Sophisticated information technologies are emerging as a tool for community building efforts of planners and Community Development Corporations (CDCs). Websites, Geographic Information System (GIS), and other visualization methods are now available to assist in place-based revitalization efforts. These tools facilitate better visioning, concept illustration, community planning & data collection efforts. GIS is perhaps the most important technological tool available to LCW in its efforts to understand and expand the IDA program, because it allows for a *place-based* analysis of community-building efforts not available through other tools.

One of the key questions we needed to answer for this project was how to create a GIS project that would be both useful and usable by CommunityWorks. Literature on successful use of GIS technology shows that useful systems focus on simplicity and small trials (Innes, 1993). Systems which effectively communicate their benefit to all stakeholders will encourage future use. Small trials allow users and creators the ability to change systems as needs evolve and also build effectiveness over time. A key concern for the sustainability of a project is the capacity of the organization to maintain and improve the GIS system (Kellogg, 1999). An important consideration for CommunityWorks is creating a core group of users who are comfortable with GIS software and can instruct others. Finally, any system must be accessible to community members both as a tool and as an expressive device, a helpful way to communicate needs and desires (Talen, 2000).

The process we designed to create the GIS project is based on strong participation from the various youth programs at CommunityWorks. We worked closely with the Young Architects and Young Professionals programs to collect data for entry into the project and also conducted training on the GIS software. The youth program participants will continue to be users, administrators and advocates for GIS use across the CommunityWorks organization.

Data Collection

Our team facilitated collection of two important types of information related to the IDA program:

1. Information collected on housing supply in Lawrence's North Common Neighborhood
2. Information provided by existing IDA Program Participants

The first category of information is intended to assist CommunityWorks in encouraging IDA participants to purchase homes in the North Common neighborhood, an area of particular concern to CommunityWorks. The second category is intended to help CommunityWorks better understand the needs and desires of existing IDA participants. The ability to visualize and analyze these two types of information (on people and place) will help CommunityWorks to join the housing needs of the IDA participants with the available supply within the community. Future data collection will allow CommunityWorks to expand its understanding of the community, and to increase the efficiency of its place-based revitalization efforts.

**PocketPCs and Geographical Information System**

Talented youth from CommunityWorks joined graduate students from MIT to walk the North Common neighborhood and collect physical information on the 485 properties therein. A series of workshops was conducted with IDA participants to collect information on their needs and desires with regard to home-buying. For further information on specific maps and data tables refer to Appendix B.

& Lawrence CommunityWorks
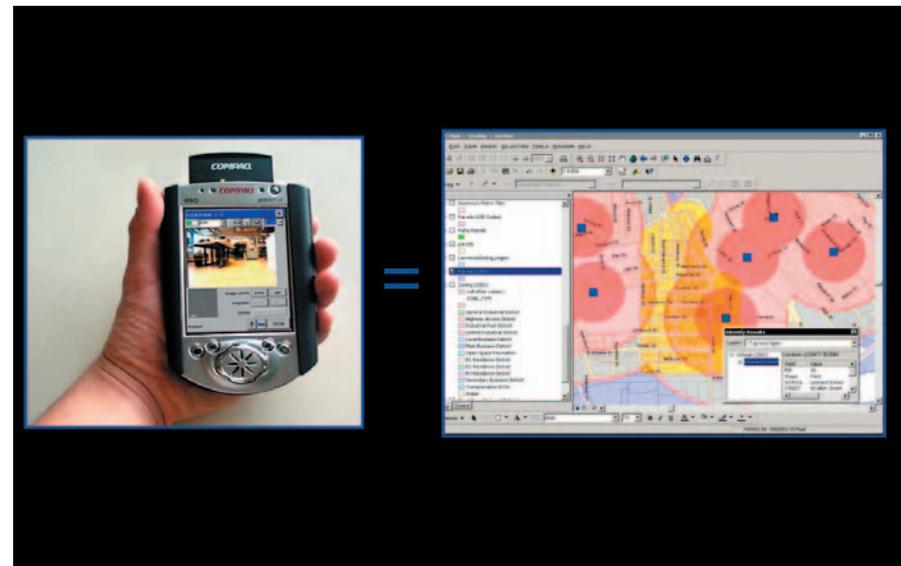
Comprehensive Binder

Distributed separately from this report is a comprehensive binder entitled "Lawrence Community Works: North Common ArcGIS Project & Data Collection Manual." The binder contains all information collected during this project related to the supply of housing in the North Common Neighborhood, as well as information collected at the IDA Participatory Workshops, and general information about the City of Lawrence. (Additional information is included on the use and programming of Pocket PCs for data collection, use of ArcPad, ArcGIS, ArcExplorer, and ArcPad Application Builder.) This wealth of geographic and database information will assist Lawrence Community Works into the future with the installation of its first comprehensive Geographic Information System (GIS) later this month. MIT secured two licenses for ESRI's state-of-the-art ArcView GIS software, and will assist with installation and setup of the necessary data and map layers. The five-year collaboration between MIT and LCW will benefit greatly from this platform of information, as well as the establishment of a process by which new information can be gathered and added to the system.

Property Disribution in North Common

Alexander | Canepa | Pauls | Port | Rice | Weisner
Course 11.423 | Spring 2004

& Lawrence CommunityWorks
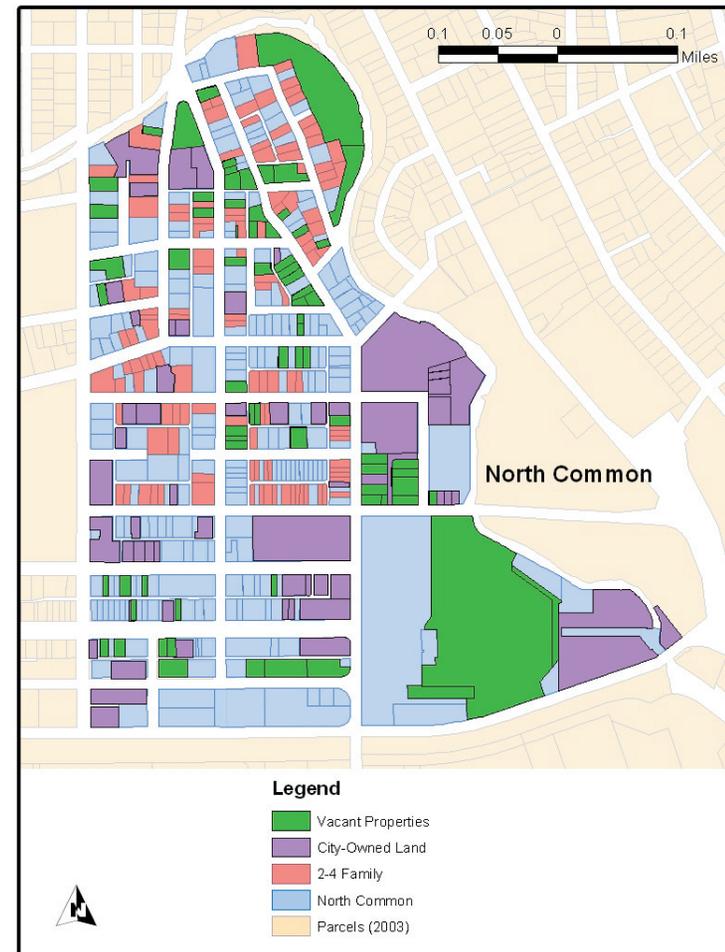
Having conducted a wide array of information gathering and community building activities, we next considered how to bring people and place together in Lawrence. This synthesis of the information we gathered was aided greatly by a focus group discussion conducted at CommunityWorks and organized by Armand Hyatt, staff lawyer and Board member. The focus group consisted of two real estate attorneys, two local realtors and two real estate lending officers from local banks. The discussion focused on IDA participants, their purchasing power, local housing stock, and opportunities for moving IDA members into homeownership. This discussion was useful both as an information gathering tool and as a way for these real estate professionals to meet and discuss ongoing difficulties and new possibilities.

Along with conducting various activities to better understand both people and place in Lawrence, we spent time trying to understand the barriers that kept these two apart. The primary barrier is easy to identify: the high cost of housing in Lawrence. Even small condominiums in poor condition cost at least $100,000 to purchase. The average IDA participant can afford the monthly payments on a home that costs about $65,000. A more adequate home that fills the needs of most program participants will cost around $175,000-$200,000. Homes in the surrounding areas are even more expensive. This gap between the purchasing power of the program participants and the market price of the available housing stock is the primary impediment to increased homeownership by IDA participants. There are other barriers that keep people out of the home buying market, including an aging housing stock and individual preferences.

In order to understand the dynamics of the real estate market, we analyzed recent sales data as well as Multiple Listing Service (MLS) listings, a service showing homes currently for sale. This data helped us to identify market levels for Lawrence, and can also be applied at the neighborhood level to understand the submarkets. This process of reviewing sales and the available for sale market is an ongoing activity that should be repeated by the CommunityWorks real estate department as part of its basic operations.

We also analyzed the purchasing power of the IDA participants, based on income levels and approximate down payments. The maximum income of IDA participants is set at 200% of the federal poverty level. In 2004 this means that in order to participate in the program an IDA member needs to earn less than $30,000 per year. The average participant probably earns between $20,000-$25,000 per year. Based on tax and insurance levels, this means that the average participant can afford a home worth between $60,000-$80,000 (see Appendix A for detailed calculations). This analysis can be repeated and improved upon with information about "soft-second" mortgages and other mortgage subsidy programs, which may be utilized to increase purchasing power.

housing needs of Lawrence residents — People → ← Place — housing units in Lawrence
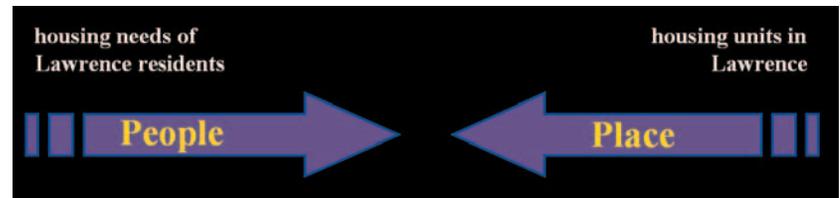
Our discussion with local real estate brokers, lawyers and bankers also revealed some of the difficulties in moving low and moderate income residents into homeownership. The available affordable options have many problems associated with them. Owning a multi-family home and renting out apartments is a good way to lower housing costs, but it involves being a landlord and dealing with tenants. This is a very difficult thing for new homeowners to do, with little financial backing to handle a few late rent payments or vacant units. In addition, the maintenance costs of 2-4 family homes are quite high and these homes can be difficult to maintain if funds are not properly budgeted by the owner.

Purchasing a home with another participant (informal collective purchasing) is also a way to reduce home costs, but it is a very risky proposition for most families. This process involves jointly purchasing a home, making each individual responsible for making monthly payments. It is a useful option for some, especially single mothers who can use assistance with child care and chores. But leaving such an arrangement is difficult as it normally involves selling the home, which each owner may want to do at a different time. This arrangement requires a great deal of trust and communication between owners and is therefore only recommended for close friends and family members who have a clear exit strategy and understanding of the balancing act required to make it work.

Finally, owning a portion of a larger building may be the best option for many low and moderate income residents. The purchase price of a condominium is generally lower than for a single-family home because the size of condos is lower and certain features (entrances, utilities, etc.) must be shared with other owners. One possibility for IDA participants is to purchase a three family home and then "condominiumize" it, splitting it into three separate units which would then be owned by the individual families. The primary problem with doing this is that it requires significant upfront costs for engineers and attorneys who are needed to draw up legal documents and structural arrangements for the condominium association. These costs may push the cost of this option out of the range of IDA participants.

There are also difficulties in matching the housing desires of IDA participants and the housing options in Lawrence. Our workshops with IDA participants revealed that many of them did not necessarily want to purchase a home in Lawrence, and almost all wanted to own a single family home. Much of the housing stock in Lawrence is of the multi-family variety, especially in the core neighborhoods that CommunityWorks will focus on into the foreseeable future.