6	24.2	7.4	18.2
Yes	87.2	91.6	74.7	88.9	81.8
Don't know	4.3	2.8	1.1	3.7	0.0
Using Social Networking sites (Facebook, Myspace, etc.)	*n* = 93	*n* = 212	*n* = 90	*n* = 25	*n* = 11
No	20.4	17.5	0.0	20.0	18.2
Yes	76.3	78.3	32.2	76.0	81.8
Don't know	3.2	4.2	67.8	4.0	0.0
Downloading music	*n* = 93	*n* = 211	*n* = 89	*n* = 26	*n* = 11
No	17.2	12.8	0.0	19.2	18.2
Yes	77.4	84.4	30.3	73.1	81.8
Don't know	5.4	2.8	69.7	7.7	0.0

Appendix B, Table 4. Civic 2.0, Demographic Information

CHARACTERISTIC	Humboldt Park, Bickerdike	Auburn Gresham, GAGDC	Chicago Lawn, SWOP	Englewood, TE	Pilsen, TRP
Gender	*n* = 41	*n* = 105	*n* = 70	*n* = 59	*n* = 40
Female	78.0	73.3	90.0	62.7	72.5
Male	19.5	26.7	8.6	37.3	25.0
Other	2.4	0.0	1.4	0.0	2.5
Age	*n* = 42	*n* = 90	*n* = 70	*n* = 62	*n* = 37
Less than 18	0.0	0.0	0.0	0.0	0.0
18–30	9.5	12.2	8.6	12.9	5.4
31–50	47.6	34.4	75.7	38.7	45.9
51–65	28.6	34.4	11.4	35.5	37.8
Older than 65	14.3	18.9	4.3	12.9	10.8
Education	*n* = 38	*n* = 104	*n* = 61	*n* = 48	*n* = 40
Highest grade 0–8	34.2	5.8	24.6	8.3	35.0
Highest grade 9–11	10.5	9.6	16.4	6.3	37.5
Highest grade HS grade	23.7	17.3	29.5	18.8	17.5
Some college/AA degree	7.9	45.2	21.3	58.3	5.0
Bachelor's degree	13.2	16.3	8.2	2.1	2.5
Postgraduate	10.5	5.8	0.0	6.3	2.5
Ethnicity	*n* = 29	*n* = 51	*n* = 67	*n* = 44	*n* = 40
Non-Hispanic	6.9	98.0	9.0	100.0	0.0
Hispanic	93.1	2.0	91.0	0.0	100.0
Race	*n* = 41	*n* = 105	*n* = 65	*n* = 57	*n* = 40
African-American/Black	22.0	97.1	13.8	100.0	0.0
Asian	2.4	0.0	0.0	0.0	0.0
Caucasian/White	9.8	0.0	53.8	0.0	20.0
Hawaiian/Pacific Islander	0.0	0.0	0.0	0.0	0.0
Other	65.8	2.9	32.3	0.0	80.0
Is the participant working now (at program entry)?	*n* = 2	*n* = 46	*n* = 44	*n* = 35	*n* = 38
No	50.0	89.1	90.9	88.6	86.8
Yes	50.0	10.9	9.1	11.4	13.2

Appendix B, Table 5. Civic 2.0, Internet Connectivity and Experience

	Humboldt Park, Bickerdike	Auburn Gresham, GAGDC	Chicago Lawn, SWOP	Englewood TE	Pilsen, TRP
Do you ever use the Internet in any place (home, work, school, anywhere else)?	*n* = 39	*n* = 87	*n* = 68	*n* = 18	*n* = 21
No	25.6	12.6	42.6	27.8	47.6
Yes	74.4	86.2	42.6	72.2	23.8
Don't know	0.0	1.1	14.7	0.0	28.6
Do you use your cell phone to send email or to use the Internet?	*n* = 13	*n* = 0	*n* = 67	*n* = 16	*n* = 21
No	92.3	0.0	80.6	6.3	38.1
Yes	7.7	0.0	16.4	0.0	4.8
Don't know	0.0	0.0	3.0	93.8	57.1
How many years have you been an Internet user?	*n* = 33	*n* = 78	*n* = 67	*n* = 18	*n* = 21
0–1 years	51.5	23.1	23.9	27.8	23.8
2–5 years	18.2	34.6	16.4	22.2	4.8
6–10 years	18.2	21.8	7.5	27.8	4.8
More than 10 years	9.1	19.2	4.5	16.7	0.0
Don't know	3.0	1.3	47.8	5.6	66.7
Do you have a working computer at home?	*n* = 37	*n* = 81	*n* = 67	*n* = 18	*n* = 20
No	32.4	38.3	85.1	61.1	95.0
Yes	67.6	59.3	11.9	38.9	5.0
Don't know	0.0	2.5	3.0	0.0	0.0
Do you have an Internet connection at home?	*n* = 38	*n* = 83	*n* = 67	*n* = 18	*n* = 21
No	39.5	39.8	71.6	61.1	81.0
Yes	60.5	60.2	22.4	38.9	19.0
Don't know	0.0	0.0	6.0	0.0	0.0
If you don't have an Internet connection at home, why not?	*n* = 10	*n* = 32	*n* = 58	*n* = 12	*n* = 21
Privacy/Security concerns	0.0	3.1	0.0	0.0	0.0
Cost	50.0	78.1	63.8	75.0	38.1
Don't know how to use it	40.0	12.5	17.2	0.0	4.8
Don't know	10.0	6.3	19.0	25.0	57.1

Appendix B, Table 6. Civic 2.0, Skills

Please tell me if you would need assistance doing the following computer task:	Humboldt Park, Bickerdike	Auburn Gresham, GAGDC	Chicago Lawn, SWOP	Englewood, TE	Pilsen, TRP
Using the mouse and typing	*n* = 38	*n* = 71	*n* = 65	*n* = 18	*n* = 21
No	60.5	73.2	44.6	50.0	38.1
Yes	34.2	25.4	44.6	27.8	57.1
Don't know	5.3	1.4	10.8	22.2	4.8
Using email	*n* = 38	*n* = 74	*n* = 67	*n* = 18	*n* = 21
No	39.5	59.5	35.8	50.0	14.3
Yes	55.3	40.5	52.2	27.8	66.7
Don't know	5.3	0.0	11.9	22.2	19.0
Locating information on the Internet	*n* = 38	*n* = 76	*n* = 66	*n* = 18	*n* = 21
No	39.5	38.2	30.3	33.3	14.3
Yes	50.0	56.6	56.1	50.0	66.7
Don't know	10.5	5.3	13.6	16.7	19.0
Using word processing programs	*n* = 38	*n* = 77	*n* = 68	*n* = 17	*n* = 21
No	28.9	24.7	17.6	23.5	9.5
Yes	65.8	72.7	67.6	64.7	71.4
Don't know	5.3	2.6	14.7	11.8	19.0
Using spreadsheet programs	*n* = 38	*n* = 74	*n* = 69	*n* = 18	*n* = 21
No	13.2	23.0	15.9	22.2	0.0
Yes	76.3	74.3	69.6	72.2	76.2
Don't know	10.5	2.7	14.5	5.6	23.8
Taking a class online	*n* = 38	*n* = 74	*n* = 68	*n* = 18	*n* = 21
No	18.4	35.1	16.2	27.8	0.0
Yes	60.5	60.8	64.7	55.6	76.2
Don't know	21.1	4.1	19.1	16.7	23.8
Downloading a form	*n* = 38	*n* = 71	*n* = 69	*n* = 17	*n* = 21
No	21.1	39.4	23.2	47.1	0.0
Yes	68.4	59.2	62.3	47.1	76.2
Don't know	10.5	1.4	14.5	5.9	23.8
Uploading photographs	*n* = 37	*n* = 78	*n* = 68	*n* = 18	*n* = 21
No	13.5	24.4	27.9	38.9	0.0
Yes	73.0	73.1	57.4	50.0	76.2
Don't know	13.5	2.6	14.7	11.1	23.8

Appendix B, Table 6. Civic 2.0, Skills (continued)

Please tell me if you would need assistance doing the following computer task:	Bickerdike	GAGDC	SWOP	Englewood	TRP
Creating a website	*n* = 38	*n* = 78	*n* = 69	*n* = 18	*n* = 21
No	5.3	9.0	17.4	11.1	4.8
Yes	73.7	88.5	66.7	83.3	76.2
Don't know	21.1	2.6	15.9	5.6	19.0
Using Social Networking sites (Facebook, Myspace, etc.)	*n* = 38	*n* = 76	*n* = 67	*n* = 18	*n* = 21
No	15.8	35.5	26.9	27.8	4.8
Yes	57.9	60.5	53.7	61.1	71.4
Don't know	26.3	3.9	19.4	11.1	23.8
Downloading music	*n* = 38	*n* = 79	*n* = 69	*n* = 18	*n* = 21
No	13.2	27.8	20.3	38.9	0.0
Yes	63.2	69.6	59.4	44.4	76.2
Don't know	23.7	2.5	20.3	16.7	23.8

APPENDIX C. INTERVIEW QUESTIONS

Citywide Partners (Phone Interviews)

1. So far, are there any changes have you made in implementing the program, compared to the grant proposal and master plan? If so, what were they and why did you make those changes?
2. What challenges have you encountered in implementation? What would be needed to overcome these challenges?
3. Do you feel that you have adequate resources for the task? If not, what other resources do you need?
4. What has been successful so far? Why has that worked well?
5. What has not been successful so far? Why not?
6. Are there any particular lessons you feel that you have learned from implementation so far?
7. What advice would you give to others if they were setting out to undertake a similar digital inclusion initiative?

Smart Managers/Technology Organizers (Phone Interviews)

1. What outreach and awareness activities are being conducted? Are there specific types of residents that are being targeted?
2. Let me ask about the organizations you are working with—
   A. Which organizations are participating as partners?
   B. What commitments have they made, and what activities are they carrying out?
   C. Are there others that you would like to see participate, who haven't? Who are they?
   D. Are there types of organizations or expertise that are needed and just aren't present in the community? What are they?
   E. Are there any issues that make collaboration a challenge? If so, please describe them.
1. What other activities have you initiated since our last discussion?
2. So far, are there any changes have you made in implementing the program, compared to the plan? If so, what were they and why did you make those changes?
3. What challenges have you encountered in implementation? What would be needed to overcome these challenges?
   A. Do you feel that you have adequate resources for the task? If not, what other resources do you need?
   B. Do you feel that the goals for the project are clear? Are they agreed upon by all program participants?
   C. Do you feel that the action plans have been helpful? Why or why not?
6. What has been successful so far? Why has that worked well?
7. What has not been successful so far? Why not?
8. Are there any particular lessons you feel that you have learned from implementation so far?

9. What advice would you give to another community organization if they were setting out to undertake a digital inclusion initiative?

FamilyNet Centers (Site Visits)

1. So far, are there any changes you have made in implementing the program, compared to the plan for the FamilyNet Centers? If so, what were they, and why did you make those changes?
2. Do you feel that you have adequate staff for the task? Has there been adequate training for staff? Why or why not?
3. Has the equipment for the program been adequate? Why or why not?
4. Have the facilities been sufficient for the program goals? Why or why not?
5. Have you received sufficient support from LISC ? From the Smart Communities staff for your area? Why or why not?
6. Do you feel that the curriculum and courses are sufficient? Why or why not? Have you made any changes?
7. Are there any other challenges have you encountered in implementation? What would be needed to overcome these challenges?
8. Who in your community is most likely to take the Every Day Digital classes? Or, to use the drop in services? Are these the residents you expected to participate?
9. What are the reasons that some people don't take all three courses?
10. Are there any organizations or residents in the community you'd like to see involved in your program who haven't been involved?
11. What has surprised you about implementing the program, if anything?
12. What has been successful so far? Why has that worked well?
13. What has not been successful so far? Why not?
14. Are there particular lessons you feel that you have learned from implementation so far?
15. Have you had a chance to share lessons with the other FamilyNet Centers?
16. What advice would you give to another community organization starting a program like this?

Business Resource Networks (Site Visits)

1. So far, are there any changes you have made in implementing the program, compared to the plan for the Business Resource Networks? If so, what were they, and why did you make those changes?
2. Do you feel that you have adequate staff for the task? Has there been adequate training for staff? Why or why not?
3. Has the equipment for the program been adequate? Why or why not?
4. Have the facilities been sufficient for the program goals? Why or why not?
5. Have you received sufficient support from LISC ? From the Smart Communities staff for your area? Why or why not?
6. Do you feel that the courses and services for referral are sufficient? Why or why not?

7. Are there any other challenges have you encountered in implementation? What would be needed to overcome these challenges?
8. Who in your community is most likely to come in and take advantage of your services? Are these the businesses you expected to participate?
9. Are there any organizations or businesses in the community you'd like to see involved in your program who haven't been involved?
10. What has surprised you about implementing the program, if anything?
11. What has been successful so far? Why has that worked well?
12. What has not been successful so far? Why not?
13. Are there particular lessons you feel that you have learned from implementation so far?
14. Have you had a chance to share lessons with the other Business Resource Networks?
15. What advice would you give to another community organization starting a program like this?

Portal Managers (Phone Interviews)

1. What are your duties as portal manager?
2. Do you feel that you have adequate resources for the task? If not, what other resources do you need?
3. What are the positions of the other Smart Communities staff you work with? In what ways have you worked together?
4. What challenges have you encountered in implementation? What would be needed to overcome these challenges?
5. How often is the portal updated?
6. What organizations and residents have contributed content?
7. Are there any types of content or types of organizations that you haven't gotten that you would like to include in the portal?
8. Do you feel that the goals for the portal are clear? [Probe—What are the particular goals for the portal in this community?]
9. What has been successful so far? Why has that worked well?
10. What has not been successful so far? Why not?
11. Are there any particular lessons you have learned from implementation so far?
12. Have you had a chance to share lessons with other Smart Communities portal managers?
13. What advice would you give to another community organization if they were setting out to create a community portal?