BUILDING COMMUNITY CAPACITY TO USE INFORMATION:

Four Training Options From the Experience Of The National Neighborhood Indicators Partnership

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**Introduction: Training Options for Building Community Capacity to Use Information**

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Training Options for Building Community Capacity to Use Information

Introduction

The National Neighborhood Indicators Project (NNIP) is a collaborative partnership of 12 cities and the Urban Institute to assemble and apply current and reliable information about conditions and trends in urban neighborhoods. Founded in 1995, these cities came together as a result of their commitment to rebuilding inner-city neighborhoods in their respective cities, their belief that those strategies that empower and enable residents and stakeholders within those distressed communities hold the most promise for sustainable change, and their use of neighborhood level data as a powerful community building tool. NNIP has four overlapping purposes:

- To advance the use of information in community capacity building;
- To use information to enhance local policy making;
- To build the National Neighborhood Data System (NNDS) and analyze neighborhood change; and
- To disseminate and help other cities build neighborhood indicators capacity.

This report addresses purpose #1: advancing the use of information in community capacity building. In each of our cities, NNIP partner organizations work to move the possession and interpretation of neighborhood data into the hands of those who live and work in neighborhoods and to help neighborhood residents and other community stakeholders develop the skills to use data for community change.

NNIP partners supply data to a wide variety of users -- elected officials, non-profit organizations, media, neighborhood associations, and residents. As diverse as the users, so too are their skills. Partner organizations report dramatic differences in data knowledge among their users. Some do not know what data to ask for. They need help even articulating a request for data. Others haven’t the skill to analyze the data. A teen birth rate is worthless if you don’t understand what it is, what it means, or why it is used. Still others have no idea what to do with the data once in hand. How do you explain it to others? How much will the data buy you in getting across your point of view? These skills -- understanding what data you need, knowing how to analyze the data, and being able to use data for some end -- vary considerably across all types of data users. In community, understanding how to use data can be an even larger problem than understanding how to get data.

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1 The original six partner organizations were the Atlanta Project; the Boston Foundation; Center for Urban Poverty and Social Change, Case Western Reserve University, Cleveland; The Piton Foundation, Denver; Urban Strategies Council, Oakland; and The Providence Plan. In 1997, these organizations were joined by DC Agenda in Washington, DC and in 1999, five new organizations joined NNIP: Baltimore Neighborhood Indicators Alliance; United Way Community Service Council, Indianapolis; Florida Department of Children and Families, Miami; The Nonprofit Center of Milwaukee; and the Reinvestment Fund, Philadelphia.
In response, a number of NNIP partners have developed and continue to test different training programs to help people learn how to analyze and use data. This report will introduce four types of training models employed in the cities:

1. Training community stakeholders to use specific data bases;
2. Training community stakeholders to apply technology in analyzing data (e.g., geographic information systems for mapping, graphical interfaces, database technology, spreadsheets);
3. Training community stakeholders to use data as part of a comprehensive leadership development program; and
4. Training community stakeholders in the hands-on use of data in specific applications.

Each of these training models will be explored in the remainder of this report. For each, a case study describing how a particular model is employed in one of the NNIP partner cities is highlighted. In all of the examples used, it is important to understand that the case study discussions are limited to just those forms and processes that help describe the particular type of training highlighted in that chapter. This report does not attempt to capture the entire range of efforts these and other NNIP partners undertake to help build the skills of community stakeholders in their cities to use data for social change. For more information about these or other capacity building efforts, please contact the NNIP partners directly.
Chapter 1: Training Community Stakeholders to Use Specific Databases

Democratizing data, a key philosophy of NNIP, is not as simple as making data available. Without access, people not only did not have data, they did not have the habit or practice of using data. As NNIP partners developed their databases rich in previously unavailable data at a neighborhood level – demographic, housing, education, economic and the like – it became necessary to also develop processes to help potential users learn how to use these new data. Data had to be explained; where it came from and how it could be used. Users needed training in simple but common applications such as selecting geography, computing a rate, or tracking change over time.

Perhaps the first and longest lasting of all the NNIP training options developed to help build community capacity to use data is training people to use specific databases now available to larger and larger audiences of data users. Generally, this training occurs in a group setting, often made available whenever the data are released or updated. Early on, data were released in hard copy or on diskette but increasingly data are being made available on CD and via the Internet. The training utilizes whatever forum in which the data are presented. Thus, for data available on the Internet, the training is typically held in a computer lab with the class working on the actual database while online.

The case study highlighted in this chapter began with a previous non-Internet version of the database. However, in its’ newest iteration, the database and the training are provided online.

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<th>ADVANTAGES</th>
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<tr>
<td>Training can accommodate a diverse audience of participants.</td>
<td>Computer literacy and number of participants dictate how much can be achieved.</td>
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<td>Can reach significant numbers of people with this training option but more in-depth training should target smaller numbers.</td>
<td>Currently, training is about data in the abstract and lacks specific context for the use of the data.</td>
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<td>On-site demonstrations and training sessions are possible with Internet access.</td>
<td>Computer lab may be inaccessible to some community stakeholders.</td>
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<td>Provides a link from the University to the community.</td>
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Case Study – Cleveland Area Network on Data and Organizing (CAN DO)

In January 1990, the Center on Urban Poverty and Social Change at Case Western Reserve University released, An Analysis of Poverty and Related Conditions in Cleveland Area Neighborhoods. This report provided data from a variety of sources including the census, vital statistics, public assistance counts, crime data, and property data. Data from such disparate sources had not been available to the public at a census tract or neighborhood level before this report. The release of this publication resulted in numerous special requests from neighborhood organizations, social service agencies, planning agencies and academics to make available detailed profiles of specific
neighborhoods using data compiled for the “Poverty Report”. The overwhelming response for these profiles indicated a need for timely and accurate data about the social, demographic and economic characteristics of the neighborhoods and municipalities in Cuyahoga County. The profiles were provided in fixed paper copy format that limited the amount and types of information that could be made available to the user. In addition, a substantial amount of staff time and cost went into preparing profiles with data that would soon be obsolete.

In an effort to make the data more easily accessible and allow the user to access data to meet their specific needs, CAN DO was created. CAN DO began as a text-based, menu driven database accessible by direct-dial modem. CAN DO was conceptualized in 1991 and introduced to the public in 1995. Potential users of CAN DO were informed about the database and invited to attend a training session. Training in the use of CAN DO was held two Fridays a month based on need in the university computer lab. Each session lasted for approximately two hours. The hands-on training sessions described CAN DO – the background, data available, uses of the data – after which users would get into the database and go through several examples of extracting and downloading the data. If time and computer literacy of participants permitted, bringing data into EXCEL to make charts and graphs was also explored in training. Training manuals were provided to all participants for a small fee. On-site training sessions were also available for organizations with the appropriate technology.

Since the introduction of CAN DO, the Center has trained approximately 800 people in its’ use. The people taking advantage of the training have been diverse, the majority from various agencies in the Cleveland area but about 25 percent neighborhood residents and representatives of grassroots community organizations.

In early 1999, the Center converted CAN DO to a web-based database allowing for easier access. The user needs only Internet access and the ability to work in a Windows environment and with a mouse. In addition to creating data tables, the web-based version allows users to create, view and download customized maps for printing or inclusion in other software packages. Training is still available with CAN DO on an as needed basis but the ease of access on the Internet has changed training needs. The Center is more frequently asked to provide demonstrations than training. When training is requested, it is similar to that provided previously. In addition to a walk through CAN DO, training on the web-based version includes reviewing the data documentation that is also online including information on data sources and citations, data precautions, data definitions and how indicators are calculated, links to related web sites, and links to related Poverty Center reports.

The Center has tracked the usage of CAN DO over time. CAN DO usage reached a monthly record 1412 ‘hits’ in April 1999. The Center has also implemented a broadcast only list server to keep organizations informed of updates to CAN DO. Over the years the Center has elicited feedback from CAN DO users through surveys both written and over the phone. In general, the feedback from CAN DO is positive. The conversion to the web-based system eliminated what many users found most difficult – downloading the
data to their computers. Most agency staff find it extremely useful to access data from differing sources in one database. The ability to extract in minutes is something agency staffs appreciate due to time constraints. Most users are extracting data for use in proposals they are preparing or to document needs in their service area.

**Lessons Learned**

1. Continuous communication with the community about CAN DO and its potential uses is of major importance. The Center understands that it needs to be more proactive in informing the community about this local resource and its usefulness in planning and community development efforts.
2. Training is the beginning, not the extent, of the relationship. The Center is frequently called upon to provide technical assistance to individuals, sometimes years after they have been through the training.
3. The best source of feedback is the users of the data who have provided very helpful suggestions about improvements and additions to the CAN DO system. However, this feedback needs to be elicited and collected in a more systematic way.

**Plans for the Future**

The Center is in the early stage of developing a one-day continuing education seminar that would incorporate part of a Needs Assessment and Program Evaluation course and CAN DO into a more in-depth training. A more in-depth training would work for those who want to know more about applying and using the data to address a particular issue such as conducting a needs assessment in their neighborhood or developing a program. However, the Center would continue to provide the more general training and demonstrations. In addition, we intend to develop an online tutorial to assist users in constructing and extracting indicators from CAN DO that address and identify specific community issues and needs. While Cleveland’s neighborhoods are the primary focus of CAN DO, the Center has added census, vital statistics and HMDA² for the eight-county Cleveland-Akron-Lorain Consolidated Metropolitan Statistical Area (CMSA) and plans to acquire additional administrative data for these counties. The expansion of the CAN DO database into a more regional information system will assist the Center and the community in gaining a deeper understanding of neighborhood economies and economic opportunities in Northeast Ohio.

The CAN DO system is an evolving one. The Center continues to explore ways to improve the interface to meet the needs of our users. It is our intention to incorporate an online survey enabling CAN DO users to provide us feedback on the usefulness of the database, information on how they are using the data, and any improvement suggestions. A Communications Plan is being developed for the Center that will include specific ways in which we can interact more directly with CAN DO users. The plan will also include ways to more effectively disseminate information about the training, updates and improvements to the CAN DO system to the community.

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² Home Mortgage Disclosure Act.
Chapter 2: Training Community Stakeholders to Apply Technology in Analyzing Data

Technology and the analytical tools to bring data to life is a crucial aspect of community use of data. All of the NNIP partners employ mapping software that allows a visual depiction of data. We are convinced that, “pictures are worth a thousand words” (or numbers in this instance). But whether the tool needed is one that allows for simple analysis of data (for example, to produce a rate or compute change), or creates a graphic, or produces a map, technology is essential.

The training model highlighted in this chapter recognizes that suitable hardware and software is an obstacle to the use of information for most community-based organizations. In attempts to put not just data but the technologies to use data into the hands of community users, NNIP partners are rethinking the “capacities” that need to be built and are exploring new partnerships in the process. Training, in this instance, is less on the data than on the manipulation of the data through specific software applications. In the case study highlighted here, software was specifically developed to simplify community use of the software and the database. The software developer, in collaboration with the BCFD Governance Group\(^3\), then offered a series of training options to help users become more familiar with both the data and the technological tools made available for its analysis and use. The case illustrates the evolutionary nature of technology and data partnerships as they seek to address community needs.

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<td>Works well with non-profits and other organizations with access to and comfort with appropriate computer hardware/software.</td>
<td>Requires that user have access to computer or computerized training facilities for hands-on use of database.</td>
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<td>Builds technological skills supportive of data analysis.</td>
<td>Specific applications of technology must follow training or skills are quickly lost.</td>
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<td>Training works best when connected to release of new or updated data or a particular organization’s project.</td>
<td>Training doesn’t work well if participants are unfamiliar or uncomfortable with computers.</td>
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<td>Training resources (staff, time, funds) can be easily anticipated compared to some other training options.</td>
<td>Users must invest time and patience in learning new software and dealing with glitches.</td>
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<td>Training and analytical tools must be constantly updated to keep pace with changes in technology.</td>
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\(^3\) Current members of the BCFD Governance Group include: the Action for Boston Community Development; the Boston Community Building Network at the Boston Foundation; Codman Square Health Center; EQUIP, Associated Day Care Services; Family Advocate Program, Boston Medical Center; Full Circle Technologies; Harvard Graduate School of Design; Information Services, Northeastern University; Metropolitan Area Planning Council, the New England Foundation for the Arts; and the United Way of Massachusetts Bay. Other organizations and individuals are involved through the BCFD committees.
Case Study – Boston Children and Families Database Project

The Boston Children and Families Database (BCFD) is the result of a collaborative effort among the Boston Community Building Network at the Boston Foundation, the Metropolitan Area Planning Council, Northeastern University, and other public agencies and community-based organizations. Initiated and funded by the Boston Foundation, it is designed to provide a picture of neighborhood conditions, to allow for measurement of community change over time, and to strengthen the community’s capacity to analyze the impact of public policies and community-based initiatives in the lives of Boston’s children and families.

Launched in 1991, the BCFD was first disseminated in 1994, originally on diskettes and more recently on CD. Updated roughly every two years, the BCFD is distributed to community agencies, neighborhood coalitions, public agencies, foundations and others and has become an integral part of Boston decision-making.

From the beginning, the collaborative attempted to address the connection between the data and the tools necessary to analyze and use the data. The original database was developed utilizing a spreadsheet format based on the assumption that everyone could access and use spreadsheets. Lotus Development Corporation, a prominent local vendor, had an active software donation program for community-based organizations through its Philanthropy Program. However, while access was easier, use of the technology proved to be a problem, particularly for many community-based organizations unfamiliar with database use and analysis. The BCFD spreadsheets with many variables across the top and hundreds of census tracts or census block groups down the side proved to be too cumbersome for most community users.

The Lotus Development Corporation donated a software developer to work with the collaborative to develop a user-friendly interface to the database – the Report Assistant. The Report Assistant allows database users to access, combine, extract, save and print information in the BCFD without needing a deep understanding of Lotus 1-2-3. Lotus also facilitated local use of the BCFD by providing free access to its software.

Report Assistant was released in 1997, along with a new version of BCFD, at a conference that included orientation in the use of both the database and the software. Accompanying the disks were a User’s Guide and a set of paper maps that allowed a user to identify the census tracts or block groups in his/her service area as defined by the user. The release of the data was followed by a series of trainings to allow interested individuals and agencies to obtain more extensive training. A collaboration of organizations, coordinated by the Community Action Information Network (CAIN), developed and implemented the training series, which included: 1) Using the Report Assistant, 2) Data Analysis, 3) Using the U.S. Census, 4) Understanding Primary Data Collection, 5) Mapping, and 6) Data Presentation.

Lotus developed the Report Assistant and Data Presentation curricula and recruited employees to perform the trainings. These two classes were initially offered at the Lotus
Development Corporation training facilities, but were later offered in local community-based organizations and technology centers as well. To date, about 120 persons have been trained in the use of the Report Assistant.

The collaborative became increasingly convinced of the power of mapping in the hands of community stakeholders. A Mapping Subcommittee was formed and several training workshops were held on the use of mapping in community-based organizing, advocacy and development. Because of its low cost and user-friendliness, the BCFD encouraged the U.S. Department of Housing and Urban Development (HUD) to target its Community 2020 software product (created by a local vendor, the Caliper Corporation) to community-based organizations. In June 1999, the BCFD project partnered with HUD and Northeastern University to provide training in Community 2020 to 55 people, primarily representatives of community-based organizations.

A number of events have shaped the collaborative’s thinking about its efforts. Changes in the technology marketplace resulted in more community-based agencies making decisions to utilize Microsoft products. Thus, access to Lotus 1-2-3, necessary to use the Report Assistant program, became a barrier as more agencies removed Lotus software from their computers. Even if the data analysis was done in Microsoft Excel, the report had to first be generated in Lotus 1-2-3 and then converted to Excel. IBM purchased Lotus, and key staff that had been so instrumental to the partnership left the company or became less available to work with the collaborative. Mapping efforts were stifled as the use of the Report Assistant required that the database be formatted in a way that was not compatible with mapping software applications. Furthermore, the U.S. Department of Housing and Urban Development ended its collaboration with Caliper and began working with the ESRI Corporation, a nationally prominent vendor. The Community 2020 product is undergoing some update and revision and it is not clear to what extent HUD will continue to provide user support/training to utilize it.

In February 2000, the fourth release of the Boston Children and Families Database was available for the first time on CD. The new release and all previous versions of the database were presented in dBASE format as well as Lotus spreadsheet format. This allowed users to import the data directly into Microsoft Excel, or any other spreadsheet or database program. It also allowed users to import data into mapping software programs for users proficient in the use of these programs. An HTML “mapping teaser” was provided for users unfamiliar with the power of mapping.

Since most organizations used Microsoft Office products, the CD provided a new database interface, the Data Extractor, based on the Microsoft Access Database, 1997 version. The Report Assistant was not included on the CD. A new web-based digitized mapping program takes the place of the set of the paper maps given to users to identify the census tracts/block groups in their service area. Supporting documents, such as the User’s Guide and information on training, were included on the CD as well.

\[4\] The Data Extractor was created pro bono by Doug Denatale of the New England Foundation for the Arts.
As with previous versions, the new CD was released at a day long conference “Using Data to Drive Community Change”, which featured a number of workshops on using data, developing indicators, collecting your own data; presenting data mapping, and using data to drive community change. Training sessions continue to be held, at the Boston Foundation, in community-based technology centers and within individual organizations. The BCFD project has attempted to broaden training options by offering on-site orientations, hands-on training and project-based technical assistance. The Metropolitan Area Planning Council now coordinates training.

**Lessons Learned**

1. Integrate the data and the technology into bundled applications. In one CD, users have access to data, multiple forms of analytical and presentation software, and information about available training opportunities.

2. Keep on eye on the present and another on the future. The key is not to play to the lowest common technology denominator, but rather to create strategies to raise everyone to the next highest denominator while also creating technologies that level the current playing field.

3. Stay abreast of new technologies and monitor how these technologies are being utilized in the community and by which groups.5

4. Create multiple analysis options. Single data analysis options (e.g., spreadsheets) are too limiting. Community users want, need and increasingly expect to have access to a range of options (database, graphics, reports, maps) from which to choose to achieve their purposes.

5. Focus on project applications. Use of specific examples in the context of data and technology training aid in the grasp of the software application and the understanding of how data can be used.

6. Collaborate to innovate. The involvement in the BCFD of academic institutions, technology firms and public agencies along with community-based organizations has helped the project to access resources and expertise in the use of data and various technologies. These connections have kept the project informed of new trends and expanded capacity to implement the project beyond what is available by funding alone.

**Plans for the Future**

Building on the lessons learned above, future plans for the BCFD project envision web-based access, delivery, analysis and training options. Several organizations are already developing web-based versions of the database. The Harvard Map Collection, a BCFD collaborating partner, for example, is developing a Boston Atlas that will allow interactive mapping of the BCFD on the Web. Other organizations such as the Boston Foundation, the Metropolitan Area Planning Council, and Northeastern University are

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5 The web-based digitized browser program was created to work with Internet Explorer version 4. Technology programs throughout Boston, however, have been significantly upgraded and feature, among other things, Microsoft Office 2000, Internet Explorer 5 or higher and high-speed Internet connections. The software developer is now correcting this problem by upgrading the digitized map program. The same problem occurred with the Data Extractor program and a new version compatible with Access, version 2000 has been developed.
also planning to present versions of the database targeted to different constituencies and uses.

Northeastern University, in collaboration with the BCFD project, has presented an innovative Greater Boston Data Laboratory proposal for the access and dissemination of the microdata, or individual level data, for the datasets in the BCFD. The addition of this resource will expand the use of data for community planning, advocacy, research and public policy analysis. Technology will play an important role in this new initiative, especially in maintaining privacy and confidentiality in its development, but also creating user-friendly mechanisms to access the microdata and training to use it. Funding is currently being sought for this proposal.

The BCFD plans to continue its focus on project-based application of data. This perspective will continue to be reflected in the training options offered. A soon-to-be launched on-line User’s Group will also serve as a source of and forum for dissemination of case examples of how organizations are using the BCFD to drive community change.

The Annie E. Casey Foundation’s Making Connections Initiative is one way this perspective of using data to drive community change is being actualized. The Boston Community Building Network at the Boston Foundation is the lead agency of the Local Learning Partnership (LLP) associated with this initiative. The LLP is working to create a base-line of information about the targeted neighborhood that can be used by the Neighborhood-Based Team (composed of residents and CBOs) to develop priorities and strategies for family strengthening and neighborhood transformation. Areas of work include:

- a statistical profile of the neighborhood, using the BCFD and other quantitative data along with an assessment of data use by community-based organizations in the neighborhood;
- a history of the neighborhood from the perspective of residents and organizations and including a compiled annotated bibliography of historical resources about the neighborhood;
- documentation of the family perspective through interviews and focus groups with residents, particularly those unattached to any organization, and utilizing community residents in this work;
- documentation of the Neighborhood-Based Team’s process in organizing families and developing priorities/strategies for the Making Connections initiative;
- technology planning to help the neighborhood assess its technology needs and resources and make recommendations for addressing those needs, including the development of a Making Connections website; and
- other data and technology efforts that provide information, build capacity and support the efforts of the Neighborhood-Based Team.
Chapter 3: Training Community Stakeholders to Use Data as One Part of a Comprehensive Leadership Development Program

This version of building capacity to use data assumes there are a variety of skills needed by stakeholders to effect change in their community. Information access and use is imbedded in a larger curriculum of skill-building opportunities taught to a group of people who come to know and support each other throughout the leadership development process. In addition to learning how to access data, community residents and other stakeholders may need to know how to access resources, to solve problems and resolve conflict, to speak publicly and communicate with impact. Leadership programs frequently go way beyond those skills helping participants also gain the self-confidence and team-building essential to their future success.

The leadership development program option is best used when training residents and other individuals working at a grassroots level, particularly in low-income or disenfranchised communities. The opportunity to develop a shared vision for their community imbues participants not only with the skills necessary to act out that vision but a sense of ownership and purpose essential to community change. In the case study that follows, participants are neighbors within small geographic communities who either have known or will know each other over long periods of time. Their children attend the same schools. They share the same community concerns and experience the same community challenges.

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<td>Works well with residents and grassroots constituencies.</td>
<td>Requires greater resources and commitment of time; program extends over period of weeks, not hours.</td>
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<tr>
<td>Builds other skills supportive of data access and use.</td>
<td>Given range of topics covered, less classroom time devoted to data access and use.</td>
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<tr>
<td>Supports community change efforts rather than just data use.</td>
<td>Can’t assume any basic skills present.</td>
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<td>Creates connections and relationships in community.</td>
<td>Must be highly flexible, adapting training and materials to be culturally sensitive and relevant to participants.</td>
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Case Study – Neighborhood Facts and The Neighborhood Leadership Program in Denver

The Piton Foundation launched Neighborhood Facts, a clearinghouse and dissemination strategy for information about Denver neighborhoods, in 1991. Initially, Neighborhood Facts focused on decennial census information supplemented by administrative data. As census data became dated and administrative data increasingly important to describe neighborhood changes, Neighborhood Facts worked to increase its access to administrative data and to place those data into the hands of those most affected by community change – residents, particularly of low-income neighborhoods.
Neighborhood data were initially made available in a variety of written forms (major reports, periodic fact sheets, strategic partnerships with a major Denver newspaper) and through the provision of hands-on technical assistance to community users. Staff were ‘on-call’ and responded to specific data collection, analysis and presentation needs at the request of community users. In this way data and technical assistance in the strategic use of data were provided informally and individually to close to 200 individuals, groups, and organizations.

Around the same time that Neighborhood Facts was initiated, The Piton Foundation and its neighborhood advisory groups established the Neighborhood Leadership Program. The mission of the program is to nurture and develop local citizen leaders who will help their communities address the difficult issues facing inner-city neighborhoods today. The program operates from the premise that leadership skills can and should be developed among those who traditionally have been the least involved in shaping the future of their communities – the residents of low-income neighborhoods.

Leadership training programs currently operate in several low-income neighborhoods across Denver. While the curriculum differs slightly between the programs, there are common themes including: communication, problem solving, conflict resolution, resource development, meeting management, public speaking AND information access. The six-month programs consist of a variety of learning experiences ranging from lectures and discussions to structured activities and experiential learning. There is no fee for participation other than an on-going commitment to work to build strong communities.

Since 1990, the leadership programs have graduated almost 200 neighborhood residents. Most have left the programs with new confidence in their own abilities and increased knowledge and commitment for tackling community challenges. Graduates serve on resident boards and neighborhood task forces, are actively involved in school reform efforts, write proposals, work on political campaigns, organize blocks, labor in community gardens and establish or assist in a range of clubs and associations for youth.

**Use of Information for Community Change Curriculum**

Each module of the leadership curriculum is offered by different providers at the direction of resident committees and boards that help direct the leadership programs in their communities. The Piton Foundation continues to fund the various programs and staff facilitate the module on information access and use in three of the four programs.6

The Neighborhood Leadership Program curriculum on information access has changed over time. Originally envisioned as a combined curriculum in *Resource Development and Information Access*, the training was designed to provide participants with information on how to identify needs and establish resources to fulfill those needs. The original curriculum included: 1) utilizing technology and computer systems; 2) becoming familiar with local, city and state resources; 3) developing a speaker’s bureau; 4) building a list of resources for funding; 5) accessing the media; 6) identifying

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6 The fourth neighborhood leadership program is a modified program for youth.
The curriculum has changed considerably from that early approach for a number of reasons: the curriculum attempted to do too much; resource development and information access, while complimentary topics, did not necessarily belong in the same curriculum module; and some of the topics and skills were better suited to a classroom model than others. As a result, the module changed into its’ current focus, Use of Information for Community Change, and is now broken into three parts:

1) Classroom lecture and discussion on how to identify your information needs:
   ♦ identifying the problem or opportunity;
   ♦ verifying the information: informing yourself about the scope, location, causes and effects;
   ♦ identifying what needs to change;
   ♦ identifying who else will be or needs to be involved and their effect on your informational decisions; and
   ♦ identifying the informational and communications resources needed to have an impact.

2) This lecture and discussion is followed by role plays in which participants are led through an informational problem-solving scenario developed from actual case studies of past leadership program participants on a variety of topics (e.g., public education, housing, crime and safety, etc.). These case studies are designed to help participants practice using information to identify community issues, understand their information needs, and understand the appropriate uses of information to meet those needs.

3) Following the formal training, leadership program graduates are offered ongoing technical support as they continue to assume leadership roles in community. Leadership program graduates are given first priority in the technical assistance that continues to be made available through Neighborhood Facts. Foundation staff work with graduates, helping them locate, collect, analyze and communicate information to effect change in community.

In 1998, the foundation launched its website including Neighborhood Facts (www.piton.org/facts.html), an annually updated database of indicators available in a variety of formats (neighborhood data summaries or searchable database, neighborhood asset and thematic maps, neighborhood histories, and charts and graphs). Unique visits to the website have increased steadily from an average 370 visits per month in the first six months of operation (March – August 1998) to an average 1,590 unique visits (amounting to an average 27,558 ‘hits’ per month) during the same six month period in 2000. Training and on-going technical assistance to participants in the Neighborhood Leadership Program and others increasingly take advantage of this important resource.

Lessons Learned
1. Data intermediaries cannot sit back and wait for potential community data users, particularly residents and grassroots community organizations, to come to them for help. It is important to have a presence in community, to be aware of the issues
driving the community’s change agenda, and to be proactive in supplying the data and support needed by community to affect that agenda.

2. Training in use of data, as with other leadership skills, can be abstract to program participants. The distance between learning skills and applying skills can be immense and daunting for program participants. Leadership programs need to be available to assist residents as they apply those skills to real issues and opportunities in community.

3. Relationships are essential. As much if not more effort needs to go into establishing and maintaining relationships with residents and community stakeholders as goes into even the best training options.

4. Residents and community stakeholders are in the midst of it everyday. Don’t expect them to leave the issues confronting their families and neighbors at the door. When you invite or are invited by residents, accept all that they bring. Be prepared but be flexible.

5. Residents are not only distanced from action by an absence of quality, up-to-date information about their own communities but also by the absence of technologies necessary to effect change in this increasingly technologically-based society. Programs need to bridge the gap in leadership skills, data as well as technology.

**Plans for the Future**

The Piton Foundation is applying its lessons to a new opportunity made available by the Annie E. Casey Foundation’s Making Connections Initiative. Making Connections is the centerpiece of the Annie E. Casey Foundation’s multi-faceted effort in 22 cities to improve the life chances of vulnerable children by helping to strengthen their families and neighborhoods by promoting programs, activities, and policies that contribute to strong families. In each city, the Foundation is identifying a “local learning partner” to strengthen the capacity of the community to gather and use data to monitor neighborhood and family conditions, set priorities about the use of community resources, and advocate for change. The Piton Foundation is the local learning partner in Denver.

Neighborhood Learning Partnerships consisting entirely of residents are taking on responsibility for data collection and analysis, training and other efforts to build the capacity of residents to collect and use data, and digital divide challenges in their communities. Their initial challenge in tackling the digital divide in their neighborhoods is the development of a neighborhood specific website, initially to be developed in both English and Spanish, that will include interactive databases of neighborhood indicators, community resources, and calendar of events as well as online newsletters and links to community and foundation partners and other relevant sites.

The Neighborhood Learning Partnership works closely with community organizers and other stakeholders to provide an informational response to community identified issues and to create a community of learners. Supported in their efforts by a resource team of data providers, researchers, communications experts, policy analysts and others, over time the Neighborhood Learning Partnership will work to build their own capacity as well as the capacity of an ever widening circle of residents to collect, disseminate and use data for community change.
Chapter 4: Training Community Stakeholders in the Hands-On Use of Data in Specific Applications

Most training on data is abstract and provided absent a real-life application. While participants in the training or capacity building activity – whatever form it may take – may have real issues they are facing at home in their community, they are left to their own devices to connect whatever training they’ve received to the issue at hand. Increasingly, NNIP partners are attempting to bridge this gap recognizing that unless training is relevant, it can be meaningless in community. Relevant in community means not only that the skills imparted are of real and immediate value but that they are imparted in the real-time context of community life.

This chapter addresses an emerging field of training in the use of data that attempts to build the capacity of community users as they apply those skills in action. This may be as informal as the provision of one-to-one technical assistance or may be an organized project as described in the case study that follows. Regardless, this can be very time intensive in that the community user requires help in applying real data to real issues while learning the informational, technological, analytical and communications skills necessary to effect change. While some of the training can be provided in group settings, building the skills of community data users as they address specific community needs or problems requires much of the capacity building to occur on a case by case basis with a group of people working together on behalf of a common agenda.

This option works best when both the data intermediary and the community agency have dedicated staff with sufficient time to invest. Time must be allotted to see the project – whatever community need or problem that prompted the need for training – through to completion. While the investment in time can be intensive, the pay back is immeasurable. Real relationships are created between organizations and between data providers and data users. Real community assets and capacities are built. And real community needs are addressed.

<table>
<thead>
<tr>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Builds and develops community nonprofit organizations’ capacity to use information and technology more effectively.</td>
<td>Group training only useful as starting point. Regular and customized follow-up and technical assistance needed to apply skills.</td>
</tr>
<tr>
<td>Establishes more ongoing rather than one-time or episodic relationships with community organizations.</td>
<td>Skills become lost as lead person leaves community organization or becomes distracted with other duties.</td>
</tr>
<tr>
<td>Integrates information and action agenda.</td>
<td>Investment on part of data intermediary can be intense. Be prepared.</td>
</tr>
</tbody>
</table>
Case Study – Community Partners in the Information for Change Project in Providence

The Providence Plan initiated its Information for Change project in 1996 to improve the scope, quality, accessibility, and usability of information about Providence’s neighborhoods and residents. The project consolidated all of the organization’s information-related activities (the Providence Neighborhood Fact Book, Geographic Information Systems or GIS, and the Demography Initiative) and worked to enhance the capacity of a growing network of community-based information users known as Community Partners.

The foundation for The Providence Plan’s information initiatives was the 1994 publication of the Providence Neighborhood Fact Book, a compilation of statistics, maps, and descriptive text for each of the city’s neighborhoods. Originally published in hardcopy format and subsequently posted on the organization’s web site, the Fact Book includes summaries of data pertaining to population characteristics, education, housing, employment, income, economic base, public assistance, and crime. The content draws primarily from 1990 census data and is supplemented by locally available administrative data.

Following the publication of the Fact Book, The Providence Plan stepped up its efforts to gather and analyze local administrative data primarily in the areas of public education, health, employment, public assistance, and housing. This new emphasis on analysis, under the banner “Counting On Ourselves: the Providence Demography Initiative”, was initiated by the City Council’s need for better information about the rapidly growing public school population. The goal of the Demography Initiative is to develop a dynamic planning tool that makes use of data from a variety of sources to provide an up-to-date understanding of the forces of population and community change (i.e., build the camera, don’t just take the snapshot), and to make this tool accessible to a variety of information users.

Another major component of The Providence Plan’s strategy to make information more useable was the development, in partnership with the City’s planning department, of a citywide parcel-based Geographic Information System (GIS). The GIS enabled data to be analyzed and presented geographically – property-by-property and neighborhood-by-neighborhood – thereby making information more relevant to community-based organizations.

The final piece of the strategy was to develop community capacity to identify, collect, interpret, and use data to bring about positive change within a particular neighborhood or for a particular segment of the population. The Community Partners initiative was initiated to identify and work with organizations committed to using information as a catalyst for change. The Providence Plan issued a Request for Proposals (RFP) to local nonprofits to participate in the program based on three criteria:

1. Demonstrated commitment to community involvement in community building activities;
2. Commitment to building organizational and community capacity to use information as a tool for community change; and
3. Clear understanding of how the information technology could benefit the organization’s work within the community.

Each applicant was asked to describe their current technology capability, a description of the specific project(s) for which information capacity was needed, and the expected outcomes. Between 1996 and 1999, 14 community-based organizations became Community Partners. These partners are as diverse as the Urban League of Rhode Island, the West Broadway Neighborhood Association, and Keep Providence Beautiful, Inc.

For each partner, The Providence Plan purchased a computer, printer and GIS mapping/database software (Maptitude). Edgenet Internet Services donated unlimited Internet access. The Providence Plan provided the Community Partners with group training sessions on Using Community 2020, Creating and Managing Databases, Using E-Mail and the Internet, and Using Microsoft PowerPoint. Group discussions and learning sessions were also sponsored on vacant and abandoned properties and asset mapping. In addition, The Providence Plan made themselves continuously available for technical assistance to individual Community Partners throughout the initiative.

The RIOP Example

In Community Partners, capacity building and training in the use of information tools (technology, database development, etc.) is provided within the context of addressing a specific community need or problem. Perhaps the best known of the Community Partners projects is the Rhode Island Organizing Project (RIOP), a faith based organizing group with constituents throughout Rhode Island.

In RIOP’s primary neighborhood of Olneyville, abandoned properties have been a major threat to neighborhood stability and health. RIOP originally intended to find residents for the abandoned houses. After examining patterns of ownership, however, RIOP discovered that a number of abandoned buildings belonged to a small number of land speculators abusing a state-sanctioned system for auctioning off the tax titles of owners who were delinquent on their property taxes.

Using GIS software and parcel information provided by The Providence Plan and tax sale data obtained through the hard work of community organizers, RIOP combined property (vacant and abandoned buildings) with ownership (five years of tax sales) information. This enabled them to demonstrate graphically not only which parcels had been sold at tax sales but also how many times the same properties had turned over and who had been purchasing their tax titles. The results were astonishing: some properties had been sold at tax sales as many as four times over a five-year period and a very small number of individuals were doing a large percentage of the buying, some of whom already owed back taxes on other properties. Armed with this information and wielding GIS maps, RIOP lobbied the state legislature and was successful in changing state law to increase accountability of absentee landlords and to give municipalities greater control over tax-delinquent properties.
Using the experience and skills gained in advocating for more community control over tax delinquent properties, RIOP continued applying these capacities in other work including identifying where youth services were needed and assessing the potential impact of a housing tax credit.

Lessons Learned
1. The process of building community capacity to use data in hands on applications is not a casual undertaking. The demands on all parties, both information provider and user, are significant and must be anticipated and planned for in order to build genuine long-term capacity among community-based organizations and resident leadership.
2. Since most community-based organizations are not in the information business, it makes sense to reach out and involve partners that are in that business. In Providence, that means a strong relationship with the public library but other potential partners might include universities, policy analysts or advocates, city planners and others who have access to information, communication or training resources.
3. Capacity-building works better among partners with a shared, focused information need, and perhaps common geography. Rather than proceed with individual strategies focused on the particular issues faced by a particular organization, implement a more collaborative approach among several partners that have come together around a shared planning or problem-solving agenda. By focusing on building organizational capacity to use information at a collective table of partners with a commitment to a shared implementation agenda, the information agenda is explicitly integrated into an action agenda, making both more powerful.
4. Make the information tool as simple as possible. Rather than trying to teach the complexities of GIS mapping, help organizations to ask the right questions, know the usefulness of the tool, design a user interface with simple point and click access, and create a prepackaged set of information products. Organizations will still have the capacity to customize the information to meet more specialized needs but the technology should be invisible to the users. The technical is a means to the end and not the end itself.
5. Despite the call for simplicity above, commit to cutting edge approaches to technology, software and information management systems, communication and distribution systems, etc. With all the talk about the “digital divide”, the role of building capacity must include “smart-up” strategies to build the information and technical capacity of community based organizations and local residents. Often this commitment to smart-up will result in the development and use of simple but powerful tools that are easily understood and used.

Plans for the Future
The Providence Plan is applying the lessons learned from Community Partners to two new information initiatives in Providence: the Community Opportunity Zone Information Network (COZIN) and the Annie E. Casey Foundation’s Making Connections Initiative.

COZIN is a partnership between The Providence Plan and the Community Opportunity Zone (COZ) Collaborative including the Providence Public Library, Providence School Department, and service providers within Providence’s Enterprise
Community. The COZ Collaborative is developing a comprehensive system for delivering services to residents of the West End/Elmwood neighborhood. COZIN will enable service providers, schools, libraries, residents, and other stakeholders to access information about health, education, and social services offered by collaborative members and outside agencies. COZIN will also provide access to a comprehensive database of community-level information, including neighborhood demographics, public school enrollment, public health statistics, public assistance, economic conditions, and housing and other physical characteristics. Information will be distributed via an Internet-based network accessed through a graphical interface that will enable users to produce maps of geographically based information at the click of a button. Information will be accessible to staff of the partnering organizations, as well as to the general public at COZ provider sites, schools, local branch libraries, and any other computer with Internet access. Specialized training for the information network will be provided in conjunction with the Providence Public Library, building upon computer and Internet training that the library already provides to the public.

In addition, The Providence Plan is the local learning partner for the Annie E. Casey Making Connections Initiative in Providence (see description of Making Connections provided on page 10). Planned activities include development of a community statistical profile, building a comprehensive neighborhood-level database, assessing and filling the information capacity gap (hardware, software, skills) of select community based partners, and generally bringing to bear all the data analysis, mapping, indicator development and capacity building that will be needed by the Providence community to respond to this important opportunity.
Final Thoughts

The case studies highlighted in this report represent five to ten years of experience in and adaptation to the challenge of building community capacity to use data effectively. Other areas ripe for exploration include community production of data and communication of data to other stakeholders. These represent additional capacities perhaps as important to communities as learning how to use the data currently available.

And despite the years of experience in building capacity to use data, very little evaluation has been done of the training models in use. It would in fact be very difficult to do so given how quickly these models change and adapt over time in response to community need. Still, it would be of great help to better document the models in use, how capacity building decisions are being made, and the lessons learned in the process.

Absent that evaluation, however, each of these training options has much to recommend it. They are all targeted though the target may differ. They all meet a specific identified need in the continuum of efforts to build community capacity to use data. And they are all learning. And while each has specific lessons to offer others considering similar efforts in their own communities, cross-model lessons emerged in this analysis that warrant discussion.

1. Current and potential community data users may be limited in their ability to use data effectively but there ends any similarity between them. They come with varying degrees of skill and experience. They represent a broad cross-section of community from individual to institutional, from neighborhood and parent associations to state and local government, from large agencies and small. *No one capacity building approach will ever be able to, on its own, meet the needs of a community of data users.*

2. *Capacity building takes time and commitment and is rarely finished.* Training begets new training ideas. New skills need exercise. Increasingly sophisticated uses of data require increasingly sophisticated skills and tools.

3. We must not “dummy down” to meet the perceived needs of inexperienced data users but rather *“smart up” the technology to provide simple yet advanced applications for community data.* Much more work needs to be done to develop new Internet, mapping, graphical and database technologies capable of meeting the sophisticated needs of community data users.

4. Relevance is key. Whatever training or capacity building strategies are employed, community data users live in real time confronted by real issues. *Provide what is needed when it is needed.*

5. Communities operate relationally. *Capacity building works best among partners with a shared vision or common need* committed to the same community whether geographically or membership defined.
Appendices

Cleveland – Training Community Stakeholders to Use Specific Databases
Cleveland Area Network on Data and Organizing
Accessing the Web-Based CAN DO Database
CAN DO Brochure
CAN DO Users Survey
CLEVELAND AREA NETWORK ON DATA AND ORGANIZING

The Cleveland Area Network on Data and Organizing (CAN DO) is a web-based database developed and maintained by the Center on Urban Poverty and Social Change at Case Western Reserve University. This public access database contains data describing key demographic, social, and economic conditions in Cuyahoga County. Data are available for the census tracts, neighborhoods, and municipalities in Cuyahoga County. We recently expanded CAN DO to include selected data for the seven surrounding counties: Ashtabula, Geauga, Lake, Lorain, Medina, Portage, and Summit. Data for these counties are available at the census tract, city and county geographic levels.

CAN DO includes U.S. Census data such as population counts, basic demographics (age, race, gender), educational attainment, employment, income, and housing information. Census data are available for 1980 and 1990. Other data files in CAN DO include county welfare data (AFDC, Food Stamps, Medicaid), vital statistics (births and deaths), mortgage lending data, juvenile delinquency filings, Cleveland crime counts, and child maltreatment. Many of these data items are annual and cover the period from 1990 to present. Each of these data sources is updated in CAN DO as new data becomes available. Currently, only Census data, vital statistics and mortgage lending data are available for the 7 counties surrounding Cuyahoga County.

CAN DO allows for easy extraction of data and the ability to create, view, and download customized tables and maps to suit the needs of the user. Maps of each neighborhood and municipality by census tract, are available for viewing and printing. The documentation regarding the data in CAN DO such as; data source, data precautions, data definitions, list of indicators available, links to related web sites, and Poverty Center reports are also online and can be accessed through CAN DO.

The data in CAN DO are used for a variety of purposes, including preparing grant proposals, writing reports, monitoring program outcomes, determining program needs, and strategic planning.

Access CAN DO on our web site at http://povertycenter.cwru.edu and then choose On-Line Database (CAN DO).
ACCESSING THE WEB-BASED CAN DO DATABASE

Go to our website: http://povertycenter.cwru.edu/

Choose: On-Line Databases (CAN DO)

Choose: Access CAN DO (Version 3.0)

Choose: Choose County of your choice
(Note: Please read information found under CAN DO on-line documentation)

Choose: Subject Area of Interest – scroll to bottom of Screen and Click NEXT
(You can only choose one subject area at a time)

Choose: Appropriate File Type (HTML for printing, Comma Delimited for EXCEL) Click NEXT

Choose: Appropriate Geographic Level (for your use)– Click NEXT

Choose: Geographic Areas of Interest – (To choose more than one at a time hold down the CTRL key and make choices)

*(FOR CRIME DATA ONLY – you will prompted to choose the year(s))

Choose: Variables (limited to 7 for printing) and click GET DATA

You can directly print your output by choosing File on Pull Down Menu and choosing Print

Click BACK on the Menu Bar return to previous screens

Data documentation, maps and general information can be viewed by choosing the items on the left of each screen. A new window is opened when choosing an item on the left – you’ll need to minimize the window to get back to the database.

Questions: Lisa Nelson – 368-4664 email: lan@po.cwru.edu
CAN DO Users Survey

Please indicate your response and return this survey in the enclosed envelope

**Training:**

1) Did you attend a training session?
   - ☐ Yes
   - ☐ No

2) Rate how helpful the training session was preparing you to use CAN DO.

   - 1 not very helpful
   - 2
   - 3
   - 4
   - 5 very helpful

3) Would you like to attend an advanced session?
   - ☐ Yes
   - ☐ No

   If so, on what topics?

   - ☐ Using CAN DO data is other software application.
   - ☐ Using CAN DO data for presentations and reports.
   - ☐ Other___________________________________

**Usage:**

1) How often do you use CAN DO?

   - ☐ More than once per week
   - ☐ Once per week
   - ☐ Once per month
   - ☐ Less than once per month

2) Do you use CAN DO for:

   - ☐ personal use
   - ☐ education use
   - ☐ occupational use
Comments:
1) How user-friendly is CAN DO?

1 not very user-friendly  2  3  4  5 very user-friendly

2) Would you like to see additional data added to the system? What?

3) Are you confused about any aspects of CAN DO?

4) Any suggestions or comments about CAN DO?
AN DO is an information sharing network providing a comprehensive collection of data describing Cleveland's neighborhoods and the suburban municipalities in Cuyahoga County. AN DO is designed to be used by nonprofit, community-based organizations, government entities, universities, scholars, and students, and others concerned with poverty and neighborhood conditions. Over a decade of information regarding neighborhood characteristics are available including:

Population and Housing Census Data;
Economic Data such as welfare dependency, mortgage lending, and new housing construction;
Crime and Safety Data such as incidence of crime and drug violation arrests, and delinquency filings;
Vital Statistics such as birth, death, infant mortality rates, and low birth weight statistics; and
Housing Information such as tax delinquent rates; and properties, vacant land, and subsidized housing.

**Examples of CAN DO Output**

How many births to unmarried mothers compared to births to unmarried teen mothers were there in census tract 1099 in 1992?

<table>
<thead>
<tr>
<th>Unmarried mothers</th>
<th>Unmarried teen mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>18</td>
</tr>
</tbody>
</table>

What was the actual number of AFDC cases in the Central neighborhood in 1980 compared to 1990?

<table>
<thead>
<tr>
<th>1980</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,660</td>
<td>2,087</td>
</tr>
</tbody>
</table>

How many AFDC cases per 1,000 of the population in the Central neighborhood were there in 1980 compared to 1990?

<table>
<thead>
<tr>
<th>1980</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>137</td>
<td>151</td>
</tr>
</tbody>
</table>

What was the actual number of personal crimes reported in the City of Cleveland in 1983 and 1993?

<table>
<thead>
<tr>
<th>1983</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>12,673</td>
<td>22,354</td>
</tr>
</tbody>
</table>

How many acts of personal crime were reported per 1,000 of the population in the City of Cleveland in 1983 and 1993?

<table>
<thead>
<tr>
<th>1983</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>44</td>
</tr>
</tbody>
</table>

What was the percentage of poor living in Cleveland and Cuyahoga County in 1979 and 1989?

<table>
<thead>
<tr>
<th></th>
<th>1979</th>
<th>1989</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleveland</td>
<td>22%</td>
<td>29%</td>
</tr>
<tr>
<td>Cuyahoga</td>
<td>11%</td>
<td>14%</td>
</tr>
</tbody>
</table>

**For Information Contact**

Center for Urban Poverty and Social Change
(216) 368-6946
Fax (216) 368-8670
The Center for Urban Poverty and Social Change was established in August of 1988 at the Mandel School of Applied Social Sciences to establish a program to address the problems of persistent and concentrated poverty in the Cleveland area. The Center's mission is to link Case Western Reserve University's strengths in social policy and social welfare-related research, analysis, and data management with community-based organizations and groups addressing aspects of urban poverty. One result of the Center's efforts is the creation of CAN DO.

**What You Can Do With “CAN DO”**

**CAN DO**'s sharing of neighborhood data can assist community organizations in their planning and program development, especially as it relates to poverty and low-income populations and neighborhoods.

Today, the complex nature of the causes and effects of social problems requires a cooperative approach to change. With CAN DO, service providers in the areas of economic development, human services, community organization, education, and housing can have access to the type of information they need to develop joint and multi-faceted approaches to solving complex problems. For example, health planners can have information about the neighborhood economy. Housing planners can have information about the occupational skills of area residents, or the kinds of skills required by jobs in certain locations.

**CAN DO** empowers a wide range of individuals and organizations by giving them direct access to information that relates to their areas of concern. As a result, CAN DO assists neighborhood and grassroots groups in making informed decisions.

**“CAN DO” Is For Cleveland And You**

There exists a vital need for a comprehensive understanding of the multi-faceted dimensions of today's neighborhoods. The dynamics of change can be observed in areas such as:

- age distribution;
- race and ethnic composition;
- labor force participation;
- marriage rates;
- family structure;
- dependence on public assistance;
- movement of people;
- housing stocks;
- educational attainment;
- mortgage and loan investment; and
- safety.

**You Too “CAN DO”**

**CAN DO** is a user-friendly, menu-driven, on-line database network. Only a computer, modem, and ID number are needed to access CAN DO. Once connected, it is easy to select data, geographical area of interest, and the format for receiving the data.
Appendices

Boston – Training Community Stakeholders to Apply Technology in Analyzing Data
The Boston Children and Families Database Information Sheet
The BCFD CD Intro
The BCFD HTML Mapping Teaser
Excerpts from the BCFD User’s Guide
Locating A Neighborhood Using Maps
The Data Extractor Training Manual
The BCFD Training Agenda
The BCFD Training Evaluation Form
Boston Children & Families Database

THE BOSTON CHILDREN AND FAMILIES DATABASE

The Boston Children and Families Database (BCFD) is a collaborative project of the Boston Community Building Network at the Boston Foundation, the Metropolitan Area Planning Council, Northeastern University, and many other public agencies and community-based organizations. Initiated and funded by the Boston Foundation, it is now housed and coordinated by MAPC.

The BCFD is organized to provide a clearer picture of neighborhood conditions and to allow measurements of community change over time and between census decades. The project enables users to strengthen our capacity as a community for better and more effective analyses of the impact of public policies and community-based initiatives on the lives of children and families in Boston. It is designed to encourage collaborative planning and advocacy within and across neighborhoods as well as between public agencies and community-based groups.

The BCFD contains more than 1400 data points of community health and well-being compiled from administrative data provided by participating partners over several years and available to the public at the census tract and block group levels. The database includes:

- Housing, income and demographic data from the U.S. Bureau of the Census;
- Birth and mortality data from the Massachusetts Department of Public Health;
- Hospitalization and insurance data from the Division of Health Care, Finance and Policy (formerly the Massachusetts Rate Setting Commission);
- Child care data from the Massachusetts Office for Children;
- Student data from the Boston Public Schools;
- Public safety data from the Boston Police Department;
- Housing stock data from the Boston Assessing Department;
- Real estate and home improvement loan data from HUD compiled CAIN (the Community Action Information Network);
- Economic activity and social service data from the Coles Business Directory.

The database is generally updated biennially; new datasets are added, as they become available. A diverse group including project staff, representatives of community-based organizations, and data providing agencies identify the selected data points. The Boston Children and Families Database has been

Metropolitan Area Planning Council • 60 Temple Place, Boston, MA 02111 • (617) 451-2770 • fax: (617) 482-7185

Northeastern University
The Boston Foundation
Metropolitan Area Planning Council
distributed on disks to several hundred groups – CDCs, health centers, neighborhood coalitions, public agencies, foundations, and researchers.

The database is truly a collaborative venture. Information Services in the Department of Strategic Planning and Research at Northeastern University is responsible for collecting the data files from agencies, cleaning and reformatting them. The New England Foundation for the Arts has created a user-friendly interface, the Data Extractor, that makes the database easier to use. Experts in the field of geographic information systems (GIS) came together to plan for the integration of the BCFD with mapping software, especially HUD’s Community 2020, and to create the first release of the BCFD on CD-ROM. These collaborators include Northeastern University, the Metropolitan Area Planning Council, the New England Foundation for the Arts; the Harvard Graduate School of Design, the Harvard Map Collection; Full Circle Technologies, Inc.; and the Boston Redevelopment Authority. The Boston Foundation also contracted with Full Circle Technologies for a digitized set of the maps accompanying the BCFD. We look forward to the launch of the Harvard Map Collection’s new Boston Atlas, a web-based interactive mapping program featuring the BCFD.

Boston is one of only a dozen cities in the nation that has produced databases integrating administrative data. The Boston Children and Families Database has provided the opportunity for Boston to participate as a member of the National Neighborhood Indicators Project, a coalition of cities with integrated database projects, coordinated by the Urban Institute in Washington, D.C.

A cross-sectoral Governance Group meets regularly to determine ways to improve the Boston Children and Families Database, to institutionalize community access to its information as well as to other data resources, and to build our community’s capacity to use data effectively for planning, advocacy and evaluation. MAPC coordinates the work of this diverse group, its subcommittees and its training program for data users.

The Governance Group is also collaborating with HUD on training in HUD’s Community 2020 Mapping Planning Software (Maptitude). Web site access to all or most components of the database, new training methodologies, and a User’s Group are part of the future plans for the BCFD.

For more information, please call Gloria Cross at 617-451-2770, ext. 2034, or email gcross@mapc.org
Welcome to the 4th Release

OF THE

Boston Children & Families Database

THIS SPECIAL MILLENNIUM RELEASE APPEARS FOR THE FIRST TIME ON CD-ROM!

Congratulations! You’ve just received a valuable resource for empowerment: The Boston Children and Families Database (BCFD). This brief document will introduce you to the BCFD and the exciting new and updated features of this CD.

- About the BCFD.
- About the CD.
- Data
- Data Extractor
- Maps
- User Support
- Restrictions on Use
- User Feedback

About the BCFD.

The Boston Children and Families Database (BCFD) is a collaborative project of the Boston Community Building Network (www.tbf.org/publications/community.htm), the
Metropolitan Area Planning Council (www.mapc.org), Northeastern University (www.neu.edu) and many public agencies and community-based organizations. Initiated and funded by the Boston Foundation, the database is now developed by Northeastern’s Division of Information Services and coordinated by the Metropolitan Area Planning Council. A diverse, cross-sectoral group has been involved in providing data, developing software applications, and generally determining ways to improve the BCFD, institutionalize access to its information and build community capacity to use it. (See Acknowledgements section in the User’s Guide.)

The BCFD is a resource for empowerment. The database is designed to help you:

- Better understand your neighborhood by identifying both strengths and weaknesses.
- Develop strategies for positive change and community organizing.
- Measure community change over time and between census decades.
- Advocate and plan for effective action.
- Analyze the impact of public policies and community-based initiatives on the lives of families and children in your community.
- Build and strengthen collaboration across the sectors working to improve the well being of children and families (community-based, public, private, philanthropic, religious and academic).

The BCFD is unique because it allows you to view information about your neighborhood as you define it by selecting information for the census tracts, block groups, or zip codes that fall within your neighborhood’s boundaries. This means that you are not limited to using aggregations of data created by other organizations. You can choose your unique service area and develop your own information base.

The database is designed to be used by community-based organizations, public agencies, foundations, child and family advocacy groups, academic institutions, schools, libraries, and residents – in other words, YOU!

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About the CD.

This CD was made possible by the expertise, commitment and persistence of a number of individuals to whom we offer thanks. (See Acknowledgements section in the User’s...
Guide.) We have included on the CD useful data, interesting “trial” software applications, intriguing maps, and important information about user support. Let’s look at each in turn.

We have DATA and lots of it!

The BCFD contains more than 1400 data points of community health and well-being compiled from administrative data provided by participating partners over several years and available to the public at the census tract, census block group and zip code levels. The database includes:

- Housing, income and demographic data from the U.S. Bureau of the Census;
- Birth data from the Massachusetts Department of Public Health;
- Hospital and insurance data from the Division of Health Care, Finance and Policy (formerly the Massachusetts Rate Setting Commission);
- Child care data from the Massachusetts Office for Children;
- Student data from the Boston Public Schools;
- Public Safety data from the Boston Police Department;
- Property data from the Boston Assessing Department;
- Home mortgage and real estate sales data compiled by CAIN (the Community Action Information Network);
- Economic activity data from the Coles Business Directory.

This release features the addition of mortality data from the Massachusetts Department of Public Health and social and human services data from the Coles Business Directory. Check it out!

Click here to learn more about the data in these datasets. (See Data Dictionary in User’s Guide.) We strongly recommend that you review the User’s Guide before using the BCFD.
The data is available in two formats on the CD:

- **Lotus worksheet (or .wk1 format).** Data in this format can be found in the Lotus_RA folder and can be used with Lotus 1-2-3 spreadsheet programs. **IMPORTANT NOTE:** Previous BCFD users may be accustomed to using the .wk1 files with Report Assistant. (The Report Assistant is a user-friendly interface developed pro-bono by Lotus Development Corporation to help users extract data from the BCFD and create reports.) These files have been updated and cannot be used with prior versions of the Report Assistant. An updated Report Assistant can be mailed to you. Please contact Alan Saiz at bcfd@neu.edu.

- **dBase (or .dbf format, version dBase IV).** Data in this format can be found in the Data folder and is organized by subject. The .dbf data includes fields that allow you to map the data in various mapping programs (see Maps below). These files can be viewed and used in Microsoft Excel and Lotus 123. (They can also be used in Microsoft Access, but more sophisticated expertise with this program is required.) If you have Microsoft Access 97, you may also create a report from these files with an innovative “trial” program, the Data Extractor, described below.

---

**Meet the EXTRACTOR!**

No, it’s not your dentist. It’s a new software interface developed by the [New England Foundation for the Arts](http://www.nefa.org/). The Data Extractor application allows you to:

1. Define a specific geographic area within the city and look at the data for just that area.
2. Select a set of specific data variables or fields from one or more of the BCFD tables.
3. Convert the data to a different file format that you can more easily use with another type of software (e.g. another database or mapping program).

You must have Microsoft Access 97 to use this program. Click [here](http://www.nefa.org/) to learn more. It’s new and we’re using it as an interim interface until we put the BCFD on the World
Okay, we don’t have maps of the entire world, but we think you’ll like our maps of Boston.

**Locating your neighborhood.** We have maps that help you locate your neighborhood geographically using a street map. Then you can find the census tract, block group and zip code numbers that help you access the BCFD data for this area. Previous BCFD users will remember the paper maps that accompanied earlier database releases. This program completely digitizes those maps. Full Circle Technologies ([www.fullcircletech.com](http://www.fullcircletech.com)) designed this mapping software with maps provided by the [Boston Redevelopment Authority](http://www.ci.boston.ma.us/bra/). With these maps, you can view your neighborhood in relationship to census tracts, census block groups, zip codes, City Council districts, Massachusetts' legislative districts, the Boston Empowerment Zone and the Boston Public Health Commission’s neighborhood boundaries. Click [here](http://www.fullcircletech.com) to access these maps. (See FCT_Install in FCT_Maps folder on CD.)

**Mapping the BCFD.** If you are new to Geographic Information Systems (GIS) or mapping software, the [Harvard Map Collection](http://icg.fas.harvard.edu/~maps/) and the [Harvard Graduate School of Design](http://www.gsd.harvard.edu/) have created an interesting “teaser” to stimulate your desire to learn more. We look forward to the launch of the Map Collection’s Boston Atlas, an online, interactive mapping program featuring the BCFD. Click [here](http://icg.fas.harvard.edu/~maps/) to view Map “Teaser.” (See Mapintro.htm document on CD.)

If you are an experienced GIS user, we give you everything you need to map the BCFD -- except a mapping software program. ☺ The database in .dbf format (see Data folder on CD) includes fields that list geographic information in different formats readable by three major mapping programs:

1. Community 2020 (a collaboration of the Department of Housing and Urban
Development and the Caliper Corporation)

2. ArcView, which is made by ESRI
3. MapInfo, made by the MapInfo Corporation.

Working with the Boston Redevelopment Authority, the Map Collection and the School of Design have provided several geographic coverages or map layers for use with each of these programs, including census tracts, census block groups, towns, zip codes, streets and bodies of water. Users skilled with mapping programs can use these maps to access the BCFD data included on this CD. (See Maps folder on CD.)

Need HELP? Call Us!

We are committed to helping you build your capacity to use the BCFD effectively. We have several options for support if you need it.

- For questions about the data, maps or the User’s Guide on this CD, please contact Alan Saiz or Bobbie Griffith at bcfd@neu.edu or 373-8985.
- To learn more about training options and receive the most recent training schedule, please contact Gloria Cross at gcross@mapc.org or 451-2770, ext. 2034.

JOIN OUR DATA USERS GROUP! This on-line community is a great way to ask questions, share examples of how you are using the database to create change, receive notices of data updates and training opportunities, and network with other data users. Just send e-mail to gcross@mapc.org with the message: SIGN ME UP FOR THE USER’S GROUP!
We do have LIMITS.

RESTRICTIONS ON USE. Data providers have allowed us to offer this data to you for neighborhood planning purposes. The Boston Children and Families Database, in whole or in part, cannot be sold or used for any commercial purposes. If you are unsure about whether you are using this data appropriately, please contact Alan Saiz at 373-8985 or bcfd@neu.edu.

Have a GREAT IDEA? We’d like to hear it!

We welcome your comments and suggestions about the BCFD and all the contents on this CD. Just send them to bcfd@neu.edu.

THANK YOU FOR USING THE Boston Children and Families Database TO DRIVE COMMUNITY CHANGE.

The CD Release Committee
February 3, 2000
Mapping the BCFD

Mapping the information in the *Boston Children and Families Database* (BCFD) can give insights into the spatial patterns of the demographics of the Boston community. Looking at the data in map form can inform users about characteristics of the citizens of Boston that are hard or even impossible to see when viewing the data in tabular, or spreadsheet, format. Click [here](#) to see information about the data layers available in the BCFD (then use your browser’s "Back" button to return to this page).

The Harvard Map Collection is developing a web-based interactive map of Boston that will allow users to access the BCFD data as well as other useful data about the city of Boston. The atlas is designed to be useful to everyone from those who are just becoming familiar with using the internet to experienced map users. This interactive atlas of Boston will be accessible from the [Map Collection’s](http://icg.fas.harvard.edu/~maps) main page.

The Boston Atlas is based on a type of mapping software, called GIS (Geographical Information Systems). GIS allows its users to look at information about a city and quickly change the look of the map in order to better understand the city or to make maps for presentation. The purpose of this tutorial is to show you some of the basics of GIS in the hopes that you will use it to make the most of the BCFD data.

The entirety of the Boston Children and Families Database has been prepared for use in three major GIS software packages. These are

~ [Community 2020](http://www.caliper.com), the product of a cooperative venture by the US Department of Housing and Urban Development and the [Caliper Corporation](http://www.caliper.com)
~ ArcView which is made by [ESRI](http://www.esri.com)
~ and MapInfo, made by the [MapInfo Corporation](http://www.mapinfo.com).

Savvy computer users can also download free mini versions of two of the full-blown GIS packages: ESRI's [ArcExplorer](http://www.esri.com) and MapInfo's [MapInfo](http://www.mapinfo.com).

To the [examples](#)
Data Tables

The dBase tables (with the suffix ".dbf" or ".DBF") of the BCFD may be opened in most desktop mapping packages as well as in Excel or dBase. This is a portion of table "Schm94T1.DBF" which represents public middle school students by tract in 1994.

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</table>

These images are intended solely to show what the mapping software can do. The data may not be accurate.

More examples
Back to the beginning
Mapping the Data

With GIS you can easily select a BCFD data table, import it into your mapping environment, link it to your map, and then choose the variable you want to display on the map. In this case the map shows the number of middle public school students enrolled in 1994 by census tract.

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Continue for more examples
Back to the beginning
Making a Meaningful Map

Changing the classification scheme lets you make the presentation of information more meaningful. In this example, two of the census tracts had no students enrolled in public middle schools in 1994. To point out this important fact, the classification scheme has been changed to include this category. In addition, to eliminate the bias of large tracts, the map now shows the density of students instead of absolute numbers.
Changing the Classification

You might also classify the data according to standard deviations.

More examples
Back to the beginning
Adding Context

Adding other layers of data makes it easier to locate your area of interest.
Conclusion

Mapping the data in the *Boston Children and Families Database* can increase the understanding of the wealth of information you now have about the city of Boston. The Boston Atlas hosted by the [Harvard Map Collection](#) will allow users to make maps of all the data in the BCFD plus other information. Users familiar with the GIS programs [Community 2020](#) (or Maptitude), [ArcView](#) or [MapInfo](#) can choose to access the BCFD data enclosed on this CD-ROM in the folder entitled *Maps*.
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Introduction

The Boston Community Building Network

The Boston Community Building Network is an outgrowth of the Boston Persistent Poverty Project (1989-1997), originally funded by the Rockefeller Foundation as part of a national initiative. Now part of the Boston Foundation’s Program Department, the Network’s mission is to support collaborative, informed community building and systems change. The Boston Community Building Network coordinates three major projects that advance a collaborative community building approach to the reduction of urban poverty and to other key issues in Greater Boston. The Boston Community Building Curriculum offers accessible, affordable, high quality training to grassroots leaders in community building skills. The Boston Children and Families Database (BCFD) puts information into the hands of community organizations and residents for community-driven planning, assessment, and evaluation. The Boston Indicators of Change, Progress and Sustainability is a civic project which expresses shared goals and values as indicators to inform, monitor, evaluate and drive change at the neighborhood, city and regional levels.

Rationale for the Boston Children and Families Database

The Boston Children and Families Database (BCFD) is a resource for empowerment. Its data, obtained from a number of government agencies, has never been available to the public. With the knowledge to understand and use this data, combined with the everyday experience of people, communities and public agencies, we may be able to identify both strengths and problem areas, develop strategies for change and for organizing, and to advocate and plan for effective action.

The BCFD is a collaborative project of the Boston Community Building Network at the Boston Foundation, Northeastern University, the Metropolitan Area Planning Council, the Community Action Information Network, Lotus Development Corporation and many public agencies and community-based organizations. Initiated and funded by the Boston Foundation, the goals of the BCFD are to create a clearer picture of neighborhood conditions. The BCFD allows for measurements of community change over time and between the U.S. Census decades, and creates the capacity for better, more responsive analyses of the impact of public policies and community-building initiatives on the status of children and families in Boston.

To help achieve these goals, the BCFD has compiled administrative and other data that can be overlaid on the U.S. Census. It is designed to be used by community-based organizations, public agencies, foundations, child and family advocacy groups, and academic institutions. Northeastern University’s Information Services Department of Strategic Planning and Research and the Center for Criminal Justice Policy Research at the College of Criminal Justice has managed the collection of the data and the technical development of the BCFD with the Boston Community Building Network. The Metropolitan Area Planning Council provides project management and user training.
Using and Presenting Data

What Data Tells Us

Data is an abstraction and a generalization about the world. In other words, it is a selection of some features but not others; these features are usually considered “important” to defining whatever the thing or person the data is describing. Data is also a “snapshot” of a particular point in time.

The 1990 Census may say that there were 50 five-year old children in a particular Census Tract. This statement, however, was true only in 1990 when the Census was taken. In 1994 those children may be 9- or 10-years old, they may have moved away, or the area may have been converted to a garage (in which case, no one lives there). What was true of the area in 1990 may not be true in 1994.

Data can provide some general ideas about communities including volume, rate, comparison, distribution and change.

- **Volume.** Sums, counts or aggregates. How many things, people, houses are there? How large is the population?

- **Rate.** Percentage, proportions, or ratios. How many times greater or smaller is something in relation to a standard? How much more or less does one group have versus another group?

- **Comparison.** Means, medians, or other types of statistics. How do two (or more) groups differ from one another or from a standard? Is the difference between groups systematic of simply a chance variation?

- **Distribution.** Or relationship. Where does an individual or group stand in relation to another, or to a reference point? What are the physical relationships between things — nearer, farther?

- **Change.** How have conditions, populations, rates, means, distribution, changed over time? Has a population grown, shrunk or stayed the same from one year to the next?

Data Presentation

Methods of representing data affect what is emphasized, what people understand about the data, how easily they understand it, what kind of impact it has, even what kind of conclusions people draw from it. Four basic methods of presenting data include narratives, tables, graphs, and maps. For examples relevant to Boston, see the Status Report on Children and Families in Boston, a baseline report developed by the Boston Foundation.

- **Narrative presentations** use words to explain what the data says. They tell stories about how things fit together.

- **Tables** arrange the data in rows and columns, with the rows and columns representing particular groups.

- **Graphs** are pictures of the data. They physically represent volumes, amounts, lengths, sizes, or distances from a baseline.

**Maps** also present data as pictures. A city map shows physical relationships among streets or parks or buildings. A map of Boston reveals that Dorchester is east of Roxbury, that East Boston is north of the North End. A **thematic map** supplements the geographic relationship about an area with information about the area, such as average income, rate of home ownership, or
population. Values can be shown as numbers, and represented as colors, shades of gray, or patterns. Maps may also incorporate narratives, tables or graphs. If a map is too cluttered, however, it becomes hard to read and understand. For excellent examples please see the MAPS folder where one will find the data. For examples of how to use GIS software to make the most of the BCFD data, double-click on INTRO.HTM in the DOCS folder which is in the MAPS folder.
Data Dictionary

The BCFD Datasets and Their Levels of Aggregation

Table 1 indicates the level at which data is aggregated in the different files in the BCFD. The “A” under “Geographic Level of Aggregation Available” indicates the level of aggregation of variables in the different BCFD datasets.

Table 2:

Data aggregation in the BCFD database

<table>
<thead>
<tr>
<th>Database</th>
<th>Data Provider</th>
<th>Focus</th>
<th>Geographic Level of Aggregation Available</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Census Block Group</td>
</tr>
<tr>
<td>Census - Demographic and Social Characteristics</td>
<td>United States Bureau of the Census</td>
<td>Individuals, Families, Households</td>
<td>A</td>
</tr>
<tr>
<td>Census - Education and Labor Market</td>
<td>United States Bureau of the Census</td>
<td>Individuals</td>
<td>A</td>
</tr>
<tr>
<td>Census - Income and Poverty*</td>
<td>United States Bureau of the Census</td>
<td>Individuals, Families, Households</td>
<td>A</td>
</tr>
<tr>
<td>Census - Housing Patterns</td>
<td>United States Bureau of the Census</td>
<td>Individuals, Householders, Housing Units</td>
<td>A</td>
</tr>
<tr>
<td>Birth Data</td>
<td>Massachusetts Department of Health</td>
<td>Infants</td>
<td>A</td>
</tr>
<tr>
<td>Mortality Data</td>
<td>Massachusetts Department of Health</td>
<td>Individuals</td>
<td>A</td>
</tr>
<tr>
<td>Hospitalization Data</td>
<td>Massachusetts Division of Health Care Finance and Policy</td>
<td>Hospital Patients</td>
<td>A</td>
</tr>
<tr>
<td>Student Data</td>
<td>Boston Public Schools</td>
<td>School Age Children</td>
<td>A</td>
</tr>
<tr>
<td>Child Care Data</td>
<td>Office for Children</td>
<td>Child Care Programs</td>
<td>A</td>
</tr>
<tr>
<td>Business Data</td>
<td>Coles/ Experian Directory</td>
<td>Businesses</td>
<td>A</td>
</tr>
<tr>
<td>Social &amp; Human Services</td>
<td>Coles/Experian Directory</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Police Call and Reports</td>
<td>Boston Police Department</td>
<td>911 Calls for Service/ crime incidents</td>
<td>A</td>
</tr>
<tr>
<td>Real Property Data</td>
<td>Boston Assessing Department</td>
<td>Real property</td>
<td>A</td>
</tr>
<tr>
<td>Real Estate Transactions and Bank Lending</td>
<td>Home Mortgage Disclosure Act</td>
<td>Real Estate Sales and Bank Loan</td>
<td>A</td>
</tr>
<tr>
<td>Real Estate Transactions and Bank Lending</td>
<td>Compiled by the Community Action Information Network from public data</td>
<td>Real estate sales and bank loans</td>
<td>A</td>
</tr>
</tbody>
</table>

Note: There are 168 Census Tracts and 630 Census Block Groups in Boston.
Locating a Neighborhood Using the Maps

Full Circle Technologies (www.fullcircletech.com) has designed a mapping program that helps community groups to locate their neighborhood geographically using a street map. The records in the BCFD are geographically referenced to enable organizations to develop customized databases for their areas. This can be done by selecting the Census Tracts or Census Block Groups that fall within a neighborhood’s boundary. Census geography allows an organization to define its service area with a boundary that is customized to the population it serves. This means that an organization is not limited to using aggregations of data created by other organizations. Using Census geography allows each organization to choose its unique service area and develop its own information base.

The mapping program includes several sets of electronic maps to help identify neighborhoods and the appropriate geographic boundaries surrounding them. The following maps are included:

- **Major streets and parks**
- **All streets and parks**
- **Boston Redevelopment Authority (BRA) Neighborhood Boundaries**: The BRA has defined 16 neighborhoods for it’s planning purposes. Many community groups use these BRA neighborhoods as the basis for their planning. The BRA has published a profile based on Census data for each of these neighborhoods.
- **ZIP Codes boundaries**: ZIP Code areas are created by the U.S. Post Office to speed the delivery of mail. ZIP Codes often refer to a geographic area, but not always. Sometimes a single building can have its own ZIP Code, such as the Prudential Tower, or a ZIP Code may refer to a single post office. The ZIP Codes on this map include only those that cover a substantial geographic area.
- **1990 Census Tract boundaries**: As explained in the Dictionary of U.S. Government Statistical Terms, ”Census tracts usually have between 2,500 and 8,000 persons and, when first delimited are designed to be homogeneous with respect to population characteristics, economic status, and living conditions.” 168 Census Tracts cover the city of Boston.
- **1990 Census Block Group boundaries**: Census Block Groups are subdivisions of Census Tracts. Boston includes 630 Block Groups.
- **City Council Districts**
- **Massachusetts Legislative Districts**
- **The Boston Empowerment Zone**: Boston has received federal designation as an Empowerment Zone, which targets economic development and human service resources in the most disadvantaged area of the city.

The **Boston Public Health Commission**: This agency creates an annual report, the Health of Boston, which provides health data by neighborhood.
USING THE MAPS TO DEFINE YOUR NEIGHBORHOOD

First, get used to maneuvering around the maps:

- Click on the "Layers" toolbar, to see the choice of maps that are available for viewing. Click on "Layers" toolbar again to hide the menu.

- View one map layer at a time along with the street layer (Major Streets and Parks & All Streets and Parks) to avoid visual clutter.

- Clicking on the "Zoom" and hold down the mouse button. Move the mouse up (+) to enlarge the map, or down (-) to reduce the map.

- Click on "Pan" and hold down the mouse button. Move the mouse to find the area of the map you want.

- Both the “Zoom” and “Pan” buttons will allow you to do real-time zooming and real-time panning. There are no preset zoom or pan screens which restrict the amount of viewing possible. The choice is yours.

- If you have already clicked on the "Zoom" or "Pan" buttons, right clicking on the mouse will give you even more options, including the very useful feature of "Zoom rectangle". This allows you to draw a rectangle, highlight, and zoom into any area of the map that interests you.

Then, define your area:

- Select the Major Street and Parks layer and the All streets and Parks layers. Use the Zoom and Pan buttons to find your service area. Use the Zoom rectangle feature to help you if necessary.

- Overlay these layers with either the census tract, census block group or zip code layers (one at a time).

- List on a piece of paper all the census tract numbers, census block group numbers or zip code numbers within the boundary of your service area as you define it.

- Use these census tracts, block groups or zip code numbers to find BCFD data for your area from the appropriate dataset. Just exit the mapping program and use Lotus 123 (for .wk1
files) or Microsoft Excel (for .dbf files) to find the data. Or use the Extractor program to create a report.

Finally, we at Full Circle Technologies (www.fullcircletech.com) would like to point out that the ability to view true vector maps on the web is very new technology. As with any such innovation, the benefits can be considerable. However, as this is the very first version, there are still quirks and areas that need improvement. We would therefore welcome your feedback, comments, or suggested corrections at "mail@fullcircletech.com".

*Whip is a trademark of AutoDesk Inc.
**Internet Explorer is a trademark of Microsoft Corporation.
The BCFD Data Extractor program is a utility written in Microsoft Access® 97. It is intended to be an interim tool for processing information from the database. If Access 97 is available to you, the Data Extractor program will provide you with an easy way to do the following things:

1. Define a specific geographic area within the city, and look at the data for just that area.

2. Select a set of the specific data variables (fields) from one or more of the BCFD tables and look at this information in a single table.

3. Convert the data to a different file format that you can use more easily with another type of software, such as a different database or a geographic information system program.

In previous releases of the Boston Children and Families Database, this functionality was provided by the Lotus® Report Assistant. In the future, it is expected that this functionality will be provided as a service via the World Wide Web.

**Installation**

In order to use the program, you must own a copy of Microsoft Access 97, which must be installed on the computer where the Data Extractor Program is to be used. You must also have at least 10MB of available hard disk space. (The entire set of BCFD data files is contained within the single Data Extractor program file.)

**Important Note:** You must copy the Data Extractor file from the BCFD CD-ROM to your computer’s hard drive and the file attributes must be changed from read only. The program will not run from the CD-ROM, because the program must write changes back to the file. We suggest that you create a separate folder (directory) on your hard disk for the program.
To install and use the program, you should have general familiarity with Microsoft Windows 95 and above, and know how to copy individual files from one location to another. Follow these steps to install the program using Windows Explorer:

1. Open the Windows Explorer program.
2. Select your CD-ROM drive (in most cases this will be Drive D:)
3. Double click on the Extractor folder to open it.
4. Select the BCFD Data Extractor.mdb file by clicking on its name, and drag the file to the directory on your hard drive where you want to store it.
5. Select the copy of BCFD Data Extractor.mdb on your hard drive and then click on file and then properties. Click on the file attributes that have check(s) so that none are selected. Click OK and Close Windows Explorer.

Using the Data Extractor Program

Once you have installed the program on your hard disk, it is ready for use.

Start Microsoft Access 97, and open the BCFD Data Extractor.mdb file. The program will automatically start, and the initial program screen will display. At any time, you can exit from the program by clicking the Close button on the lower right-hand corner of the window.

The program uses a Wizard style interface to guide you through the three steps of 1) selecting a geographic area; 2) selecting the data you want to use; and 3) displaying or exporting the data as a single table.

The program has a series of three individual dialog screens, or pages, for each one of these steps (see figure1 Select Area). Immediately above the Close button are two buttons used for moving forward from one page to the next, or back to the previous page (except for the first screen which only has the forward button). The button marked Next -> will move you forward, while the < Back button will take you back to the previous step, so you can revise your selections at any time.

Step 1: Selecting a Geographic Area

As outlined in the BCFD User Manual, the data files contain information compiled for three geographic units: U.S. Census Block Groups, U.S. Census
Tracts, and Zipcodes. With the Data Extractor program, you can generate tables of selected data for only one type of geographic unit at a time.

Select the appropriate geographic unit by clicking on one of the check boxes marked “Census Blocks,” “Census Tracts”, or “Zipcodes” located at the top left corner of the first program screen. Each time you select a different type of geographic unit, the list of individual blocks, tracts, or zipcodes in the box below (initially labeled “Choose Block(s)”) will change to the appropriate set of geographic units.

Figure 1. Select Area (screen 1of 3)

The default name format for Census Tract and Block Group units is the shortened form used by the BCFD. Three other name formats are included in the database: a justified version of the short form, with the decimal point dropped and leading zeros added; the FIPS format, which makes the units consistent with the national set of unit names; and a version of FIPS that is used by the HUD Community 2020 GIS software. You can change the display of the geographic unit names by selecting one of these formats in the drop down box below the list of geographic units (which is labeled “Display Format:”). Click on the down-arrow button to the right of the box to show the list of all four formats. This does not affect the selection of the units in any way—only the form of the name used to identify individual census tracts or block groups.
To select a set of individual tracts, block groups, or zipcodes, scroll up or down through the list of available units, and click to select an individual block group, tract, or zipcode that you want to include in your selected list. (For the sake of example, we’ll use census tracts here.) Between the list of census tracts available and the list of tracts selected is a set of four buttons that can be used to move the individual tracts between the two lists. The button labeled “>” will move the selected tract from the available list to the selected list. The button labeled “<” will move a tract in the opposite direction. If you want to include the entire city of Boston as your selected area, click on the button labeled “>>” to move all of the tracts over to the selected list. Click the button labeled “<<” to clear the entire selection.

You can also move an individual tract/block group/zipcode from one list to the other by double-clicking on it. If you double-click a tract in the available list, it will move over to the selected list; double-clicking a selected tract will clear it and return it to the available list.

You must have at least one tract/block group/zipcode in the selected list before you can proceed to the next step of selecting specific data from the BCFD tables.

Figure 2. Select Data (screen 1 of 3, several tracts have been selected)
Storing and Retrieving a Selected Area for Future Use
Once you have a set of geographic units selected—such as the set of block
groups that belong to a specific neighborhood—you can store this set for
future use. To do this, click the button labeled “Save Selected Area” in the
upper right-hand side of the dialog window. You will be prompted to enter
a name for your customized area. When you have done this and clicked
the OK button (figure 3a), a message will confirm that your area has been
stored (figure3b). Once you have stored one or more areas, you can
retrieve it at any time by clicking the button labeled “Use Saved Area”
(figure 3c). If there is a list of tracts, block groups, or zipcodes in the
current selected list, you will be warned that the current set will be cleared
when you retrieve the saved set. A new dialog window will open, with the
list of areas that have been saved. Select the area desired by clicking on its
name and then clicking the button labeled “Select Set” (doubleclicking on
the name will do the same thing). You also have the option of deleting a
stored set, by clicking on its name and then clicking the button labeled
“Delete Set.” Remember: once a set has been deleted it is
permanently removed.
Once your desired area is selected, you can proceed to the next step by clicking the Next -> button. The screen used for selecting data will appear.

**Step 2: Selecting the Data to be Extracted**

Once the “Select Data” (figure 4) screen has appeared, you can define the set of data fields you want to extract.

At the top of the “Select Data” screen is a drop-down box labeled “Choose Tables:” listing all of the data tables appropriate to the type of geographic unit you are using. Long descriptive names are used to identify each table. To scroll through the list, click the down-arrow button at the right-hand side of the box. Select any table by clicking on its name.

Each time a table is selected, the list of its available data fields appears in the box immediately below. Scroll through the list of fields, and select the name of the field you want by clicking on it. Use the four buttons below the box to move fields to the selected list, or to clear all selected fields. You can also doubleclick on individual field names to move them from the available to the selected list, or to remove them from the selected list.

Figure 4. (screen 2 of 3)
You can select individual fields from more than one table by first selecting the desired table and then moving particular fields from that table to the selected list.

**Searching for Data Fields**
The “Select Data” screen has an additional option for searching through all of the fields in all of the available tables for a word or phrase. Begin a search by clicking on the button labeled “Search.” A search dialog window will open.

In the box labeled “Search for:” enter a word or phrase to be searched that is contained within the long field names, ie the short variable names will not work. You can refine your search by selecting one of the three options in the drop-down box below.

- Searching for your criteria using the **Any Part of Field** option will retrieve fieldnames in which your criteria appears in any position. Searching for “child” using this option will retrieve fields with descriptive names such as “Total Child Capacity,” “Number of children in special education,” and

- Searching for criteria using the **Match Whole Field** option will only retrieve fieldnames that match your criteria. Searching for “child” using this option will retrieve no fields. Searching for “total child capacity” will retrieve only “Total Child Capacity” fields (letter-case does not matter).

- Searching for criteria using the **Start of Field** option will only retrieve fields whose names begin with your criteria. Searching for “number” using this option will retrieve “Number having school year program,” “Number of simple assaults,” and “Number of high school students.” It will not retrieve “Total number of days absent.”

Once you have entered your criteria with the appropriate search option, execute your search by clicking the button labeled “Find.” The list of fieldnames meeting your criteria appear in the box below. To include a field from the list in your selection, click on its name to select, and click the **Select** button, or simply doubleclick on the name. The search window will close and the field will be added to your selected list. If you want to select more than one of the fields that were retrieved, return to the search window by clicking the **Search** button and select another field from the list.
**Storing and Retrieving a Group of Data Fields for Future Use**

You can store and retrieve a group of data fields in the same way you store and retrieve a geographic area. To store, click on the **Save Dataset** button, and you will be prompted for a name for your group of data fields (figure 5a). Once you click OK you will receive a confirmation that the area has been saved (figure 5b).

To retrieve an existing set, click on the **Use Dataset** button (refer back to figure 4 for button location), and select the desired set (figure 6).
Please note that you will only be able to see the stored groups appropriate to the type of geographic units you are currently working with. If you have stored a group of data fields for census tracts, it will not appear in the available list of groups when you are working with census blocks—only groups of census block data will be displayed.

You must select a group of data fields to be extracted before you can move on to the final screen. Once you have completed selecting the group of data fields that you want to abstract, you can move to the final step by clicking the Next -> button.

**Step 3: Exporting or Viewing the Data**

Once the “Export/Display Data” screen has appeared, you can select the data format that you want to use and export the data.

In the upper-left hand corner of the program screen is a set of check boxes for export formats:

- **View Data** – this option will display the results of your dataset as an Access query on your computer screen. The query will be named “ExportQry.” If you wish, you can use the file functions within Microsoft Access to save the query under a different name, or export it. The query is not stored permanently otherwise—“ExportQry” is overwritten every time you define a new set of data (figure 7).

Figure 7 (screen 3 of 3)
• **Export to Spreadsheet File** – this option will create a new external spreadsheet file containing the results of your dataset that can be used by a spreadsheet program. Spreadsheet formats available are restricted to the various versions of Microsoft Excel: Excel 3, Excel 4, Excel 5/95, and Excel 97 (figure 8a-b).

Figure 8a-b.
• **Export to Database File** – this option will create a new external database file containing the results of your dataset that can be used in other database programs. Database formats available are: Microsoft Access 97, dBase III, dBase IV, dBase 5.0, FoxPro 2.0, FoxPro 2.5, FoxPro 2.6, FoxPro 3.0

• **Export to Text File** – this option will create a new external text file containing the results of your dataset. The two formats available are comma-delimited, and HTML. The HTML option will create an HTML page with your data arrayed within a table.

Once you have selected one of these export options, a set of additional format options will appear in the upper right-hand corner of the program screen. The specific spreadsheet, database, and text file formats noted above will be available for selection in a drop-down box.

**Fieldname Formats**
The database export formats use the short BCFD fieldnames only. All other export and display options give you the choice of using the short BCFD fieldnames, or the long descriptive fieldnames. Select the fieldname format you want by clicking on your choice.

**Geographic Unit Fields**
As noted above, the BCFD database stores geographic unit names in several different formats for the Census Tract and Census Block Group tables. These various formats are useful in working with specific Geographic Information System software programs. You can include one or more of these formats in addition to the abbreviated BCFD format by checking the box next to each format that you want to include. (Please note that the HUD2020 census tract and block group fieldnames have been changed from the names commonly used in the BCFD. Instead, the names used by HUD Community 2020 have been substituted - Community 2020 census tract fields have been given the fieldname "Name," while census block group fields have been given the name "Code." In addition to fields identifying geographic areas, you can include the geographic longitude and latitude coordinates for the centroid of each tract or block group by clicking the **Include Centroid Coordinates** option.
Once you have chosen the export/display options you want, complete the operation by clicking on the **Output** button. If you are exporting to an external file, the standard Windows file dialog box will open (figure 9), prompting you for the location and name of the file to be created. Once this information has been entered, the new file will be created. If you want to change the file format of the data being saved click on cancel and it will return you to the “Export/Display Data” screen (figure 8a-b)

Figure 9.

After the file has been created, you will be given the option of creating and printing a documentation report (figure 10). If you choose to create a report, you will be prompted for a descriptive name for the report (figure 11). You can enter this information or leave it blank. The report created will contain the name of the export you have created, and a list of each individual field, with the field’s short BCFD name, its long descriptive name, and its source table (figure 12). If you have exported a file using the short BCFD names, you will probably find this report useful for keeping track of your selected data. Use the Access print function to print the report, then close the report window to return to the program screen.

Figure 10.
Figure 11.

![Figure 11](image1.png)

If you export the data to a spreadsheet file it would look similar to figure 13 depending on the options that were selected.

Figure 12.

![Figure 12](image2.png)
Figure 13.

Troubleshooting

If you are trying to export to a spreadsheet, database, or text format, and you are unable to open the Windows file dialog box, there may be a problem with the installation of Microsoft Access on your computer. The Data Extractor program uses several functions that are part of Wizard tools that come with Access. If the Wizards are not installed, the Data Extractor program cannot export a file.

If this happens, you should reinstall Microsoft Access and make sure that the Wizards option is also installed. This should correct the problem and allow you to export files.

When exporting to an external database format, you may get an error message that the file cannot be exported because there are duplicate fields. This problem arises when you are trying to export fields from two different tables that have the same names. When there is a duplicate field, the program appends the name of the second table to the fieldname. In most cases this works, but when the first eight characters of the two names are
the same, some databases that cannot accept longer filenames cannot distinguish between the two fields. If you run into this program, try exporting the data as a text file in the comma-delimited format. Most databases are able to import this format. Before you try importing the file, you'll need to open the text file and change the fieldnames that are causing the problem.

Program Authorship

The Data Extractor program was written by Douglas DeNatale, Ph.D., Director of Research & Technology, New England Foundation for the Arts, 330 Congress Street, Boston, MA 02210. (617) 951-0010 (voice) / (617) 951-0016 (fax).

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BOSTON CHILDREN AND FAMILIES DATABASE
TRAINING AGENDA

June 15, 2000
10:30 – 10:00 noon
Women’s Educational and Industrial Union

A. OVERVIEW
   1. Welcome and Introductions
   2. What is the BFCD?
   3. Restrictions on Use
   4. The Goals of the Orientation

B. GETTING STARTED
   1. Computer Checklist
   3. Setting Up Project Files
   4. Installation Tips

C. USING THE DATABASE
   1. Using the Browser Maps to Locate Your Neighborhood
   2. Using the Data Extractor to Create a Report
   3. Using Cut and Paste to Create a Report
   4. Analyzing and Presenting Your Data

D. USER SUPPORT OPTIONS
   1. Technical Support and Errors Documentation
   2. Understanding the Results
   3. Other User Support (Hands-On Training, Customized Training, User’s Group)

E. QUESTIONS AND ANSWERS
Your answers to the questions below will help us improve future orientation sessions.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did this training help you better understand what BCFD is and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>how to use it?</td>
<td></td>
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<tr>
<td>Do you feel you are more capable of now using the database on</td>
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<tr>
<td>your own</td>
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<tr>
<td>Do you feel you need more hands-on training before you can use</td>
<td></td>
<td></td>
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<tr>
<td>the database?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What was most helpful during this training? How was it helpful?

What was least helpful during this training? How could it be made more helpful to you?

What other comments or suggestions would you like to make about this session?

THANKS FOR YOUR COOPERATION.
Appendices

Denver - Training Community Stakeholders to Use Data as One Part of A Comprehensive Leadership Development Program
Neighborhood Leadership Program Brochure
Class Case Studies
  - Understanding the Nature of the Problem or Issue
  - Understanding Your Information Needs
  - Understanding the Uses of Information
Neighborhood Leadership Program

Developed at The Piton Foundation

The Neighborhood Leadership Program is an integral component of The Piton Foundation’s efforts to improve the capabilities of grass-roots individuals to develop solutions to problems and create their own opportunities. Piton is a privately funded, operating foundation with a vision of a better future for the low-income children of Denver. It is supported principally by the Gary-Williams Energy Corporation.

The foundation’s neighborhood focus took shape in 1988, when it developed partnerships with residents of several targeted high-poverty neighborhoods — Five Points/Curtis Park in northeast Denver and Baker, Sun Valley and Auraria/Lincoln Park in west Denver.

Residents from these communities formed the Eastside and Westside Neighborhood Advisory Groups. Since their inception, these groups have provided valuable counsel to the foundation — reviewing and making recommendations on grant proposals affecting their neighborhoods, providing insight on issues facing their communities, and developing alliances between residents and initiatives operating in their neighborhoods.

All of these activities built a foundation of trust and collaboration between Piton’s philanthropy and the community and influenced the formation of a number of Piton-supported, neighborhood-based initiatives, including the Neighborhood Leadership Program.

History of The Neighborhood Leadership Program

Begun in 1990, the neighborhood leadership training program was conceived as a way of strengthening impoverished communities by encouraging and nurturing grassroots leadership. The goal was to identify interested residents in the targeted neighborhoods and strengthen their commitment and effectiveness as neighborhood advocates.

As the beginning step, planning committees for Denver’s eastside and westside neighborhoods met for approximately six months to clarify the goals of the two initial leadership programs and the form each training program would take. A foundation representative participated on the planning committees. Then consultants were hired to develop the curriculum guides and administrative manuals for each of the two programs.

Recruitment for the first series of training programs took different forms in the two neighborhoods. In Five Points/Curtis Park, planning committee members administered a brief interest survey through the neighborhood and flagged potential participants through their door-to-door contacts. Eleven residents, including six planning committee members, enrolled in the first class of the Eastside Neighborhood Leadership Program.

On the westside, recruitment was handled through word-of-mouth. Members of the planning committee contacted friends, relatives and other individuals in the neighborhood. Fourteen westside residents, including three from the planning committee, enrolled in the first class of the Westside Neighborhood Leadership Initiative.

The cost to participants is their commitment of time and energy and their dedication to the future of their communities.
Major Curriculum Components

The six-month leadership program consists of a variety of learning experiences ranging from lectures and discussions to structured activities, experiential learning and role playing. Classes are scheduled twice a month in the evenings and program participants also attend a two-day retreat.

While the curricula differ slightly between the leadership programs, there are common themes around the topics of: communication, problem-solving, conflict resolution, resource development, information access, meeting management and public speaking. Trainers from the profit, nonprofit and governmental sectors bring to bear a broad range of expertise.

Following is a description of the major curriculum components of the neighborhood leadership program.

Session 1: The Neighborhood
This session is designed to discuss the neighborhood from the participants' viewpoint. Participants are asked to share their personal perspectives, stories and dreams for their neighborhood.

Session 2: Team Building
The intent of this session is for the participants to understand the benefits of teamwork and positive motivation. They see how their contribution makes a difference to the team. They practice how to work in a team to build consensus and resolve conflict.

Session 3: Meeting Management
This session provides the participants with the basic skills required to effectively plan, organize and conduct effective meetings.

Session 4: Resource Development
Participants are provided with information on how to identify needs and find resources to fill those needs. This includes local, city and state resources. Specific areas covered include utilizing technology and computer systems.

Session 5: Information Access
This session is intended to provide participants with ways to access, organize and distribute information.

Session 6: Culture and Socialization
Participants are helped to understand how their values are formed. They also look at the influences in society that contribute to socialization. Participants identify the major times in their lives when they had value shifts and what the contributing factors were.

Session 7: Group and Leadership Development, A Two-Day Retreat
This two-day retreat provides participants an opportunity to further their personal growth. The workshop is comprised of several experiential activities designed to challenge participants to complete tasks, both individually and with team members. In debriefing activities, participants examine how successfully they worked together and what personal challenges they overcame.

Session 8: Public Speaking
Participants are provided with the skills necessary to effectively plan and organize material for a speech. They learn delivery styles and how to tell if they are reaching their audience.

Session 9: Public Speaking/Practice
In this session, participants deliver a short talk to the group. Feedback allows them to strengthen their delivery.

Session 10: Communicating with Impact
The focus of this meeting is on communication styles and their effects. Specifics covered are: understanding the importance of good communication; examining common misinterpretations; identifying words with multiple meanings; looking at the effect of body language; and improving listening skills.
Session 11: Personal Development
Participants learn basic principles for building their own personal framework. They identify barriers to their own success and discover what is specifically required to reduce such limitations and replace them with positive action.

Session 12: Now What? Developing the Next Steps
This session is designed to develop the participants' next steps and commitments. The intent is to transition the learning that has taken place in the basic curriculum into practical applications and action.

Graduation
The leadership program culminates with a graduation ceremony and reception. Over the years, classes have chosen places ranging from the Governor's Mansion to local churches for their special event. Participants receive a certificate honoring their completion of the program, and class pictures are taken. The ceremonies include keynote speakers, who typically are community leaders who the residents hold in high regard and who represent the cultural and ethnic diversity of their neighborhood.

The Future of the Neighborhood Leadership Program
The Piton Foundation wants to inspire residents to invest in themselves and in the well-being of their neighborhoods. It believes in the capacity and ability of individuals to lead and assume greater responsibility for their quality of life and the quality of life of their families and neighborhoods. And it believes that strong neighborhoods need residents willing and able to become vitally involved in the issues that affect their lives and the lives of their neighbors.

Therefore, the foundation is committed to assisting Denver neighborhoods interested in nurturing and developing local leaders who will help their communities build a better tomorrow. The Piton Foundation's goal is to expand the neighborhood leadership program into at least three additional low-income neighborhoods by the year 2000. Over the next 10 years, it has set its sights on graduating 800 residents from its network of neighborhood leadership programs in Denver.

For information on the Neighborhood Leadership Program, contact Grant Jones at The Piton Foundation, 370 17th Street, Suite 5300, Denver, CO 80202. Telephone (303) 825-6246.
Understanding the Nature of the Problem or Issue

Case Study

**Problem**: Last week a woman in your neighborhood called you up to ask for your help. She is a single working mother with two children: a daughter age 12 and a son age 15. Her son had just been expelled from school for fighting. Her son told her the fight was not his fault and that white kids never get suspended or expelled, only brown and black kids. The mother took time off from work to go and meet with the principal of the school. The principal disagreed that brown and black kids were being disciplined any differently than white kids. When the mother asked what her son was supposed to do about his schooling, the principal told the mother she could try and enroll him in another school if they would have him but because it was so late in the school year (it is now April) the principal didn't think another school would admit him. The principal told the mother she should just try to keep her son out of trouble. The mother said she worked during the day and asked how she was supposed to keep her son out of trouble if he was home alone all day. The principal said it wasn't her problem and told the mother she should have done something about her son's behavior before it got so bad that he had to get kicked out of school.

1. **What is the problem?** There are lots of ways to look at the story the mother told you. What do you think the issues are?

2. **Is it really a problem?** What information do you need to have to know if this is really a problem and to help you decide what you need to do about it?

3. **If this really is a problem, what do you want to see changed in order to solve the problem?**

4. **Who else should be involved?** The principal and the mother are already involved. Are there any others whose help you need or who you worry might get in your way?

5. **What resources do you need to solve the problem?** In addition to the information and the involvement of others, do you need anything else?
Understanding Your Information Needs

Case Study

Problem: Twenty years ago, the state built a college campus on a part of your neighborhood. They tore down a lot of housing and converted other neighborhood institutions like churches into classrooms and administrative buildings over the strong objections of the neighborhood. The college ate up all of the portion of the neighborhood that sat on the west side of a major street. At the time, they promised to never cross over to the other side of this same street for any college purpose. Now, they are proposing to build 760 units of student housing on the east side of the street, on land owned by the local public transportation authority. This housing would not be available for neighborhood residents and would charge average rents to students that are way above the means of local residents to afford. You and your neighbors, many of them the same ones or the children of the ones who fought the battle to keep the neighborhood intact 20 years ago, are opposing this latest assault on your neighborhood.

1. What kinds of information do you need to get started? What do you need to know about the college's plan? About the process they must go through to get permission to build the student housing?

2. Who are your allies in this effort, who are your adversaries, and who will make the decisions? Who else in or outside of your neighborhood might be on your side? Who opposes you? Who will make the decisions of whether to let the housing plan go forward?

3. What kinds of information do you need for each of these allies, adversaries and decision makers? You will need different kinds of information for each of these groups. What kinds of information will you need to convince other people to help you? What kinds will you need to fight against those who want the student housing to be built or to convince them you are right? What will convince the decision makers to rule in your favor?

4. How will you present this information to each group? There are lots of ways to present information: write letters, make community presentations, write grant proposals for money to fund your ideas, work with the media. How will you present your information? How do those presentations change depending on the group (ally, adversary, decision-maker) you are trying to reach?
Understanding the Uses of Information

Case Study

Problem: There is a vacant lot in your neighborhood just down the street from your home. Children in the neighborhood used to play there. But lately, you've noticed a group of adults hanging out there in the afternoons and at night and your children are afraid to play there anymore. They say the adults are using drugs and sometimes get into fights and they don't feel safe. Unfortunately, the closest park is a few blocks away and across a major street from where you live. There really isn't anywhere else for the children to play. The lot belongs to a local resident who has not been able to take care of the property and he has said that he would be willing to sell the vacant lot. You and some of the other parents get together and start talking about buying the lot or asking the city to buy the lot and turn it into a playground.

1. **Who can help to make your playground idea a reality?** Whose support do you need? Whose permission do you need?

2. **What kinds of information do you need?** What do you need to know about the vacant land? About the neighborhood? About the children who live in the neighborhood? What will convince people to support you or to give you the permission you need?

3. **How will you use the information to reach and convince the people you need to convince?** There are many ways to use information: in writing letters, in making community presentations, in writing grant proposals asking for money to fund your ideas, in community bulletins or newspaper articles. How will you use the information you collect?

4. **How will you present the information?** Information can be shared verbally, in writing, and visually (such as maps or graphs). Sometimes information needs to take more than one form to be understood by others; say it and show it, read it and talk about it. How will you present your information so that others understand and want to help?
Appendices

Providence - Training Community Stakeholders in the Hands-On Use of Data in Specific Applications
Request for Proposals – Community Partners in the “Information for Change” Project
Sample Community Partner Workplan - Center for Hispanic Policy and Advocacy
Description of Community Partners and their Projects
Information for Change Training
  Project: Selection Sets and Joining
  Project: Thematic Mapping
  Project: Databases and Sources of Data
  Project: Select by Location
  Project: Using the Internet
Abstract
The Providence Plan is issuing a Request for Proposals (RFP) to expand the network of Community Partners in our Information for Change project. The Community Partners initiative strives to help nonprofit organizations enhance their use of data and information technology to improve their communities.

Background
The Providence Plan began work on its Information for Change project in July, 1996. Information for Change enables us to consolidate all of our information-related initiatives that had previously existed, like the Providence Neighborhood Factbook, Geographic Information Systems (GIS), and the Providence Demography Initiative; to expand the information resources available to the Providence community; and to enhance the capacity of a growing network of community-based information users known as Community Partners.

The Community Partners aspect of the Information for Change project is a community building initiative. Community Partners are organizations committed to using information technology to bring about positive change within a particular neighborhood in Providence or for a particular segment of the Providence population. The goal of this initiative is to develop community capacity to identify, collect, interpret, and use data to address issues that are important to a particular community. We view this work as the beginning of a community-based information network. Our Community Partners are both users and producers of information.

An expanded network of partners will not only get useful information into the hands of more people, but will enrich our collective work by introducing additional experiences and perspectives.

Work with Community Partners
Work with Community Partners began in the fall of 1996, after a period of planning to determine project expectations and staff capacity. The heart of our community access strategy to date has been our close work with five community-based organizations in Providence:

- Center for Hispanic Policy and Advocacy (CHisPA),
- International Institute of Rhode Island,
- Mount Hope Neighborhood Land Trust,
- Rhode Island Organizing Project (RIOP), and
- Rhode Island Urban League.

For each partner, The Providence Plan purchased a computer, printer, and GIS mapping/database software. Edgenet Internet Services donated unlimited Internet access to all partners in the project.

Over the course of the year, Community Partners have received training and on-site assistance in the following areas:

- Basic Computer Skills
- Database Development
- GIS Mapping/Database Software (Maptitude)
- Internet Use

Each Community Partner has used the training and equipment to address its own distinct information needs and challenges. For example, one Community Partner used Maptitude to produce maps of vacant and abandoned properties in Olneyville. Another Community Partner is developing a database that will
track home health visits and catalogue health issues in the community. This year, The Providence Plan will work closely with its Community Partners to assess their community needs and obtain and analyze data that will help in addressing those needs.

The Providence Plan invites proposals from nonprofit organizations in Providence to participate in the Community Partners initiative. This year, The Providence Plan will select 3 - 6 organizations to join this initiative. Community Partners will receive computer hardware and/or software as needed to participate in this initiative. Internet access may also be provided. Each organization will participate in training sessions along with other Community Partners.

Profile of Applicant Organizations
The Providence Plan is seeking Community Partners that have information technology needs that are not currently being met. Strong applicant organizations will be those that have a close connection to the community, such that community members will be actively engaged in the information-based community building projects.

Community Partners must be dedicated to building community around information and technology. This includes, but is not limited to:
- Identifying the community’s needs and goals;
- Identifying ways to use information to address community needs and further community goals;
- Using technology to increase the information flow within a community;
- Using technology to develop and/or strengthen ties among members of a community; and
- Using technology and information to make more informed decisions regarding that community.

Criteria for Evaluation
- Demonstrated commitment to community involvement in community building activities;
- Commitment to building organizational and community capacity to use information as a tool for community change; and
- Clear understanding of how information technology can benefit the organization’s work within the community.

Information Session
If you would like further information about the Community Partners initiative, you are welcome to attend an information session on Wednesday, October 15, at 3:00 p.m. at The Providence Plan office. Please note that attendance at this meeting is not required to be considered for selection as a Community Partner.

Application Timetable
All applications must be complete upon initial submission. Proposals should be addressed to:

Michael Simon
The Providence Plan
56 Pine Street, Suite 3B
Providence, RI 02906

The date of issue for this proposal is October 2, 1997. All responses must be received at the Providence Plan office no later than Friday, October 24, 1997. Community partner decisions will be completed by November 14, 1997. Questions concerning this RFP may be directed to Michael Simon at (401) 455-8880 or msimon@providenceplan.org.
APPLICATION
Community Partners in the “Information for Change” Project

BACKGROUND INFORMATION

Name of Organization: __________________________
Address: ______________________________________________________
________________________________________________________________
________________________________________________________________
Phone: _________________________ Fax: _____________________________
Designated Community Partners Contact: _______________________ Title:_______________________
Secondary Contact: __________________________ ______________ Title:_______________________

What is your organization’s Mission Statement?
_______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________

Please attach any other background information on your organization that you would like to include.

CURRENT TECHNOLOGY CAPABILITY OF YOUR ORGANIZATION

How would you rate the current computer literacy of your staff members? (circle all that apply)
Cyberwizards Advanced Intermediate Beginner No experience

# of computers on site: __________________________
Are these: IBM-compatible or Macintosh-compatible
Do these use: Windows 3.1 Windows 95 DOS

# of color printers: __________
# of b/w printers: __________

Do you have:
• Microsoft Office? yes no
• e-mail capability? yes no
• Internet access? yes no
DESCRIPTION OF INFORMATION NEEDS AND COMMUNITY PARTNER PLAN

Please attach a description of your organization’s data and information needs and how these relate to your current or planned community building efforts. In this description, please address the following items:

- Staff capacity and commitment to information technology
- Description of specific projects for which information capacity will be helpful
- Expected organizational outcomes
- Commitment to community access and involvement

UNDERSTANDING OF PROGRAM REQUIREMENTS

We understand that, if chosen to participate in the Information For Change/Community Partners initiative, we would be required to attend all training sessions provided by The Providence Plan.

_________________________________ ___________________________
Signature Date

Completed applications must be received by 5 p.m. on Friday, October 24, 1997 at:
The Providence Plan
56 Pine Street, Suite 3B
Providence, RI 02903
fax: 401-331-6840

For more information, please attend the Information Session at The Providence Plan office on Wednesday, October 15, at 3:00 p.m. In addition, feel free to contact Michael Simon at The Providence Plan (phone: 401-455-8880; e-mail: msimon@providenceplan.org)
To: Community-based Organizations in Providence

From: Michael Simon, Senior Policy Coordinator

Re: Community Partners RFP

We are pleased to announce that The Providence Plan is issuing a Request for Proposals to expand the network of Community Partners in our Information for Change project. The Community Partners initiative strives to help nonprofit organizations enhance their use of data and information technology to improve their communities.

In order to broaden our outreach to include all of the neighborhoods and communities of Providence, we are contacting organizations that might be interested in applying to be a Community Partner and/or may be able to help identify organizations that might be candidates for this initiative.

Feel free to contact me at 455-8880 if you have questions or would like further information. Thank you!

Potential Partners (definitely a partial list)

Parents Making a Difference
South Providence Development Corporation
DARE
Smith Hill Center
S.E.D.C.
Oasis International
McAuley Village
Genesis Center
South Providence Neighborhood Ministries
SWAP
Olneyville Housing
West Elmwood Housing
John Hope Settlement House
Elmwood Neighborhood Housing
Good News Housing Corporation
Family Housing corporation
AS220
RI Coalition for the Homeless
Boys and Girls Club of Fox Point
Sojourner House
Nickerson House Community Center
Summit Neighborhood Association
Fox Point Citizens Association
Keep Providence Beautiful
Broadway Renaissance
Southside Community Land Trust
Elmhurst Neighborhood Association
Information for Change Notes
Community Partners -- Strategy Meeting 7.31.97

Current Partners
- RIOP
- Mount Hope
- CHisPA
- Urban League
- International Institute

Last formal meeting of partners: 5/7/97

Need to set next meeting
- Create curriculum:
  - “Internet Treasure Hunt”
    - List of sites of general interest
    - Find a piece of information that is useful to your organization
    - On TPP site, find specific information
    - Throw out subjects -- have them find sites
    - Have them share site information
    - Maybe even have them report what other partners found

- Other Issues
  - Internet
  - e-mail
  - HandsNet: group membership?
<table>
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<tr>
<th>Outreach Strategy</th>
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<td>• Funding -- <em>Jim will check with RI Foundation</em></td>
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<td>• How many to bring on? 4? 5?</td>
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<td>• RFP</td>
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<td>• Info. Session</td>
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<td>• Possibilities</td>
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<td>• COZ</td>
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<td>• DARE</td>
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<td>• Juan Pichardo’s group</td>
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September 24, 1997

«Title» «FirstName» «LastName»
«Company»
«Address1»
«Address2»
«City», «State» «PostalCode»

Dear «Title» «LastName»:

We are pleased to announce that The Providence Plan is issuing a Request for Proposals to expand the network of Community Partners in our Information for Change project. The Community Partners initiative strives to help nonprofit organizations enhance their use of data and information technology to improve their communities. All community-based organizations in Providence are encouraged to apply.

In order to broaden our outreach to include all of the neighborhoods and communities of Providence, we are contacting organizations that might be interested in applying to be a Community Partners and/or may be able to help identify organizations that might be candidates for this initiative. We would greatly appreciate your assistance in this effort.

Feel free to contact me at 401-455-8880 if you have questions or would like further information. Thanks so much for helping to spread the word about this exciting initiative!

Sincerely,

Michael Simon
Senior Policy Coordinator
Information Technology Leadership Training

The Pew Civic Entrepreneur Initiative (PCEI-Providence) is a new program that will provide twenty “civic entrepreneurs” with leadership training with a specific focus on the issues of job creation and economic development in the City of Providence. These emerging leaders will receive training in a number of leadership skill areas, and PCEI-Providence plans to focus at least one of its workshops on how to identify information needs and establish resources to meet those needs. PCEI-Providence will utilize the Denver Neighborhood Leadership Program Training’s “Use of Information for Community Change” as a model for this workshop.

PCEI-Providence has just begun its training sessions, and the program will run through June, 1998. The Civic Entrepreneurs have expressed interest in gaining information related to economic development. Specifically, the Civic Entrepreneurs would like to learn more about::

- Asset-mapping of neighborhoods;
- How to start a business, and how to share that information with others in the community
- Changing hiring practices in industries in Providence.

As the program develops, and as the Civic Entrepreneurs learn more about the resources available to them and the specific issues they want to tackle, the Providence Plan will assist their progress by providing them with access to data and with training on how best to utilize information.

In addition to workshops and trainings, the Civic Entrepreneurs will work in small groups on hands-on projects geared toward specific aspects of economic development in Providence. Each of these small group projects will be sponsored by one or more community-based organizations in Providence. The Providence Plan will urge its Community Partners to forge relationships with Civic Entrepreneurs and develop projects that use information technology as a tool toward enhancing job creation and economic development in Providence.
Executive Summary

The Providence Plan, partnering with the Community Opportunity Zone (COZ) Collaborative including the Providence Public Library, Providence School Department, and service providers within Providence’s Enterprise Community (EC), proposes a Community Opportunity Zone Information Network (COZIN). The COZ Collaborative is developing a comprehensive system for delivering services to residents of the West End/Elmwood neighborhood. The COZIN will enable service providers, schools, and libraries to access and share information about services offered by collaborative members and outside agencies, thereby streamlining service delivery to collaborating agency clients.

The COZIN will feature an integrated database containing information about services of the partners; information on health, education and social services; and community information, including neighborhood demographics and economic conditions. This information will be distributed via an Internet-based network and will be accessed through a graphical interface that will enable users to produce maps of geographically-based information at the click of a button. Through the COZIN, residents will receive accurate and timely information to assist them in meeting their needs. Information will be accessible to the ten partnering organization staffs, as well as to the general public at five COZ provider sites, three schools, the local branch library, and any other computer with Internet access. An evaluator will collect and analyze information to assess the uses, outcomes and impact of the COZIN. After the first year of operation, the COZIN will expand to two additional EC neighborhoods.
The Providence Enterprise Community (EC) is comprised of the most distressed, underserved neighborhoods in the city. The numerous educational, health, employment, and other social needs facing EC residents are compounded by the lack of an integrated service delivery system and a lack of shared information about these services. The many community-based organizations offering services within the EC do not integrate their services with other providers to comprehensively address the full range of residents’ needs. As a result, necessary referrals are not always made. Residents must track down the services they need, or their service needs simply go unmet. Furthermore, service providers often do not have sufficient information about the communities in which they operate and the populations they intend to serve, so they are unable to adequately plan their services. Individuals and service providers need information that will enable services to be delivered more effectively, efficiently, and comprehensively.

In partnership with the Providence School Department, the Providence Public Library, and community-based service providers, The Providence Plan is proposing to link neighborhood schools, service providers, and branch libraries via information and Web-based information technology. This information network will enable these individual community institutions to serve their common constituents more effectively as a whole. A pilot project will be launched in the West End / Elmwood community, where a “Community Opportunity Zone” (COZ) Collaborative has already been established to integrate education, health, human, and neighborhood services (see Appendix E). After the first year, the network will expand to two other communities and eventually form a citywide network.¹

The COZ Collaborative recognized early in their planning process that they could not successfully integrate their services without access to the proper information and without the tools to share that information and communicate with one another. The proposed solution to these service and information needs is the Web-based Community Opportunity Zone Information Network (COZIN). The COZIN will consist of several modular components, including: a “services module” featuring information on services and providers within the EC and beyond; a “planning module” featuring demographic and community profiles needed to plan for the service needs of constituents and prepare funding proposals; a “communication module” enabling collaborating agencies to communicate with one another and individual end users to contact service providers; a “reference module” featuring information about issues and organizations that are relevant to the topics of education, health, and human services; and a “mapping module” employing Web-based GIS (geographic information systems) server technology to enable end users to generate maps that put information in a geographic context (e.g., the location of child care providers near a resident’s neighborhood or potential employer).

The COZIN will be available to service providers through equipment and Internet access provided by this grant. The information network, and training on how to use it, will also be available to the broader community through school Family Centers, branch libraries, and the

¹ The communities and schools selected for this project coincide with those collaborating on the “Renaissance Centers” project recently funded through the 21st Century Learning Center program. This was a deliberate choice, to maximize the value of the school-community partnerships that had already been established, and based on the common goals of meeting the social and neighborhood service needs of the community.
community-based service providers that have an education and training component to the services they provide. In addition, anyone with Internet access will be able to access the COZIN.

**Outcomes.** The information and communication tools that the COZIN will provide will result in a more effective, integrated delivery of education, health, and social services to EC residents. The partners in the COZ Collaborative are confident that the integration of services enabled through the COZIN will reduce the obstacles facing many EC residents and lead to increased levels of employment and income, increased school readiness, and improved quality of life. These broad effects will result from other direct outcomes of the COZIN that can be evaluated. The COZIN will enable service providers to perform their jobs more efficiently and thoroughly, as they will have direct access to information that is relevant to the issues facing their clients, and to information that will enable them to make appropriate referrals to other providers. Increased collaboration will effectively stretch the resources available to providers by giving them direct access to the expertise of other professionals and by avoiding duplication of effort. The COZIN will also result in better planning of services provided to clients by enhancing providers’ knowledge of their client base with additional community profile information. Furthermore, information available through the COZIN will add value to school curricula and library reference resources.

Individuals and families will benefit from the COZIN, as it will provide them with more direct access to the full range of services they require. By providing residents with a single point of access to address multiple needs, we will reduce the need to make several phone calls or trips to track down available services. This is vital when dealing with a population with limited English language skills and low automobile ownership. Also, by making information available at public access points and providing training on how to access the information, residents will increase their independence in meeting their own needs.
Center for Hispanic Policy and Advocacy (ChisPA)

Project: Environmental Justice/Promotores de la Salud

Issues Project Will Address
Urban environmental justice and community health

Who do you plan to include/serve in this project:
CHisPA staff, Promotores, leadership trainees as well as community residents interested in environmental and health issues.

Objectives hoped to be achieved through this project:
• We will track and document Promotor outreach activities
• We will link residents interested in working on environmental justice issues to their neighbors
• We will also use Maptitude to help interested residents to identify urban space for community planning, land absorption, and enforcement purposes.

How will you accomplish this? What resources do you currently have that you can use for this project? What resources will you need? What format will the final project take?
To enhance community access to data, CHisPA will collect information on Promotor activities and environmental issues. Our staff will coordinate trainings of community residents and solicit ideas for information desired at grassroots level. We need technical assistance, troubleshooting, and mapping training. Our products are a database and periodic reports.

Timeline?
Ongoing
Description of Community Partners and their Projects

Community Partners
The Providence Plan works with an emerging network of nonprofit organizations to build their capacity to identify their information needs and to collect, analyze, and understand information that will enable them to better take action on those issues that are most pressing in their communities. Partners receive hardware and software, as needed; data collected by The Providence Plan and other partners; and technical training and support that will enable them to build organizational capacity that is sufficient to sustain the use of information technology over the long term. The goal of the Community Partners project is to ensure that information is used at the community level to mobilize communities to effect change and influence public policy.

Center for Hispanic Policy and Advocacy (CHISPA): CHISPA works to influence change to improve the quality of life for Latinos in Rhode Island. Last year, through the Community Partners initiative, CHISPA tracked presentations given in community members’ homes on a variety of health topics as a contribution to the effort to improve the health and overall quality of life for Latinos. CHISPA also mapped vacant lots in its neighborhood to identify areas that are potential threats to community health and safety.

DARE: Direct Action for Rights and Equality (DARE) organizes low-income families in communities of color to win social, political, and economic justice. Through the Community Partners initiative, DARE plans to create a Job Opportunities Building Strategy (JOBS). This JOBS project will use GIS to map existing and potential employment opportunities in Providence, create a “virtual hiring hall,” through a database/resume bank of community members seeking employment; and offer Internet access to explore strategies in other communities around the lack of access to decent jobs.

International Institute of Rhode Island: The International Institute works to provide educational and legal services to immigrants and refugees in Rhode Island. Through the Community Partners initiative, the Institute plans to implement its “Child-Like” project, to create and distribute a comprehensive listing of home- and center-based child-care facilities in their target area; create a map of child care facilities, bus lines and social service agencies.

Joslin Community Development Corporation: The Joslin Community Development Corporation assists residents of the Joslin-Manton area of Providence, particularly those of low-economic means, through advocacy, service, and monitoring. Through the Community Partners initiative, Joslin plans to complete an Inventory of Community Assets to create a database and asset map of people who live in the community as well as a map of small businesses in the area. It is intended to develop, educate, and strengthen the abilities of the community to make joint decision and analysis about growth and interests.

Keep Providence Beautiful, Inc.: Keep Providence Beautiful works to build a cleaner, safer, more beautiful Providence through education, public awareness, partnerships, and community outreach activities. Through the Community Partners initiative, KPB will create the “Litter Solutions” project to address the lack of regularly maintained public trash receptacles and the related litter problem. It will thus provide an issue on which residents can work together and address the issue of building communities.

Latinos for Community Advancement (LCA): LCA is an organization dedicated to the advancement of the Latino community by promoting participation, activism, and increased awareness. Through the Community Partners initiative, LCA will implement the Latinos Information Empowerment Network. This project will increase the technological activity of Latinos in Rhode Island by educating that community about the Internet and the World Wide Web and utilizing such information to make more informed decisions about community
needs. LCA also will work to standardize the collection of meaningful information about the Latino community in Providence and in the State of Rhode Island.

**Mount Hope Neighborhood Land Trust:** Mount Hope Neighborhood Land Trust works to provide affordable housing opportunities to low and moderate income residents of the Mount Hope community. Through the Community Partners initiative, Mount Hope Neighborhood Land Trust will implement a welfare-to-work project. The Neighborhood Land Trust will create a listing of all welfare recipients in the Mount Hope area; create a map locating these residents and the programs available to assist them; and set up job training and other skill-oriented programs for welfare recipients to make the transition to work easily.

**Project BASIC (Bringing Advocacy and Strategy Into the Community):** Project BASIC is a grassroots-organizing project that works in the areas of preserving, improving, and promoting low and moderate-income housing opportunities in Rhode Island. It also works with parent and community groups on public school issues. Through the Community Partners initiative, Project BASIC plans two projects: RI Community Reinvestment Association (RICRA), and Providence Teachers and Parents. The RICRA will develop an improved database to identify public and private deficiencies and/or discrimination in lending activities. The Providence Teachers and Parents project will use e-mail and the Internet to help facilitate discussion between teachers and parents who have difficulty meeting on a regular weekly or bi-weekly basis.

**Rhode Island Organizing Project (RIOP):** RIOP works to build a powerful organizational network, which trains and empowers ordinary community members to impact decision-making processes and change policies and institutional factors that obstruct healthy families, neighborhoods and society. Last year, through the Community Partners initiative, RIOP used GIS software to produce maps of properties in the Olneyville neighborhood that were sold through tax sales. Through the process of obtaining, analyzing, and presenting information, RIOP was able to show a correlation between tax sale properties and neighborhood blight, thereby affecting state legislation that will give municipalities greater control over tax-delinquent properties.

**Roger Williams Park Zoo Docent Council:** Roger Williams Park Zoo works to contribute significantly to the conservation of the Earth’s dwindling natural resources and to serve the community as a valued resource for education, economic development, and recreation. The Docent Council serves as the educational arm of the Zoo. Through the Community Partners initiative, the Docent Council will train a team of GIS Youth Technicians to map vacant and abandoned lots in neighborhoods throughout Providence. This project will assist in identifying and mapping environmental hazards, and it will lead to the creation of an exhibit in the Zoo’s art gallery to increase public awareness of vacant and abandoned lots as an environmental and health problem.

**Smith Hill Center:** The Smith Hill Center works to improve the quality of life and to create positive social change in the Smith Hill Community of Providence. Through the Community Partners initiative, the Smith Hill Center will build a neighborhood assets bank as a resource for community groups to further develop neighborhood leadership and to mobilize residents. The Center will use GIS mapping to address issues of environmental concern in the neighborhood, such as vacant lots and improper trash storage.

**Stop Wasting Abandoned Property, Inc. (SWAP):** SWAP, Inc., is devoted to increasing home ownership, cooperative, and rental living opportunities for low and moderate income families, thereby enhancing the quality and stability of the surrounding community. Through the Community Partners initiative, SWAP will work on a Development Activity project and a Neighborhood Improvement Project. The Development Activity project will include neighborhood residents and business people in helping SWAP to design and develop housing and retail opportunities that will best serve the community’s needs. The Neighborhood Improvement project will involve neighborhood residents in gathering information on available sources and infrastructure
needs. This information will be placed in a database and on maps to be distributed to residents and to be used in working with the city and grantmaking organizations to address the community’s needs.

**The Urban League of Rhode Island:** The Urban League of Rhode Island works to eliminate racial discrimination and segregation throughout the state. Through the Community Partners initiative, the Urban League will initiate an update of its “Help is Here” directory, and will work on a “De-Lead Resources” project. The “Help is Here” project will convert the existing directory into a database format and use GIS software to display locations on a simplified street map. The “De-Lead Resources” project will leverage resources for lead abatement programs in Providence by identifying lenders who can help Providence’s “Get the Lead Out” Coalition.

**West Broadway Neighborhood Association (WBNA):** WBNA works to improve and protect the quality of life in the West Broadway neighborhood by maintaining and improving relations with government officials and agencies, and by working with and educating neighborhood residents in community improvement through meetings, workshops, and other events. Through the Community Partners initiative, WBNA will initiate a Neighborhood Mapping project and a Neighborhood Marketing project. The Mapping project will create maps and a database that will focus on sidewalk repairs, tree plantings, absentee landlords, street association membership, and local businesses. The Marketing project will pull together information for realtors, developers, nonprofits, and local businesses that will form a database and maps that will be incorporated into an economic development and marketing plan for the neighborhood.
INFORMATION FOR CHANGE TRAINING

PROJECT: Selection Sets and Joining

Due: Next Community Partners Meeting _________________

INTRODUCTION

In the next phase of training for the Information For Change project, a series of projects will be distributed to each Community Partner. Upon completion of each exercise the groups will be invited to join together for a discussion/question and answer period regarding the training projects. The intent of these projects are to provide a practical implementation of Maptitude and mapping skills.

Each project will include an overview section describing the background to the project. Every attempt will be made for each project to be of a real world scenario. The overview section will discuss key concepts incorporated into the project. The actual exercise will be described in a step by step manner. Each project will include the opportunity for the advanced user to proceed one step further and touch upon future topics. Important Maptitude terms, operations and commands will be indicated in bold italic type.

KEY CONCEPTS

The essential theory behind Geographic Information Systems (GIS) is the linking of non-spatially oriented data to georeferenced data. Georeferenced implies that the data is tied to a physical location or point on the surface of the earth. Non spatial data may consist of any type of database, spreadsheet, ASCII text or traditional row and column type data. Maptitude and other GIS applications provide us the tools to visualise non spatial data in a spatial capacity.

An example of georeferenced data, or spatial database, is our parcel coverage. If we were to look at this spatial database using a Maptitude dataview, or a window that displays data as a table, it would look like any other database file. However certain fields are reserved to represent and maintain the georeferencing while other fields store data about the mapped feature like plat, lot and platlot. In our parcel coverage, the platlot field contains a unique number for each parcel, platlot. Maptitude allows us to perform a join to non spatial database files that contain a field common to both the spatial and non spatial data. Both the parcel coverage and pardata database file contain the platlot numbers for every parcel in Providence. We use platlot to link information between to the two data sets.
**PROJECT OVERVIEW**

Your organization has been chosen by the City of Providence to identify a location(s) to build a new playground within the city. Your search must meet the parameters specified by the city parks department. The criteria are as follows:

- The park is to be constructed on a vacant parcel (no structures) as to save money on any demolition costs.
- The maintenance budget for the proposed park can only support a park between 0.1 and 0.5 acres in size.
- The city can afford to spend up to $7500 dollars on the available parcel(s).

Therefore, using your Maptitude skills, compile a list of all the properties meeting the City’s requirements.

**DETAILS**

This being the first training exercise, we have decided to include a more detailed, step by step approach.

**Step 1**

Start Maptitude and open the *parcels* geographic file. Next, open the *pardata* dbase file. Note that the *parcels* are placed in a *map* window and pardata is placed in a *dataview*.

**Step 2**

At this point we must establish a relationship or *join* between the spatial data in the geographic file and the non-spatial data from the dataview. This process ties together the two data sets so that we may map the non spatial database information and give it a geographic component.

**Step 3**

We are now ready to start applying the City’s criteria to our data. Use the tool buttons or pull-down menus to start a *select by condition* operation. Our first parameter we need to look at is whether or not the parcel has a structure on it. Looking at the fields in the *Parcels+PARDATA* dataview, notice the *TTLBLDGVAL* filed. This field represents the assessed value of the building or structure on a parcel. We will make an assumption that if the assessed value of the building is zero, that there is in fact no building there. Therefore, we can select by the condition, *TTLBLDGVAL = 0*. Using the *condition builder*, create your selection set. This process should yield a set of 284 records.
Step 4

Once again, using our **tools-select by condition** functions, we can build a condition to select out the parcels that meet the size restrictions as specified by the city. Since the lot must be greater than 0.1 acres but smaller than 0.5 acres we will use the acre field from **Parcels+PARDATA**. This time, when we use the condition builder we will use the *between and* operator from the *operator list* and specify the lower and upper limits of the values we are looking for. Additionally, in the *selection method* box, we need to specify the *subset* choice. This will tell Maptitude to only look at our previous selection of 284 records and select a subset from it. This will not search the entire **Parcels+PARDATA** dataview. This process should yield a set of 85 records.

Step 5

We can now make our final set by selecting those parcels with an assessed value of less than $7500 dollars. Using the **TTLPARCLVAL** field we can use the condition builder to select only those parcels with an assessed value less than $7500 dollars. Again, in the *selection method* box, we need to specify the *subset* choice. This will tell Maptitude to only look at our previous selection of 85 records and select a subset from it. This process should yield a set of 20 records.

Step 6

Congratulations, you should now have a list of 20 potential sites for a new playground! Using the pull-down menu to pick **Tools, Selection**, toggle the map display to show selection only. Your map window should now show the 20 parcels. **SAVE** this as a workspace file, it will be used again in later exercises!

**ADVANCED TOPIC** (optional exercise)

Using a *layout*, print a map of your results with a title, north arrow, scale and legend. *Bring a printout of your map to the Information For Change training meeting on December 6th.*

Try the exercise again using only one condition statement. Please record the condition below.

*CONDITION:______________________________________________________________.*
INFORMATION FOR CHANGE TRAINING

PROJECT: Thematic Mapping

Due: Next Community Partners Meeting _________________

KEY CONCEPTS

For background information on Thematic Mapping, please thoroughly read and understand Chapter 7, Using Themes to Present Information, in your Maptitude 3.0 User’s Guide. Please pay particular attention to the chart describing the different methods of setting up classes on pages 114 through 115.

PROJECT OVERVIEW

Your organization has been chosen by the City of Providence to produce a neighborhood map of the distribution of the children under 5 years of age. You must also plot the locations of schools in the Providence School System that don’t have an AmeriCorps Parents Making a Difference Family Center at their location. The city has also requested that your map distinguish between elementary, middle and high schools.
DETAILS

**Step 1**

Install your new data according to the instructions found in the accompanying documentation.

**Step 2**

Open the 90CENSUS.cdf. This will be the base layer of your map. Using the Add Layers tool, add neighborhoods (NHOOD.dbd) and public schools (SCHOOL96.cdf) geographic files.

**Step 3**

Make CT, the layer for 90CENSUS, the working map layer. Using the **Color Theme MapWizard** button, create a color theme. The creation of a color theme ranks or orders each record, in this case census tract, according to some value. Given the task, in the field selection box, choose the **PCT_0TO5** field (percentage of children 0 to 5 years old). In the method selection box, pick Equal Size Intervals. In the # of classes selection box, choose 5 classes. Now click OK. Congratulations, you have just created a thematic map using a color theme. The census tracts have been divided into 5 groups, with each group (except the last) having an equal range of percentages (0-3%, 3-6% etc.)

**Step 4**

What you just created was a color theme map using the census tracts as boundaries. However, the city is interested in mapping at the neighborhood level. What we need to do now is to “hide” the census tract boundaries and expose the neighborhood boundaries. Using the **Map Layers** button select or highlight the CT layer and click the **Style** button. In the border style selection window, select none. Our map now shows the census distribution with the neighborhood boundaries.

**Step 5**

We will now make a selection set on the school information using **Select By Condition**. This is a review of the last exercise. The project requires you to identify schools without AmeriCorps family centers and differential those by type of school.

Make SCHOOL96 the working layer. Click the select by condition button and we will make our first selection set. Use the following condition: **AMERICORP = null & TYPE = “Elementary”**. The condition builder will prompt “yes” or missing - selecting missing will insert null into the condition. Use a set name of “Elementary Schools” and use
**Create Set** as a selection method. You have now selected all the elementary schools that have family centers. This should yield a set of 18 records.

Notes on what you just did. First, selection sets are case sensitive. If you type a capital letter or spell something wrong, the program will not find what you are looking for. That is why the **Condition Builder** tools can be helpful -- they take human error out of building conditions. Second, set names are important for legends. You don't need to type a set name when making a selection - the default name of selection will be used. Whatever you choose will be used to identify what you selected on the map.

**Step 6**

Following Step 7 as an example, create a selection set of all the middle schools with family centers and call it “**Middle Schools**”. This should yield a set of 4 records.

**Step 7**

Create a selection set of all the high schools with family centers and call it “**High Schools**”. Be careful - high school’s are noted with “H.S.” This should yield a set of 6 records.

**Step 8**

If you have done this correctly, each selection set be shown in a different color. You can control how this looks. Using the pull down menus select **Tools**, then **Selection** to activate the **Selection Toolbox**. Create a color scheme to distinguish between the three selection sets you have just created. First selection which selection set you want to modify, then click on the color palette. From there, you can choose any symbol, color and size works best. This will be reflected in your legend.

**Step 9**

If a legend is not already showing, use the pull down menu to select **Map, Settings** and then check off the **Show a legend** box. You may also use the **Show or Hide the Legend** button (two buttons to the right of the flashlight). When the legend appears, double click on it to show the **Map Settings dialogue box**. Using the options found here, create a legend that illustrates all the information that is presented in our map. There are many options to deigning your legend. It is important that you named your selection sets originally. For a detailed description of the parts of your legend, see pages 66-9 of the manual.

Step 10
Using a layout, print a map of your results with a title, north arrow, scale and legend. Save your work in a Workspace. Bring prints of your map to the next Information For Change training meeting.

**ADVANCED TOPIC** (optional exercise)

Again make CT your active or working layer. Click on the Color Theme Map Wizard button and go to style. This box allows you to change which colors are used to differentiate different census tracts and to modify legend text. There are numerous options in this box. It is best to just experiment with them. You can change colors individually, or use a start color and end color to let the computer fill in a range. Ranges of color, for example from white through greys to black, can be effecting in showing concentrations (the darker the color, the greater percentage of young children). A random array of colors, as Maptitude automatically uses, forces the user to rely upon the legend.
INTRODUCTION

KEY CONCEPTS

One of the challenges that we face as users of Geographic Information Systems (GIS) is the search for accurate and up to date information. Obtaining data represents about eighty percent of the total cost of developing a GIS system. There are two choices to make when looking for data to use in a GIS. We can research and obtain all the data ourselves which takes not only money but requires ever so valuable time; time that could have been spent analysing the data, utilising the GIS and doing all the other work that our jobs require. Alternatively, we can rely on data from other sources such as a commercial vendor of data or someone who wishes to share data free of charge in exchange for other data. Most organizations use a hybrid approach.

As data consumers, we need to address some of the pitfalls of obtaining data from external sources. We are all familiar with the cliché, if you want to do something right, you’ve got to do it yourself. This is not very far from the truth in regards to the quest for GIS data. Great care and attention must be paid to the quality of any data we obtain from either internal or external means. Quality control measures on our data are necessary to ensure that we are drawing the right conclusions from our GIS analysis.

When data is acquired through a sharing arrangement or commercial agreement, accuracy is not your only concern. There are many database software packages widely used in today’s electronic society. Each package maintains its own respective file format. Maptitude automatically understands dBase and FoxPro formats as well as fixed format text files, fixed-format binary files and comma-separated text files.

Most databases readily available today are known as relational databases. These types of databases store information in tables, or row and column format. Each row in the table is called a record and represents one person, place or thing. Each column is called a field and contains one piece of information about a record. It is important to remember that each source of data may be designed with a different configuration of rows and columns, or structure, for storing similar information.

In Maptitude can store data in either of the following types of fields:

- **integer** whole numbers between -2,147,483,646 and 2,147,483,646
- **real** numbers (with decimals) ranging from ±1.7E-308 to 1.7E+308
- **character** letters, symbols and numbers, up to 255 characters wide
Other database applications, like dBase and FoxPro, are able to store data in other formats like date and logical fields. Maptitude can read and display these formats but it translates them into character fields.

When creating a database in Maptitude, we are required to specify the following information:

- **Field Name**: brief description of information stored in that field (dBase format requires 10 characters or less)
- **Field Type**: integer (1, -400, 20, 0), real (-0.1, 123.7) or character (“Eric”, “Providence”, “FX237”)
- **Display Width**: number of characters the field can hold, it must be set for longest piece of information you wish to store (Providence, 10 characters wide)
- **Decimals**: used with field type real, how many decimal places will the field hold
- **Index**: additional information about field values, used by Maptitude in sorts and queries

The design or structure of a database is very important and must be taken into account when we are interested in combining smaller databases into larger ones. For example some databases may be designed to store the zipcode in an integer field and some databases may store it as a character field. Ordinarily, this would not matter, but if we wanted to append, or add one dataset to the bottom of the other, it would be impossible because the fields are represented by different data types and possibly different field widths. In order to append, or combine, two databases to each other each field from each database must be identical in both field width and type. In a database append, no new fields are added to the existing database, more records are added. A join, or adding additional information (more fields) to a set of records, depends on a common field. The common fields must have the same field name, field type, display width and number of decimals.

When entering data into a database table it may be easier to use codes or abbreviations for some repetitive data. If a field is set up to hold classification or coded information about a record, consistent classification methods and coding must be used throughout the database. Inconsistent classifications and codes could skew any analysis done with the data.

**PROJECT OVERVIEW**

Your organization has been chosen by the City of Providence to compile a comprehensive list of human services available throughout the state and produce a map for distribution to city agencies depicting the providers located within the City of Providence. You have already obtained several databases of provider locations. Your job is to extract all relevant information from each of the databases and compile a comprehensive database of service providers that can be address mapped and queried upon. Your database will have the following structure:

<table>
<thead>
<tr>
<th>FIELD NAME</th>
<th>FIELD TYPE</th>
<th>WIDTH</th>
<th>DECIMALS</th>
<th>INDEX</th>
<th>DESCRIPTION</th>
</tr>
</thead>
</table>

Community Partners Homework #3
## Community Partners Homework #3

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Width</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTR_NAME</td>
<td>Character</td>
<td>50</td>
<td>Center Name</td>
</tr>
<tr>
<td>ST_NUM</td>
<td>Integer</td>
<td>4</td>
<td>Street Number</td>
</tr>
<tr>
<td>ST_NAME</td>
<td>Character</td>
<td>50</td>
<td>Street Name</td>
</tr>
<tr>
<td>CITY</td>
<td>Character</td>
<td>25</td>
<td>City</td>
</tr>
<tr>
<td>STATE</td>
<td>Character</td>
<td>2</td>
<td>State</td>
</tr>
<tr>
<td>ZIP</td>
<td>Integer</td>
<td>5</td>
<td>Zipcode</td>
</tr>
<tr>
<td>ZIPPLUS4</td>
<td>Integer</td>
<td>4</td>
<td>Zipcode Plus 4</td>
</tr>
<tr>
<td>PHONE</td>
<td>Character</td>
<td>15</td>
<td>Telephone Number</td>
</tr>
<tr>
<td>FAX</td>
<td>Character</td>
<td>15</td>
<td>Fax Number</td>
</tr>
<tr>
<td>CONTACT</td>
<td>Character</td>
<td>25</td>
<td>Contact Person Name</td>
</tr>
<tr>
<td>TITLE</td>
<td>Character</td>
<td>15</td>
<td>Contact Person Title</td>
</tr>
<tr>
<td>ALT_CONT</td>
<td>Character</td>
<td>25</td>
<td>Alternate Contact Person</td>
</tr>
<tr>
<td>ALT_TITLE</td>
<td>Character</td>
<td>15</td>
<td>Alternate Contact Person Title</td>
</tr>
<tr>
<td>ALT_PHONE</td>
<td>Character</td>
<td>15</td>
<td>Alternate Contact Phone Number</td>
</tr>
<tr>
<td>CTR_TYPE</td>
<td>Character</td>
<td>10</td>
<td>Center Type</td>
</tr>
<tr>
<td>SRVC_AREA</td>
<td>Character</td>
<td>125</td>
<td>Areas served by center</td>
</tr>
<tr>
<td>RECNO</td>
<td>Integer</td>
<td>4</td>
<td>Index field necessary for address match</td>
</tr>
</tbody>
</table>

You will use the following classification scheme in the CTR_TYPE field:

- **CAPS** Community Action Projects
- **COZ** Child Opportunity Zone
- **DYCF** Department of
- **HEALTH** Health Centers
- **MENTHTH** Mental Health Centers
- **UNEMPL** Unemployment Offices

## DETAILS

**Preliminary Step:**
On your computer’s hard drive make a sub directory in the `C:\DATA` directory called `SRVCPROV` (for service providers).

**STEP 1:**
Start Maptitude, choose **File-New** from the pulldown menu, choose **Table File** as the file type and click OK. A database table can be created in of the file formats that Maptitude supports. The default is a **dBase** or **.dbf** file. The database file that is created in Maptitude can be used in any program that reads its file format.

**STEP 2:**
Click the **Add Field** button to add a new field to the list. Notice that a blue highlighted entry called Field_1, Type Integer, Width 8 appears in the **New Table** dialogue box. Also notice the **Field Information** section on the lower portion of the dialogue box. The Name section has Field_1 highlighted in it. You can replace Field_1 with **CTR_NAME**, the first name from the database structure as specified in the previous section. Use the pulldown arrow to select **Character** from the **Type** bar. Set the field width to 50 in the **Width** bar.

**Step 3:**

Community Partners Homework #3
Click the **Add Field** button to add a new field to the list. Notice that a blue highlighted entry called Field_2, Type Integer, Width 8 appears in the **New Table** dialogue box. Also notice that the **Field Information** section on the lower portion of the dialogue box has Field_2 highlighted. Repeat the procedure from **Step 2** for over writing the field name and replacing it with the next field from the database structure listed in the previous section. Remember to also set **Type**, **Width** and **Decimals** when necessary.

**Step 4:**
Repeat the procedures for adding fields until there is a field name in the New Table box for all the fields that are listed above.

**Step 5:**
Highlight the **RECNO** field in the field list window of the **New Table** dialogue box. In the **Field Information** section click off the **Index** pickbox (there should be an X in the window).

**Step 6:**
The design of the database table is complete. At this point, we have the option for Maptitude to add blank records for us automatically. The options for adding records automatically can be found on pages 273 and 274 of your *Maptitude 3.0 Users Guide*. For this exercise we will add the records manually. Click **OK** to complete this step.

**Step 7:**
The **Store Table In** dialogue box should now appear on your screen. In this box you may specify the file type (.dbf is the default and what we want for this exercise) and the path where you would like to store your new file. Choose the **C:\DATA\SRVCPROV** directory that you created and name the file **SRVCPROV.DBF**.

**Step 8:**
Maptitude places your new table in a **dataview** in the Maptitude window. Notice all the field names that you specified in the previous steps. We are now ready to add our data. From the **Edit** pulldown menu choose **Add Record**. Notice the box place in the first cell of your table and the “...” placed underneath each of the empty fields. Use your arrow keys to navigate across the fields and enter the respective information from your enclosed data sheets into each cell. Leave the **RECNO** field blank.

**Step 9:**
When you have completed entering the data for the first record, repeat **Step 8** until you have entered all the data. Please note that some of the data enclosed with your exercise is incomplete or lacking in some areas. This illustrates some of the pitfalls of obtaining data from outside sources. As part of this exercise you may wish to “fill in the blanks” and improve upon the quality of this data.

**Step 10:**
Use your mouse and click on the **RECNO** field. It should highlight the whole column. Go to the **Edit** pulldown menu and choose **Fill**. The **Fill** dialogue box should appear. Choose the **Sequence Start 1 Step 1** option and press **OK**. This uniquely numbers each record starting with one. This step is required for address matching and must be repeated each time any new data is added to the table.
Step 11:
Choose **Dataview-Select by Condition** from the pulldown menus. Create a selection set of only the providers located within Providence by building a condition where **CITY=PROVIDENCE**.

Step 12:
Open your Streets geographic file. Make your dataview the active window. Choose **Tools-Locate by Address** from your pulldown menus. The **Locate by Address** window should appear on your screen. In the **Input Layers** section of the window, choose **Selection** from the **Address Match** window and select the streets file form the **To Layer** window. In the **Input Data Fields** section, select **RECNO** from the **Record ID** window, select the **ST_NUM** field from the **Number & Street** window, select the **ST_NAME** field from the (continued) window and enter **99999** in the **Zip Code** window. Click **OK** to continue. You will then be asked to specify an name for the geographic file to store the new point features. Choose the **C:\DATA\SRVCPROV** directory and name the file **SRVCPROV** for service providers.
INFORMATION FOR CHANGE TRAINING
PROJECT: Select by Location

Due: Next Community Partners Meeting: ______________________

INTRODUCTION
One of the tools that Maptitude provides allows us to select a group of records from one layer using the boundary or area from another layer. This tool is extremely useful when we would like to group or aggregate our data by neighborhood, census tract, ward or any other arbitrary boundary. This exercise will provide you with an example utilizing a neighborhood boundary to add neighborhood information to an address-matched file. We will put a neighborhood code on the 1996 student dropout database (96drop.cdf). Now, that database has only census tract codes. When you are done, every dropout record will also have the appropriate neighborhood.

STEPS
1. Open NHOODS.CDF layer.

2. Use FILE-OPEN and choose a file-type of FIXED FORMAT BINARY to select the .bin file for the 96DROP.CDF. A DATAVIEW should appear showing the data base structure for the 96DROP.CDF file. This database is what contains the information about the dropouts (gender, race, school, census tract, etc.)

3. We now need to add a field for the neighborhood code that will hold a code representing the neighborhood that the dropout falls into. We will use a numerical code to reduce the potential for spelling or naming inconsistencies. The codes are just the place number from an alphabetized list of neighborhoods. Please see the attached list. Choose the DATAVIEW-MODIFY TABLE menu option.

4. In the MODIFY-TABLE window click on the ADD-FIELD button.

5. In the FIELD INFORMATION portion of the MODIFY-TABLE window, fill in the following information. Enter NHCODE in the Name section. Enter "2" in the Width window. Click on the Index window so an "X" appears next to the word Index. Keep the default TYPE as Integer.

6. Click on the OK button and close this file. You have now permanently added a blank field in the Dropout data base.

7. Choose ADD-LAYER and add the 96DROP.CDF layer to the current map window. Click on the DATAVIEW button to view the additions made in Step 5.

8. Make the NHOODS.CDF layer active.

9. Choose the SELECT-by-POINTING tool from the toolbar and select a neighborhood.

10. If you are not sure what this neighborhood is, use the INFORMATION tool to find its name and its neighborhood code.
11. Make the 96DROP.CDF layer active.

12. Choose SELECT-by-LOCATION from the DATAVIEW pulldown menu. If you have done everything correctly so far, the SELECT by LOCATION window should read: SELECT 96DROP FEATURES section with are inside selected, a Features in section with the NHOODS and Selection options selected and a PLACE SELECTED 96 DROPS FEATURES IN section that has the selection and create set options selected. Feel free to examine the other options available to you. Make sure you return the window to its initial configuration. What this says is that Maptitude will select and put into a new selection set those records in 96DROP that are inside the neighborhood that you previously selected.

13. Click OK.

14. Change to the map window. The points of 96DROP.CDF that fall within the neighborhood chosen in step number 9 are now selected (indicated by red color).

15. Click on the DATAVIEW button.

16. In the 96DROP DATAVIEW window, change the Records to Display selection to Selection. Only the records chosen in step number 12 appear in the dataview.

17. Click on the NHCODE field name so that the whole row is highlighted in black.

18. Choose the EDIT-FILL command from the pulldown menu. This command will allow us to fill in a field value (the same one) for all records in the selected set in one step.

19. In the FILL window, click on the dot next to SINGLE VALUE. In the space next to this option, enter in the code for the neighborhood you chose in step number 9 and click OK.

20. Notice that all the records in your selection set have a value in the NHCODE field. If you change the Records to Display feature back to All Records, you will see that only a small portion of those records have been filled in with a neighborhood code.

21. Return back to the map window.

22. Click on the CLEAR SELECTION button in the toolbar to clear the selected items from the 96DROP layer.

23. Change the active layer to NHOODS and use the CLEAR SELECTION again to clear the selected neighborhood.

24. Repeat this process from Step 8 until every record has a neighborhood code associated with it.

CONCLUSION

You have now added neighborhood information to the records of an address matched geographic file. This exercise will work for any database in which you have an address
or point location, but want to total records up or label them by some area (neighborhoods, census tracts, wards).

This can also be used to save time. If you work with a set of parcels on a regular basis, like all those in a certain neighborhood, use you use Select by Location to identify all the parcels in the boundary of a neighborhood and then use the Export tool to save these as their own geographic file.
INFORMATION FOR CHANGE TRAINING
PROJECT: Using the Internet

Due: Next Community Partners Meeting: ________________

Introduction:

Edgenet has been kind enough to provide the Community Partners Project with free Internet and email access. In return, edgenet asks that we keep a sign/flyer next to the computer with the Internet connection indicating that they are providing the Internet service, and that each of you keep a supply of edgenet flyers available to anyone interested in edgenet services. Tony will distribute these materials at the next partners meeting.

The accounts provided by edgenet are unlimited access accounts with two free email names. Additionally, each account has 10 megabytes of space on the edgenet server for a web page and to store your email messages. Should your organization decide to put up a web page, it would be nice to acknowledge edgenet's contribution on your web page by placing a direct link to edgenet on you page. For an example, please visit The Providence Plan's web page (www.providenceplan.org) or call for assistance.

Below you will find some important information regarding your edgenet Internet connection and email addresses for all involved with the Community Partners project (information on the International Institute’s email address was not available at the time this memo was printed). On the following pages is a brief training exercise on using the Internet. Please be aware that the formatting and content of the web sites included in this exercise may be changed by their designers at any time. Should you experience any difficulties please call with any questions. Enjoy the exercise.

General Internet Information:

Internet Service Provider (ISP) edgenet
   ❖ Company that provides customers an access point to the Internet

Dialup Number 401-854-1000
   ❖ Number your computer must dial to access the Internet through edgenet

Partner Email Names
   ❐ ChisPA chispa@edgenet.net
   ❐ RIOP riop-ivp@edgenet.net
   ❐ Urban League urbanleagueri@edgenet.net
   ❐ Mount Hope mhnltta@edgenet.net
   ❐ Providence Plan adeluca@providenceplan.org
      msimon@providenceplan.org
      jvandermillen@providenceplan.org
Internet Training Exercise:

- Start your web browser (Microsoft's Internet Explorer).
- Go to edgenet's homepage by typing in www.edgenet.net in the Address section of your web browser and hit return. You have just typed in the "web address" for edgenet. In other browsers, this section may also be labeled or called URL, or Universal Resource Locator. Please identify and record the following information:
  - What is the monthly cost for an Internet account with edgenet? ______________
  - Examine the edgenet home page. What are the different customer support options available to you as an edgenet customer? ________________________________

- Each time that we start the web browser, the software loads a default web page, known as the Start Page in Internet Explorer. Other browsers may call the default page the Home Page. We can customize our browser and specify the start page. You may want to set this to a popular page that you visit regularly. When you click on the Home button on your browser, you will be brought back to the page that is specified as the start page. For the purposes of this document we will set the start page to edgenet. Please do this by:
  - Type in the edgenet address and hit the enter key.
  - Once the web page loads, go to the View pull-down menu and select Options.
  - Select the Navigation tab.
  - In the Customize section of the window notice the setting for the Page bar and select Start if it is not already done so.
  - Click on the Use Default button and make sure the edgenet address appears in the Address bar.
  - Click on the Apply button at the bottom right corner of the window.
  - Click the OK button to complete the process.

- You may notice that to visit web sites, you may have to do a lot of typing. Fortunately, your web browser has a feature called Favorites, other browsers may call this feature Bookmarks. Favorites and bookmarks allow users to revisit web sites with ease by retaining a web address in a special location for quick access. We will now set up The Providence Plan web page as a favorite.
  - Type in The Providence Plan web address: www.providenceplan.org and hit the enter key.
  - Click on the Favorites pull down menu and select Add to Favorites.
  - You may specify a name in the Name bar for this Favorite or accept the default.
  - Click the OK button.
  - On your browser, click on Favorites and notice the Favorite that you just created in the listing on the lower portion of the window. To visit the site again, just select that Favorite.
If you wish, you may further organize your favorites by clicking on the **Create In** button and then choosing the **New Folder** option. Type in a name in the **Create New Folder** bar to organize the favorite in a folder (this is usually a category or subject). Once the organizational folder(s) exist(s) you only have to click on the **Create In** button and select the folder to place your favorite into.

- Web pages can contain special entities called **hyperlinks**. The **hyperlink** concept is similar to **favorites** in that they are shortcuts to a location on the web. By clicking the mouse on a **hyperlink**, the user is brought to another spot on the current web page or to a completely new web page. A **hyperlink** can take the form of either a picture or text. A highlighted border around the image usually denotes a picture **hyperlink**. Underlined and highlighted text usually denotes a **hyperlink**. A second way to tell if an image or text is a **hyperlink** is to move your cursor over the object. If the cursor arrow changes to a pointing hand when placed over the image or text a link is present. Once you navigate through a link, the highlighting color changes to indicate to you that you have visited this link before. To see an example how a **hyperlink** works, please follow along.

- Visit the Providence, Rhode Island web page by typing in **www.providenceri.com** in the **Address** bar and hitting the return key. (This page is a great place to look for Providence and RI information, you may want to create a favorite for this page.)

- Scroll to the bottom of the page to examine the various images that are set up as **hyperlinks**.
- Find and click on the **hyperlink** for the Providence Journal.
- Did this **hyperlink** keep us on the same web page or bring us to a totally new page?
- What is the web address for the Providence Journal?
- Examine the Journal site and provide a reason why the site can be accessed for free.

- Websites that contain volumes of information such as a government site contain "search engines" that allow you to search all of the documents contained on that site using user-defined keywords. As an example, we will go to the HUD homepage and use their search engine to look for information on Notices of Funding Availability (NOFA).

- Go to the HUD homepage (**www.hud.gov**).
- Click on the **Search** button.
- Click on the **Web Site Search Tool hyperlink**.
- In the **Search** bar type in "NOFA" (you don't need to type the quotes) and hit return. Click **Yes** through the security warning.
- Click on the response or "hit" that says Funding (this is a **hyperlink**) and navigate to the Funding page.
- Click on the NOFA link.
- Find the NOFA regarding "Youthbuild" and click on the **.txt hyperlink**.
Internet Training Exercise

- Print this page/document by clicking on the **File** pull down menu and then select **Print**.
- Give three more examples of funding availability.

Let's explore the Census homepage

- Go to the Census homepage ([www.census.gov](http://www.census.gov)).
- Click on the **Just For Fun** Link.
- Click on the **Map Stats** Link.
- A map of the US States should appear. We want to search for RI information by clicking on RI on the map. The state is so small that we may mis-click. The Census has accounted for this by placing a "text only" link at the top of the page. Click on it.
- A listing of the US States should appear. Click on the **Rhode Island** Link.
- Click on the Providence County Link.
- Click on the **Map** Link.
- A map of Providence County should appear. Experiment with this map if you wish.
- Scroll down to the **Search for a Particular Place (Us Gazeteer)** section and click on the **Search** button. Click **Yes** through the security warning.
- Type in the zip code for your neighborhood in the 5-digit zip code bar and click the **Search** button.
- You should now have a choice of two links to click. A Map Link and a **STF3B** Link. Click on the **STF3B** Link.
- Scroll down and check off the box marked **P8 for Race information** and click the **Submit** button at the top of the page.
- Click on the **HTML** format option (it should already be set as the default) and click on the **Submit** button.
- View the results and print the page.

Let's explore The Providence Plan homepage.

- Use the **Favorite** you set up for The Providence Plan to navigate to The Providence Plan homepage or type in the address manually.
- Click on the **Neighborhood Factbook** link.
- Scroll down to **Part B Neighborhood Profiles and Statistics** and click on this link.
- When the Providence Map loads, click on the downtown neighborhood.
- Use this page to identify the three names by which the downtown of Providence has been known over the years.

- Click on the **Back** button. This will bring you back to the previous page that you were on. Click on the **Back** button one more time to bring you back another page.
In the Part B Neighborhood Profiles and Statistics section, click on the Downtown link. Is this the same page that you have previously visited? This is an example of two hyperlinks pointing to the same location.

Scroll through the information to find the population of Downtown in 1990.

Describe the problem with The Providence Plan homepage Part F and beyond.

There are many options available that assist the users of the Internet in locating information. Your web browser is set up to take you to a site with various search engines.

Click on the Search button on your web browser.

Note the web address that this button took you to.

List the Search Engines that are available to use. These appear in the upper left corner of your screen under the words "search the web".
1. 
2. 
3. 
4. 
5. 

AltaVista should be your default Search Engine. If it is not, select it from your list of available options.

In the search bar type in Providence and then hit the Search button.

How many documents did the search find?

List the titles and web addresses of the first three links identified with this search.
6. 
7. 
8. 

Click the Back button to go back to the search window and replace Providence with Providence Rhode Island (no commas and one space between words).

How many documents did the search find?

Click the Back button to go back to the search window and replace Providence with "Providence, Rhode Island" (include comma and quotation marks).

How many documents did the search find?

Why did your search results vary between searches?

Click on the help Link for more info on specifying a search.

Experiment with some of the other search engines using the same keywords in your search as above.

Did the other searches result in the same number of documents identified as did the AltaVista search?

Why do you think this happened?

Using your newly acquired Internet skills, locate some additional web sites that
Internet Training Exercise

provide useful information relevant to your work. Please record the URL for all the web sites that you have found and describe how you located these sites.

- Visit the following sites and prepare a brief description about each site.
  - Handsnet: www.handsnet.org
  - Urban Institute: www.urban.org