Project Summary
The Richmond Neighborhood Indicators Project Chesterfield Expansion proposed to increase the efficiency of decision-making processes used by a local community development corporation in its efforts to identify potential project sites in Chesterfield County. Administrative data at the block and/or parcel-level is not readily available to those working in community development in the county. This project entailed the development of a data sharing agreement between Chesterfield County and the Richmond Neighborhood Indicators Project (RNIP), integration of this data into the current RNIP system, and provision of consultant services to Virginia Supportive Housing (VSH) to assist them in using this data to identify a potential site. While the stated objective of the project was to work with a specific data-user on a specific project, the addition of Chesterfield County administrative data to the RNIP system will benefit a wide-variety of non-profit users, both those working in Chesterfield, as well as those wishing to further examine issues faced along the City/County border and build regional solutions to problems facing our greater community.

Project Partners
The main collaborators on this project were the Richmond Neighborhood Indicators Project (RNIP), Virginia Support Housing and the Chesterfield County Department of Environmental Engineering. RNIP is a project of Richmond Local Initiatives Support Corporation (LISC) and Virginia Commonwealth University Department of Planning and Urban Development (VCU- DPUDG) that began in 1998 to provide community development corporations (CDC) with easy access to data and analytic consultancy to use in planning proposed real estate projects and measuring the impact of past efforts. Through data sharing agreements with various agencies at the City of Richmond, RNIP currently houses a variety of City administrative data. In addition, RNIP has 1990 and 2000 Census data and a small amount of employment data for the entire region. In total, RNIP has nearly 100 indicators on its system, which have been used by community development corporations, social service non-profits, as well as faith-based organizations for real estate site planning, fundraising, community awareness building and program development. Wendy Hirsch from Richmond LISC acted as the main contact on the project.

Virginia Supportive Housing is a local CDC that has been a past customer of RNIP, as well as a long-time Richmond LISC partner. As a partner of Richmond LISC, VSH has received capacity building services, loans and grants to support its work in providing transitional, special needs and homeownership housing to residents of the Greater Richmond region. As an RNIP customer, the VSH real estate development team has used the system to create maps to help identify possible sites for single-room occupancy (SRO) housing, and to explain crime patterns in neighborhoods during community meetings.
For this project, VSH was interested in identifying possible sites for apartments for disabled residents, single-family housing and/or SRO housing in Chesterfield County. Candice Streett, Director of Housing Development, represented VSH in this project.

Several years ago, Chesterfield County formed its Affordable Housing Taskforce as part of its work to begin to acknowledge and address the housing issues faced by a growing number of County residents. Representatives of LISC have been a part of the Taskforce from its inception and are committed to assisting the county as it grapples with difficult questions of how to address the housing and community development problems it faces. Chesterfield County has an extensive and enviable GIS system. However, the County provides access only to a very limited number of indicators on a neighborhoods-wide basis via its website. Collaboration and sharing of data increases access to a wider-body of County administrative data on a block and parcel level, and better enables non-profits working in the County to meet the needs of the County and its residents in a thoughtful and efficient manner by empowering their decision-making with data. The current collaboration is the culmination of several years of discussion and building of the level of mutual trust necessary to undertake a successful data-sharing effort. Initial contacts for this project were made with Deputy County Administrator Brad Hammer. The actual data sharing agreement was established through Tammy Ebner, GIS Manager, with the County’s Department of Environmental Engineering.

**Pilot Goals and Objectives**
The goal of this project was to take a further step towards providing a regional data resource, which includes easy access to data and analysis consultancy, to increase the effectiveness of non-profits and decision-makers in working to strengthen Greater Richmond through community development efforts.

**Objective One:** To create a data sharing agreement between RNIP and Chesterfield County to allow for the transfer of current and future County administrative data (such as assessment, zoning, code enforcement, TANF, Medicaid, crime, building permits, etc).

**Results:**
The relationship building and crafting of the data sharing agreement was the most labor-intensive portion of this project. Higher-level management facilitated connections with the Department of Environmental Engineering, which houses data that is normally shared, for a fee with developers. The Police Department and Planning Department houses other data, which are not available to the public. However, it was decided that we would not attempt to create agreements with multiple departments, but would focus on department as a first step in a longer process. The manager of the Department of Environmental Engineering agreed to share their data with this project, free-of-charge; however, a legal document was necessary in order to do so. Over a period of several months, an agreement was negotiated that allowed RNIP to receive the data free-of-charge, and share it with other nonprofit entities. The data was received November. For more information, please see the learning questions section. For a list of data received, please see Appendix A.
Objective Two: Evaluate the Chesterfield County data received; create a plan for integration of the County data onto the RNIP system; execute this plan.

Results: Interns received the data and integrated it into the RNIP system. Dialog with Chesterfield County GIS specialists was necessary to create descriptors for individual datasets and to understand how it correlated with administrative data that is received from the City, as each locality labels and structures their data differently.

Objective Three: Interns and Richmond LISC staff will work with VSH to identify indicators most helpful in identifying potential properties for their development, create maps and data sheets of these indicators, and conduct analysis to draw conclusions from the data.

Results: VSH was interested in learning more about the neighborhood around a single-family property they were considering purchasing for the Home-by-Five program. This program works with formally homeless families to purchase homes over a period of five years. The organization was interested in learning about the property and the neighborhood where it is situated. Based on their request, the interns determined that we could look at assessments, tenure, and schools data acquired from the County to help give a picture of the neighborhood. Census data was also used to give an idea of incomes in the area. The organization was also interested in crime data, but we were unable to fulfill that request. Chesterfield County does not currently make crime statistics publicly available.

For more information, please see the learning question section. Examples of some of the maps produced for VSH can be found in Appendix B.

Learning Questions/Answers

1. What are the critical components to forming the relationships necessary to bring about a data sharing agreement? Who are the persons who need to be involved?

Through this experience, as well as others, we have found that the key to creating data sharing agreements is building trust. The human part of these agreements is much harder to negotiate than the technological aspects of them. As such, it is essential to have one person – preferably a “people person” – to drive the process from start to finish, plugging in different actors as necessary.

High-level decision-makers are needed to make initial connections and to ensure that doors are opened. In our organization, our Senior Program Director builds understanding with her counterparts on the objectives of our indicators project and the general notion of data sharing. Once these persons are “sold” on the idea, they are asked to open doors
with departments or persons that are actual data holders. We have found that these higher-level folks, including those in our organization, generally have little understanding about using indicators and/or technical requirements of GIS. It is advisable to rely on them only to open doors and make the initial approach, not to actually set up the agreement.

Details of the agreement should be hashed out with managers/specialists who work with data. These are the people who know the ins-and-outs of the data; however, they often lack the power to release any data to you on their own, so you generally shouldn’t start the process with them, but come to them after decision-makers have given the go-ahead. In this phase of the agreement building process, it is important to have someone on your team who has technical expertise who can answer specific questions that the data holders will certainly ask. It is also important to build a good working relationship with the data holders, because they will be important to help you understand the data they are providing and can be useful to you in the future for updates and possible additional sources of data.

2. **How does this relationship need to be maintained?**
From a technical standpoint, whether or not a written agreement is put in place, both parties should understand who the contact persons are, dates when updates can be expected, etc.

It is also important to maintain the human part of these relationships. Such data sharing agreements generally result in more work for the persons who are servicing them. A thank you card and acknowledgment of individuals’ efforts can go a long way. It is also advisable to share the successful results of your use of the data, to ensure that they see the value of the agreement. In this project, we thanked Chesterfield County in our bi-annual newsletter, as well as mentioned their contribution to our work in our annual report. We added our main contacts to our mailing list, and our interns have made personal contact with GIS specialists in Chesterfield County to ensure that they have a good working relationship with them.

3. **What are the technical aspects of data sharing that need to be considered when entering into a data sharing agreement?**
When setting up your agreement you should be clear about the datasets you are receiving, the format they are in and their level of specificity. Further, as different localities label and structure their data differently, it is important to either get a data dictionary from the data holder, or create one based on your discussion with them, so that you fully understand the data you have received and have accurate information on the sources of the data and its date. There is also technical trouble-shooting that needs to take place when integrating data from various sources to work on one system. The types of issues are dependent on the individual systems.
4. What are the critical components of a good data sharing/data access agreement?

All parties should understand the data that are being shared and how it can be used. Are certain data sets restricted for use only at an aggregate level? For example, when our project initially received data from the City of Richmond Police Department, we were obligated to aggregate it and only provide it at the block level, for reasons of privacy. It is also important that your use of the data is not so limited as to make it useless to you. For example, initially, Chesterfield County was willing to provide us with data, but would not allow us to share it, in any form, with our nonprofit partners. We had to rework that portion of their agreement, so that we could share data in the form of data tables or maps. We cannot, nor would we want to, share the data in bulk. (We are not a wholesaler, but rather a retailer of data.)

It is also important that the length of the data sharing agreement is established -- is it renewed yearly, or every five years? -- as well as specific dates when updates can be requested -- yearly, quarterly, monthly?

Finally, if acknowledgment needs to given to the data source, or if disclaimers on data usage and/or accuracy need to be included on the products produced with the data, these requirements should be clearly articulated in the agreement. For instance, many organizations produce maps that include notice that they cannot be held responsible for the use of the data or the result of its use.

5. What means of outreach is most effective in educating “customers” about the benefits of indicators and transforming interest into actual use of indicators/GIS into decision-making?

We have found that the most effective way of educating potential data users about the benefits of indicators is to make the indicators tangible and useful to them. This can be done through presentations, through publications and one-on-one conversations. We often do presentations that include specific visual examples that help people translate the idea of abstract data into a form that they can understand and value. National LISC also recently compiled a tremendously successful publication on using GIS in community development, which included case studies from across the country and numerous examples of maps, and explanations of how they were used. If people have not been exposed to GIS and/or are not comfortable with using data in their work, they often do not recognize the multiple ways in which they could integrate it into their efforts.

When working with individuals that request data and/or maps from our project, we find it is often important to ask them what they are hoping to accomplish using the data. It can be the case that people think they want to look at one thing, but that there purposes would be better served if they were to look at the problem using other indicators. Further, we are limited to the number of data sets that we keep on our system, so if we do not have the specific indicator that a group is requesting, we may be able to offer alternatives that will also provide the information that the group is after.
Appendix A

Data Received from Chesterfield County

Chesterfield GIS Data

Shapefiles  bza
Easement    Easements
elschool    Elementary school service areas
flood       Flood plains
hischool    High school service areas
index       County-wide map divisions index
lakesp      Lakes
lotlines    Magisterial Districts
magdist     Middle Schools
misdcline   Parcels (this file contains a ton of info; some of the labels are intuitive, others are not.)
miscine     Public facilities (fire houses, police stations, schools, libraries)
             Sewers
rpal        RPA
sewercon    Sewer connections
sewerpt     Streams
streams     Street
subdivp     Subdivisions
votingprecincts Voting Precincts
water       Water lines
zoline      Zoning lines (what are zoning lines?)
zoningp     Zoning

*Samples of Fields within Parcels Attribute Table
This provides specific information about individual properties, i.e. parcels.

Abbreviation

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Richmond Neighborhood Indicators Project Final Report
(Richmond LISC)
Appendix B

Sample Maps