The Community Anchor Institutions of Champaign-Urbana, Illinois
Technology Use by Non-Profit and Public Organizations in the Broadband Moment
Volumes 1 and 2

Edited by Kate Williams, Abdul Alkalimat, and Abigail Sackmann
The University of Illinois at Urbana Champaign
The Community Anchor Institutions of Champaign-Urbana, Illinois
Technology use by non-profit and public organizations in the broadband moment

Volume

Edited by Kate Williams, Abdul Alkalimat, and Abigail Sackmann
The University of Illinois at Urbana Champaign

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Preface by Ronald W. Bailey

I am pleased to write this brief preface for this volume, The Community Anchor Institutions of Champaign-Urbana, Illinois: Technology Use by Non-Profit and Public Organizations in the Broadband Moment. And I am pleased to offer the support of the Department of African American Studies at the University of Illinois in making this important volume available to the public.

In recent years, few developments have been as important as the tremendous impact that digital technologies is having on our daily lives. They are ushering in a whole new period of U.S. and world history. Just yesterday, The New York Times (August 19, 2012) carried a long front page article entitled: “Skilled Work, Without the Worker—New Wave of Adept Robots is Changing Global Industry.” The results for society and its citizens will be devastating, as more and more workers are replaced by these machines which are the result of improvements in digital technologies. This issue was not really addressed in this article.

And these new developments do not stop with the workplace. Digital technologies are having an impact on the way we vote and participate in politics, the way we get news and other information, on our choices for entertainment, and, increasingly, on the ways we gain access to education. Historically, African American communities, other communities of color, and low-income communities in the inner-city and in rural areas face what has been called “the digital divide”—that is, not as much access to these technologies as what is available in more affluent communities. There was great hope when President Obama included millions of dollars in his stimulus plan for expanding broadband access to underserved communities.

It is one thing to get the wiring laid out, and it is quite another to make sure that underserved communities have the necessary knowledge and skills to get their communities onto the on-ramp to this new technologies. While many grants were awarded for putting wiring and pipes in the ground, not many addressed this critical need for community education and empowerment. And this is what highlights the importance of this volume. It is a handbook to guide communities and their supporters in better understanding what others are doing with this technology, and a source where they can learn valuable lessons for their own communities.

Faculty in the Department of African American Studies at the University of Illinois, especially our colleague Professor Abdul Alkalimat, have for several years played an active role in addressing this issue. AFRO 498 DDU/DDG, LIS490DDU/DDG Digital Divide is a course that is now offered regularly to address these issues. Working with colleagues such as Professor Kate Williams in the Graduate School of Library and Information Sciences, we are a part of a new area of study called “community informatics, that is to say, the study of how local communities use and can use information technology.”
We congratulate the community groups who provided information, the students who carried out the field research, and the members of the faculty and staff at Illinois who guided the project. We hope you will find this volume as informative as we have and a valuable tool in the service of improving our communities and the lives of its citizens.

Ronald W. Bailey, Ph.D.
Head, Department of African American Studies
University of Illinois at Urbana Champaign
September 2012
Preface by Mike Smeltzer

I am pleased to contribute to this collection of reports about 80 of the local institutions that are a focus of the Urbana Champaign Big Broadband (UC2B) project. This book explains what these organizations do today with technology, and what they want to do. It gives all of us a starting point to learn and collaborate. This will help turn ideas into real productive uses of big broadband. At the same time, this book is also an important opportunity to explain how UC2B relates to these non-profit and government agencies.

The Broadband Technology Opportunities Program’s (BTOP) request for proposals in July of 2009 spoke to providing better broadband connectivity to what it called Community Anchor Institutions. Providing better broadband connections to schools, libraries, and medical facilities, as well as to public safety and government agencies, will irrefutably provide societal dividends. However, UC2B did not stop there.

The American Recovery and Reinvestment Act—also known as the “stimulus bill”—which funded BTOP, aimed to ultimately provide better broadband connectivity to “vulnerable populations”, so we used that concept in defining our Community Anchor Institutions. Elderly populations are vulnerable. Children are vulnerable. Low-income families are vulnerable. Homeless people are vulnerable. Women who have been abused are vulnerable. Persons with disabilities are vulnerable. We included the public and private organizations that provide services to these vulnerable populations in our proposed list of Community Anchor Institutions.

UC2B was the only funded BTOP project that proposed pushing better broadband connectivity so deeply into the community, and to our community service organizations. Once those organizations have the affordable Big Broadband connectivity that UC2B will provide, we believe that they will find new and creative ways of utilizing that technology to improve not only their services, but also the lives of the individuals and families they serve.

Mike Smeltzer
Director of Networking
University of Illinois at Urbana Champaign
September 2012
Preface by Jon Gant

It’s clear. Extensive inequalities persist, not only in access to information and communication technologies, but also in digital literacy skills and know-how to effectively use these technologies. Access to the Internet opens the door to great promise for community and anchor institutions such as schools, libraries, healthcare organizations, government organizations and social and human service organizations. Using the Internet and information technology as a part of the everyday life of community anchor institutions is not easy. Community anchor institutions continue to adopt service delivery strategies that rely on information and communication technologies expecting great benefits. However, these benefits are not reaching all people and communities equally¹. As everything moves forward, digital inequalities of all kinds persist and are deeper than expected. Considerable differences exist among organizations serving the education, health, and democratic, economic and social needs of our communities. There are critical knowledge and other resource barriers that may significantly limit how well institutions are able to adopt and sustain use of the Internet to meet the human development needs of their communities.

One challenge for community and civic leaders and policy makers is the lack of data about the Internet and information technology capabilities of community anchors. Some organizations are better at developing, deploying, and managing information resources better than others. This volume provides insightful baseline data on a large set of community based institutions in Champaign-Urbana, Illinois. It is a snapshot of how digital transformation is underway. And it is part of a larger study being carried out at the Center for Digital Inclusion to understand how institutions and households are using and might use broadband and other information technologies. As my team focuses on households, the work reported here focuses on institutions. All this is right in line with the Center’s mission to understand and to support digital inclusion in all its forms.

Kate Williams, Abdul Alkalimat and their team of students and research assistants have done an excellent job of organizing carrying out research that merges current community practice and published theory. This has meant completing an important research study based in the Community Informatics Research Lab in connection with two courses at the Graduate School of Library and Information Science: Community Informatics and The Digital Divide. Their work is the essence of community informatics at a land grant institution. It stands out for using research and public engagement to help students learn first-hand about the role of information and communication technologies in the development of our communities and to become leaders in the library and information science field. Through this effort, this volume serves the Champaign-Urbana community with a very valuable resource for years to come.

Jon Gant
Research Associate Professor, Graduate School of Library and Information Science
Director, Center for Digital Inclusion
University of Illinois at Urbana Champaign
September 2012
You are looking at a collection of 80 profiles of Champaign-Urbana (Illinois) institutions, focusing on their use of information technology as of 2011-2012. If you work at such an organization, we hope you will get ideas here and reach out to your colleagues. If you want a job or want to help out in any way, please learn here what the organizations are trying to do and figure out what you have to contribute. If you are on campus, let this report help you carry out your research as it may intersect with local communities and their “community anchor institutions.” To begin with, you can learn this new moniker that Washington, DC has promoted for the local non-profit and public agencies that keep our communities functioning.

This two volume publication is a great example of community informatics, that is to say, the study of how local communities use and can use information technology. As a product of Champaign-Urbana and the University of Illinois, it follows many other projects starting with PLATO (1960), which was the first timesharing computer designed for and made available to interested members of the local public.

Like PLATO and much other community informatics research, the Anchors project, as the research team called it, also constituted university teaching and service. Each student in Community Informatics (LIS 518) and The Digital Divide (AFRO 498 DDU/DDG, LIS490DDU/DDG) learned by carrying out one or more of the cases provided here in edited form. It was far richer and more effective to teach theory in these two courses while connecting the students to actual local practice. In addition, the archiving aspect of the project also constituted a teaching and learning opportunity for a master’s student and the doctoral student who supervised her.

With respect to service, the research supports and informs the local broadband project, Urbana Champaign Big Broadband (UC2B). The university and the two cities launched UC2B with funding from the Department of Commerce, the State of Illinois, and many local partners. The federal funds came as part of the economic stimulus program of newly-elected President Obama. When UC2B was first conceived, lead authors Mike Smeltzer and Abdul Alkalimat asked, Who were the local non-profits and government agencies that could use UC2B’s fast broadband? Their vision was to provide broadband to all sizes and types of “community anchor institutions,” not just the largest and most visible. This vision was unique across all the projects funded by the Broadband Technology Opportunities Program. We hope that these volumes provide a fuller answer to their very practical questions: Who are these anchor institutions? Can UC2B help them? How? And we hope the UC2B archive helps practitioner and researchers answer questions that are not yet formulated.

As research, this work recognizes that everyone—and every society—is on a journey into the information age. Much has been written about the transitions made by the military, corporations, research and big governments. What about the local institutions that organize and support the life of communities? It is easy to take the non-profit sector and
local government for granted. But breakdowns due to budget cuts, power failures, storms and other disasters remind us how crucial the local community and its institutions are. The military, the economy, research, and state and national government all depend on intact local communities. So we set out to learn how they are navigating their way into the digital age. What are they doing with information technology? What would they like to do? What are their support networks with respect to IT? A start at answering these questions is in these volumes. More will emerge as we analyze the data. Our clear sense is that the local non-profit and public sectors are facing informatics moments, seeking and getting help in bridging various digital divides. In earlier work funded by the Institute of Museum and Library Services, we saw this in the public library. People are designing the future and they merit attention and support.

How many institutions are there? UC2B wrote its grant proposal with a count of 143 anchor social institutions, defined as the non-profit and public institutions within reach of the seven fiber rings planned through Champaign, Urbana, and Savoy, Illinois. By August 2011 when this research began, UC2B was aware of a total of 281 “anchors.” While we recognized that more anchors would emerge as UC2B carried out its work, the research used those 281 as the study population. We soon saw that the 281 sites belonged to 119 institutions. For instance, the two public school systems operate a total of 35 schools and other sites. Then, when we approached those 119, 88 allowed us to include them as case studies. This is a 74% response rate that testifies to the willingness of the anchors to work with the university and the two cities and learn about the broadband project. As of August 2012, 80 anchors had approved their case reports for inclusion in these volumes.

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<tr>
<th>Community organizations</th>
<th>19</th>
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<tr>
<td>Places of worship and spirituality</td>
<td>17</td>
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<tr>
<td>Government</td>
<td>11</td>
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<tr>
<td>Education</td>
<td>8</td>
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<td>Health</td>
<td>7</td>
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<td>Public safety</td>
<td>7</td>
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<tr>
<td>Housing</td>
<td>5</td>
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<tr>
<td>Transportation</td>
<td>3</td>
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<td>Libraries</td>
<td>3</td>
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<td><strong>Total</strong></td>
<td><strong>80</strong></td>
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Anchor social institutions profiled in these two volumes.

Especially because they are not typical for the BTOP projects nationwide, the community organizations in this study merit close consideration. They focus on people whom the broadband legislation identified as “vulnerable”: homeless women and victims of domestic violence; children and adults with disabilities; abused and at-risk children; orphans; low-income children; ethnic minorities; and poor people. And they focus on
social problems such as hunger; discrimination and inequality; basic needs for clothing, furniture, and housing; and access to legal resources, the media and even family history materials. BTOP’s focus on “vulnerable populations” was in fact an echo of the 1995-2004 Technology Opportunities Program, when the Department of Commerce also rolled up its sleeves and partnered with local communities to overcome more than a few digital divides.

One key finding is that each anchor is aware of the opportunity that information technology offers to help carry out their missions. A second finding is that almost every one of the 80 organizations is in need of help when it comes to doing this. Hardware can

UC2B is installing seven fiber rings through Champaign-Urbana and connecting that ring to homes and organizations. The yellow numbered areas are where UC2B is connecting all interested residences and businesses. Anchor social institutions do not have to be in those areas to be connected. (Map from uc2b.net.)
be old. Appropriate software can be too expensive, or free alternatives unknown. User support is needed, although many smaller anchors are supported by tech-savvy volunteers. And activities beyond the desktop or laptop on the one hand, and the well-known commercial internet services on the other, are a bit out of reach for many.

Neither UC2B nor the Broadband Technology Opportunities Program that provided the core funding is set up to answer all these needs. But they are set up to be transformative, and that transformation can drive solutions to these needs, especially with good planning. BTOP’s goal was to deliver broadband to places where either no one or fewer people (specified as fewer than 40% of households) used it. UC2B’s approach was to create a new broadband infrastructure of seven interconnected fiber rings throughout Champaign-Urbana and deliver high speed internet to all interested households and businesses in the underserved areas (below 40% broadband takeup) and to local anchor social institutions citywide. (See map below.) Post-BTOP, UC2B envisions connecting households and businesses across the entire community at an affordable price. Speeds offered on the UC2B fiber are one gig locally and 20 megs or more to the wider internet. Unlike today’s commercial internet providers, download and upload speeds are the same.

The table below summarized the desktop broadband speeds measured at the anchors we studied. The chart does not include anchors where there was no broadband service to measure. It does not include the cost of that broadband. But it shows that speeds are generally slower than UC2B is offering. The service is oriented to information consumption (downloading) rather than information sharing (uploading). The education sector is the exception, where some have begun to reorient their network towards uploading. Finally, within each sector there are digital divides: some anchors have no broadband; others are using a very slow connection, and still others have higher speed.

<table>
<thead>
<tr>
<th>Mbps, with anchors ranked by average download speed</th>
<th>Down</th>
<th>Up</th>
<th>Down minus up</th>
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<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Average</td>
<td>Max</td>
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<tr>
<td>Libraries (N = 3)</td>
<td>4.2</td>
<td>24.0</td>
<td>41.3</td>
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<tr>
<td>Public Safety (N = 5)</td>
<td>8.0</td>
<td>20.4</td>
<td>35.6</td>
</tr>
<tr>
<td>Education (N = 7)</td>
<td>1.4</td>
<td>19.2</td>
<td>45.7</td>
</tr>
<tr>
<td>Housing (N = 5)</td>
<td>1.4</td>
<td>16.2</td>
<td>33.7</td>
</tr>
<tr>
<td>Worship and spirituality (N = 13)</td>
<td>0.7</td>
<td>11.8</td>
<td>61.3</td>
</tr>
<tr>
<td>Health care (N = 6)</td>
<td>0.1</td>
<td>10.1</td>
<td>24.1</td>
</tr>
<tr>
<td>Community organizations (N = 19)</td>
<td>1.0</td>
<td>9.6</td>
<td>42.2</td>
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<tr>
<td>Transportation (N = 1)</td>
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<tr>
<td>Government (N = 6)</td>
<td>1.3</td>
<td>4.8</td>
<td>12.6</td>
</tr>
<tr>
<td>All (N = 65)</td>
<td>0.1</td>
<td>12.6</td>
<td>61.3</td>
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Internet speeds measured at the anchor social institutions, fall 2011.
Fast internet is clearly only part of the solution for the anchors described here. But another unique feature of UC2B is its Community Benefit Fund. Planners specify that up to 5% of revenue from the broadband customer fees will be set aside to bridge the digital divide. The message from the anchors here suggests that recycling, tech support, and other shared resources amounting to an IT department for the non profit and local government sectors would fill many crucial gaps.

One shared resource that has already attracted interest is a Digital Commons which would be server space and functionality for both standard and experimental services useful to the anchors. This comes from the approach taken in UC2B and in this study: seeing the community as composed not solely of individuals but also of organizations. Units in a university routinely rely on filespace, webspace, shared online tools and services. Small organizations such as most of the local anchors cannot afford such tools. As a result they are held back from full participation in the information society. They cannot afford websites that deliver video; yet local community organizations and churches were the subject of three videos during the UC2B build, and they wanted those videos and more uploaded locally where the speed would be lightning-fast. Community resources are even more scarce for video streaming such as the two cities and the university already do routinely. With a Digital Commons, church services and PTA meetings could also be livestreamed, lowering the bar to participation. The Digital Commons builds on the wide popularity of Prairienet, which offered website and listserv hosting to hundreds of local organizations for 15 years until it closed in 2008.

The research method used here is not complicated and we encourage others to adopt it. (Questionnaires and other details are in appendix A.) We started with the principle that the classroom is changing from a site of knowledge consumption to a site of knowledge production. This is in some ways a return to founding values of US higher education. When land-grant colleges were established, students and professors went into Illinois fields to learn agriculture. In the early days of the Illinois library school, students spent half their day working alongside local librarians, helping to build their institutions. Today useful field work is an imperative for community informatics, when the institutions and communities we study are just now bridging various digital divides and can use our help.

The field work for each anchor included up to three interviews with a director or leader, a technology person, and a board member or volunteer; textual research; photos and mapping; questionnaires; and the Internet speed test. Included in each report is an executive summary, maps, photographs, demographics, history of the organization, a technology inventory, an analysis and a bibliography. The book is available in print but also free and online via http://www.ideals.illinois.edu.

Not only are the research instruments provided here (appendix A) and the UC2B archive finding aid, with notes (appendix B) for others to use, we also hope to return to the field with them in a few years. How far will these local institutions have traveled with respect to information technology? How will they do it?
The LIS 518 Community Informatics students who carried out field work in fall 2011.

The AFRO 498 DDU/DDG, LIS490DDU DDG Digital Divide students who carried out field work in fall 2011.
For this research, the classroom as site of knowledge production was effectively supported by the Community Informatics Research Lab. The CI Lab designed the study in coordination with its other research (see below), recruited anchors as field sites for the students, guided and managed the students in the field, and finished the work that overflowed the fall semester. This involved troubleshooting, advising, reassuring, as well as skilled work at outreach, interviewing, data input, archiving, file management, analysis, and writeup. The work was supervised by the Lab’s co-directors, Abdul Alkalimat and myself. Master’s student Abigail Sackmann worked as primary contact with the anchors, field coordinator for the students, and field researcher. Doctoral student Noah Lenstra guided and implemented the UC2B archive. Doctoral student Shameem Ahmed assisted as course grader. Dan McNaughton of Paleograph Services provided copy editing. Ron Banks of the UIUC Institutional Review Board tightened our research design as it made its way through IRB approval.

A little social history is meaningful to understand the context for this research and to acknowledge more partners. This study of the anchor social institutions of Champaign-Urbana is part of a larger effort by the CI Lab and the Center for Digital Inclusion at GSLIS to study Champaign-Urbana and nine other Illinois communities in the “broadband moment” of BTOP funding. The broadband moment began for the Community Informatics Research Lab when Mike Smeltzer invited my co-director Abdul Alkalimat (already serving on the two cities’ telecom advisory commission and advising Noah Lenstra on building the community archive eBlackCU) to co-author the local proposal for BTOP funds. The suspense almost killed many of us, but eventually a large chunk of the proposal was funded. Several of us began to urge colleagues at the Department of Commerce (NTIA) and Department of Agriculture not only to build the broadband but to study rollout itself, collect, share and mine the data for lessons about overcoming digital inequality and more. We spoke in the tradition of the earlier Technology Opportunities Program led by Tony Wilhelm and others. Charles Benton agreed with this strategy and lent his energies and connections to the campaign. Steve Jackson and Susan Crawford (University of Michigan), Jenny Toomey (Ford Foundation), and I joined forces to host a discussion at the National Academies of Science to answer the question: What research is needed?

Along with the discussion in D.C., Ford also funded Steve Jackson and me to carry out our own research in Michigan and Illinois. Thanks to Ford, the CI Lab has been able to send research analyst Brian Zelip to nine other Illinois communities as we collected data here in Champaign-Urbana, in part by organizing the classroom as a site of knowledge production regarding this local community. Further underscoring the close relationship between research and teaching in community informatics at Illinois, Brian has become a full time student and continues as research assistant helping analyze and write up the data from all ten communities. Champaign-Urbana is important, and unique, but more communities must be examined to learn how our non-profit and public sectors are overcoming the digital divide in this broadband moment. Steve Jackson’s work in parallel on Michigan must be included as well.
Altogether, funders in this work include not only the Ford Foundation but the Partnership for a Connected Illinois, UC2B itself, and the UIUC Community Informatics Initiative, Center for Digital Inclusion, Department of African American Studies, the Graduate School of Library and Information Science, and the Campus Research Board. All of us involved in the research appreciate their support.

Kate Williams
Urbana, Illinois
September 2012
Community Organizations

1: The Center for Women in Transition

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1 Executive summary

The Center for Women in Transition (CWT) provides housing and supportive services to women and children experiencing homelessness or domestic violence. The organization has several sites throughout Champaign and Urbana and focuses mainly on transitional housing, though permanent placements are also available. In addition to supportive housing, CWT also provides a retail training center and resale shop, services for women exiting prison, an embedded Head Start program, and legal advocates. They are looking to expand services in the near future to include day care and more housing, including emergency housing and disaster relief housing. In terms of technology, CWT is forward-looking, focusing on the effectiveness of IT resources for their staff. The organization currently has an adequate Internet connection for their needs, though some areas of program expansion and potential collaboration with other UC2B anchor social institutions could potentially influence demand.
2 Maps

CWT offices, homes, and training center.
Main offices and homes with nearby institutions: Crisis Nursery, Salem Baptist Church, Empty Tomb, Champaign Police, Washington Elementary School, and the Douglass Branch Library.
3 Photographs

Executive Director at his desk.
One of three server rooms.
Technology in the main office’s on-site Head Start program.
4 Demographics

<table>
<thead>
<tr>
<th></th>
<th>Domestic Violence Program</th>
<th>Homeless Services Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Served</td>
<td>353 women, 103 children</td>
<td>51 women, 53 children</td>
</tr>
<tr>
<td>Gender</td>
<td>407 female, 39 male</td>
<td>77 female, 27 male</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>30 Hispanic, 10 American Indian or Alaska Native, 6 Asian, 180 African American, 222 White, 7 Multiracial</td>
<td>3 Hispanic, 2 American Indian or Alaska Native, 62 African American, 30 White, 7 Multiracial</td>
</tr>
<tr>
<td>Monthly Income</td>
<td>220: less than $500, 59: $500–$1,000, 85: more than $1,000</td>
<td>104 at less than 50% of the Median Family Income</td>
</tr>
</tbody>
</table>

June 2010 through July 2011
5 History

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>Women’s Emergency Shelter of Champaign County (WESCC), the predecessor to The Center for Women in Transition, opens its doors. WESCC is initially staffed completely by volunteers, having formed as a result of a local campaign with partnerships between citizens and social service providers. After six months of operation, the Illinois Department of Public Aid presents the shelter with a grant that allows for paid staff, and soon the organization is able to buy its own facility, named the Deloris Evans House.</td>
</tr>
<tr>
<td>1996</td>
<td>After changing its name to The Center for Women in Transition and shifting focus from emergency housing to long-term transitional housing, the organization acquires another site to serve as housing, the Clara Forbes House.</td>
</tr>
<tr>
<td>2006</td>
<td>CWT opens a new location with space for five families, the Unlimited Possibilities Services Center.</td>
</tr>
<tr>
<td>2008</td>
<td>CWT opens a clothing resale store providing job training to residents, Transitions, at the Lincoln Square Mall.</td>
</tr>
<tr>
<td>2009</td>
<td>Presby House opens, providing permanent affordable housing and support services.</td>
</tr>
<tr>
<td>2010</td>
<td>The Center for Women in Transition acquires A Woman’s Place (AWP).</td>
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6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software and systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 desktops</td>
<td>Microsoft Office 2010</td>
</tr>
<tr>
<td>6 laptops</td>
<td>Windows 7 platform</td>
</tr>
<tr>
<td>1 server</td>
<td>T1 line through Champaign Telephone Company, LAN</td>
</tr>
<tr>
<td>Security cameras and monitors</td>
<td>GiftWorks: donor database</td>
</tr>
<tr>
<td>Televisions, VCRs, DVD Players</td>
<td>Online Data Reporting for funders and Illinois Association for Criminal Justice</td>
</tr>
<tr>
<td>Scanners, copiers, telephones</td>
<td>In-house developed Waiting List system</td>
</tr>
<tr>
<td></td>
<td>Log Note Software</td>
</tr>
<tr>
<td></td>
<td>Security Software</td>
</tr>
<tr>
<td></td>
<td>Facebook page</td>
</tr>
<tr>
<td></td>
<td>Twitter account</td>
</tr>
<tr>
<td></td>
<td>Website</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Speedtest.net</th>
<th>Download (Mbps)</th>
<th>Upload (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed Test Results</td>
<td>1.34</td>
<td>1.34</td>
</tr>
</tbody>
</table>
7 Analysis

The Center for Women in Transition provides vital services for the health of the Champaign-Urbana community, and is continually expanding in order to be effective toward its mission of “providing a continuum of services so that individuals and families can achieve safety, stability, and self-sufficiency” (CWT Website). The center currently runs five supportive houses, four of which are situated within a block of one another and the main offices. The fifth house, previously A Woman’s Fund, was recently acquired by CWT and continues the vision of its previous owner by providing housing and supportive services to victims of domestic violence. In 2011, CWT received 2 two-bedroom units from the City of Champaign as part of the Neighborhood Stabilization Program (NSP), and in 2012 CWT will receive an additional three three-bedroom houses. These NSP units will be used for permanent housing, filling a need to provide services beyond the 2 year maximum transitional housing services. CWT also runs a resale store, where women in the program learn job skills while creating revenue for the program.

Beyond housing and job training, the services that CWT provides are numerous and varied. These include reentry services, legal advocacy, case management, financial counseling, life skills, transportation, support groups, Head Start and tutoring for children, job placement, and follow-up services. The organization is also planning to expand services to include daycare and emergency housing, and is constantly finding new and creative sources for funding. Indeed, in the last four years the annual budget of the organization has increased from $340,000 to $1.6 million, no small feat amidst an economic recession and massive state budget cuts.

As with most institutions, technology use by The Center for Women in Transition revolves around daily administrative work, and updates come with dedicated funding, donations, or pressing needs. One of the biggest challenges is finding donors and/or funders who are willing to support the purchase and development of hardware and software in addition to traditional services, a difficulty that is typical of grant-funded organizations. Still, the organization is incredibly effective in making use of its current hardware, software, and systems, and is always searching for ways to improve. For example, the organization is supporting an IT staff member’s schooling in network administration, increasing the center’s ability to troubleshoot and develop in-house, which will reduce costs and be more effective than contracting out complex IT services.

CWT recently received donated computers from Parkland College, which allowed them to implement software updates that make daily work run more smoothly. All of the facilities are connected through a LAN and telephone system using a T-1 line provided by Champaign Telephone Company. The varied funding sources require different reporting, some online and some paper. For example, the Illinois Criminal Justice Authority requires online data reporting from domestic violence shelters, and a data clerk is employed for this purpose. The center recently moved from an Excel-based system for tracking donors to specialized software called GiftWorks.

The administration and staff of CWT currently view UC2B broadband as providing exciting opportunities for the communities of Champaign, Urbana, and Savoy; however, they are satisfied with the organization’s current connection and view faster broadband as
a benefit mostly to organizations that need a higher capacity for large file sharing, graphics, and video tools.

Still, UC2B is encouraging every anchor social institution to think beyond current needs to potential future uses of both the 1 GB local connection and the wider connection to the Internet. One potential area where UC2B could come in handy for CWT is an existing idea to make their legal advocacy services available to a wider population by having lawyers available for face-to-face consultation via Skype. Indeed, video conferencing is an area where many institutions around town are beginning to dream big—for example, they hope to access one another’s services like after-school programming and face-to-face doctor visits. If UC2B is going to be effective, it must find a way to draw on the strengths of each of the anchor social institutions, facilitating collaboration and cooperation to ease the burden of an economic recession on organizations, their clients, and the public.
2: Community Elements (formerly Mental Health Center of Champaign County)

Julianne L. Breck
Master’s student, GSLIS

1 Executive summary

Community Elements is a multifaceted, important cornerstone of the Champaign-Urbana area. As their mission statement explains:

Community Elements educates, advocates, and helps build communities of well-being by providing individuals and families a range of prevention, intervention, and mental health treatment services. These services are culturally inclusive, client/family-focused, and recovery-centered through service excellence, mentoring, and leadership (Community Elements webpage).

They operate a dozen-plus properties in the area for services as well as supportive housing, in addition to working closely with the hospitals and other health care and social services.

Community Elements’ commitment is to people and community first, but technology is a close second. They house a Management of Information Systems (MIS) Department that maintains the public website, staff Intranet websites, medical records systems, LAN, and much more. Though funding is always an issue with nonprofits, the infrastructure at Community Elements allows for proper maintenance of technology with the abilities to create and meet technology goals. The advent of UC2B can play a critical role in the technological development of Community Elements’ overall goals.

2 Map

Community Elements is headquartered and offers services at 1801 Fox Drive and 202 W. Park Avenue. It operates at least 12 other properties for supportive housing, many of which are displayed on the map below. However, due to privacy issues not all of the locations can be disclosed. The Park Ave. office and TIMES/Respite Center are centrally located in relation to Champaign’s downtown area. The Fox Drive office is in a sprawling, corporate location. It has additional properties and offices in Rantoul, IL. Community Elements also works closely with many other health and social service providers in the Champaign-Urbana area.
Locations of main Community Elements properties.

- Carrol Ave. apartments
- TIMES/Respite Center
- Homestead apartments
- Park Ave. offices
- Roundhouse
- Fox Dr. offices
3 Photographs

A PDS Slim staff computer at the Fox Drive location.
Community Elements’ Fox Drive location.

Community Elements’ Park Avenue location.
4 Demographics of patrons or clients

Fiscal Year 2010 Statistics from the Community Elements website:
Total lives touched 7,852
Total nights of care at TIMES Center 20,441
Total nights of care at residential housing sites 18,254
Total Crisis Line calls 3,670
Total psychiatric and nursing visits 13,081
Total meals served at TIMES Center 63,941
Total nights of care at the Respite Center 1,233
Total Face to Face crisis encounters 1,766

5 History

Largely taken from the Community Elements website, with technology history added based on personal interviews.

1956: The Champaign County Mental Health Clinic opens its doors as a program of the Champaign County Mental Health Society. The clinic is operated by the society through 1966, when it changes its name to the Champaign County Association for Mental Health and splits off from the Mental Health Center.


1976: Mental Health Center operates in Mercy Hospital (Two West) and then later moves to the St. Mary’s School Building where it remains until 1993.

1982: Services expand to Champaign County Correctional Center. Twenty-four hour crisis services to the county begin.

1984: The Center establishes a group home in Champaign to house up to eight seriously mentally ill adults. Parents Too Soon funding received.
1987: Purchases three computers for use by the accountant, the administrative assistant to the director, and the centralized data entry staff member. The majority of written work is completed by typewriter.

1990: The Center purchases an eight-unit, one-bedroom apartment complex in Urbana to house homeless mentally ill on a transitional basis.

1994: COMPEER volunteer program is formed for support to adults with psychiatric disabilities in conjunction with Champaign County Mental Health Association. The Mental Health Center and United Way is awarded AmeriCorps/CHART grant to plan services for the homeless mentally ill. HUD funds an 18-unit permanent housing complex in Urbana for individuals with psychiatric disabilities. Emergency Psychiatric Respite Center is funded and opened in April 1994. Two new facilities are identified and funded with bonds.

1995: The Mental Health Center Counseling and Personal Development service is initiated, incorporating Counseling Institute. Facilities move to new locations at 1801 Fox Drive and 205 West Park Avenue, Champaign.

Advent of the MIS Department to meet technology needs.

1996: Mental Health Center sponsors Homestead Apartments to the homeless and continues efforts to expand residential services.

1997: Mental Health Center incorporates the Men’s Emergency Shelter (future TIMES Center) and the Volunteer Center of East Central Illinois into its structure. First accreditation by Joint Commission on Accreditation of Healthcare Organizations. A building is purchased on State Street to house Keystone, a consumer-run resource center. Purchases a home in Urbana as a supportive group home for women.

1998: Volunteer Center of East Central Illinois is hosted by the Mental Health Center. Homestead Apartments are opened for occupancy. Property for TIMES Center is donated. TIMES Center is developed as the replacement facility for the Men’s Emergency Shelter. Compeer program is expanded to serve youth. Healthy Families program begins. The Housing Authority purchases 205 West Park and the Mental Health Center purchases the Champaign National Bank Building as a replacement. The Workforce Preparation Center is also housed in this new building.


2001: Property purchased in Rantoul for a HUD-funded, 18-unit permanent housing complex for individuals with psychiatric disabilities. Office opened in Rantoul for case management, counseling and psychiatric services. Compeer Volunteer and Match honored by Compeer International for a National Award.

2002: School-based services in Champaign Alternative Schools begin.

2003: Expands outpatient counseling and psychiatric services to Vermilion County through work with Provena United Samaritans Medical Center and expansion of System
of Care Services with DCFS. Assumes responsibility for Roundhouse Shelter from Children’s Home and Aid Society. Opens the Village Apartments in Rantoul.

2004: TIMES Center loses emergency designation funding due to state legislature changes. Name changed from “Transitional Initiatives and Men’s Emergency Services” to “Transitional Initiatives and Men’s Empowerment Services.” Partners with Best Interest of Children to expand Family Conference programs. Expands behavioral health services through partnerships with Christie Clinic and School Based Health Clinic in Urbana.

2005: Restructures organization to focus on Champaign County core services. Ends affiliation with Provena Health Central Illinois Region effective January 1st. Vermilion County services are transferred to existing agencies. Expands Prevention services.

2010: Changes name from Mental Health Center of Champaign County to Community Elements to more accurately reflect the diversity of services and the degree to which the organization is involved in the community.

### 6 Technology inventory

<table>
<thead>
<tr>
<th>Technology Element</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktops</td>
<td>150 PCs</td>
</tr>
<tr>
<td>Laptops</td>
<td>60 PCs</td>
</tr>
</tbody>
</table>
| Telephone                | • Toshiba digital phones  
                          | • Cell phones          
                          | • Teleconference phones  
                          | • TDD                    
                          | • Panasonic PBS (TIMES/Roundhouse) |
| Fax                      | Yes         |
| Scanner                  | Yes         |
| Printers                 | • Yes       
                          | • Label Printers       |
| Projector/LCD TV Screen  | Yes         |
| Software                 | • Microsoft Office Suite  
                          | • Outlook              
                          | • Publisher            
                          | • Access                
                          | • Accounting—GL/AR software  
                          | • Reporting—Crystal Reports  
                          | • Form Creation—Omni, Visio, Adobe Reader, Adobe Pro, Adobe Creative Suite  
                          | • Network Management Software  
                          | • Server Software        
                          | • File Backup Management  
                          | • Clinical Scheduling     
                          | • Essential Learning—HR Training  
                          | • Paylocity—Payroll/Benefits  |
| Internet                 | Yes         |
| Server                   | • 9 servers, including 1 at TIMES Center  
                          | • Exchange server      |
Website
- Updated with photos, information, and opportunities
- Professionally designed by SURFACE 51, a local PR/Brand Identity company
- Will be expanding with more client resources

Databases
- Medical Records
- Billing
- MEDI (HFS website, Medicaid client)
- Intranet site for staff
- Crisis Line intranet website for volunteers
- Local databases created using Access

Social Media
- Facebook page regularly updated.
- Twitter icon on website, but no active account.

Routers/Switches/Wireless
Access Points: Yes
Copiers: Yes
Credit Card Processor: Yes

<table>
<thead>
<tr>
<th>Speedtest.net</th>
<th>Down</th>
<th>Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>42.21 Mbps</td>
<td>4.35 Mbps</td>
<td></td>
</tr>
</tbody>
</table>

7 Analysis

Community Elements is a nonprofit 501(c)(3) organization located in Champaign, IL. It is primarily a mental health organization, but offers a broad array of comprehensive social services. Consequently, it recently changed its name from Mental Health Center of Champaign County to Community Elements to more accurately communicate what the organization does, show how it incorporates itself in the community, and reduce the stigma of seeking mental health services. They serve “families, individuals, neighborhoods, and communities,” (Community Elements Facebook page) through counseling, psychiatric care, a 24-hour Crisis Line, and crisis clinicians. Their multiple community programs include Roundhouse, Homeless Youth, Supportive Transition Empowerment Program (STEP), TIMES Center Level II Transitional Living Program, Homestead apartments, the Permanent Housing Assertive Community Treatment program (PH-ACT), Elm St. Apartments, Carroll Ave. Apartments in Urbana, Village Apartments in Rantoul and the three 24-hour group homes (“Our Services,” Community Elements webpage).

This study focuses on the technology use and function of the three main Community Elements locations in Champaign: the offices on Fox Drive, the offices on Park Avenue, and the TIMES/Respite Center on Washington Street.

The Fox Drive office houses most of the administrative staff offices and serves clients through psychiatric and psychological care. The history of IT use at Community Elements reveals a bit about the objectives of the organization as a whole and how they attain them. According to a current MIS employee, in 1995, “[a]ll the computers and information technology were under the financial department … and [we] really knew that we had the need to split off from that.” The MIS department was created in 1995 in response to the rapid advance of technology. Community Elements connected to the Internet for the first time in 1996 with a dial-up modem and changed to a T-1 line in 2001. By 2004 they had a small network in place; the network was able to grow more
successfully and change from Novell to Microsoft when they hired a network administrator in the same year. The Terminal Services/Remote Desktop was put in place in 2007, allowing staff to enter their own clinical data. Today Community Elements has over 150 Desktop computers and 60 laptops connected in a LAN and utilizing a Comcast Business Class Broadband connection. The network administrator does all of the technical support for the 160–170 member staff, while the IT supervisor and computer data assistant address software issues.

The Park Avenue site is also home to offices and various mental health services in a more central location. It is connected with Fox Drive through a T-1 line in order to access the LAN and the servers so that staff can enter data on the Remote Desktop. This site also contains a small, private room for approved client computer use. Though the number of computers has dwindled from four to two, certain groups use the computers on a regular basis. Staff here rely heavily on the phones to answer the Crisis Line and the Intranet website to access resources for those seeking help.

The TIMES Center is a homeless shelter for men and stands for “Transitional Initiatives and Men’s Empowerment Services.” It is adjacent to the Respite Center, an emergency mental health facility that houses individuals for periods of up to two weeks. Public Internet access is not a priority here because of the short-term length of stay. TIMES Center began as an outreach of McKinley Presbyterian Church and was called the Emergency Men’s Shelter. It soon grew to need programming and TIMES Center was opened in its current location in 2000. Today it provides emergency services for homeless men in need of food and shelter. They serve three meals a day to anyone in the community who is hungry and offer beds to 50–60 men every day of the week. They also provide optional programming related to the pursuit of life skills, a job, and an education for men who express a desire to live on their own. Though TIMES Center receives some government grants, it relies heavily on cash donations and volunteer services for meals, goods donations, and labor. Though it does have a few computers, they are outdated and the server is quite old. The men prefer to use the local public libraries for Internet browsing due to the availability of quality computers with a fast Internet connection. In addition, many make use of the state facility for job searches on Mattis Avenue and Bradley near Parkland College. The TIMES Center board relies heavily on an Internet connection to conduct business and schedule meetings. According to a Community Elements’ consultant, they would like to expand the amount of computers at TIMES Center to give the men, “[b]etter access to self-help resources that are online, to job resources, department of employment security, etc.” However, Internet is not a priority at TIMES Center because it is easier and more affordable to outsource job searching and Internet use, especially because the men’s computer skills vary from completely computer literate to illiterate.

Overall, Community Elements’ biggest issues across the board are funding related. Both the parent organization and the smaller organizations within Community Elements are in need of funds. The TIMES Center especially struggles to maintain funding, in light of recent state budget cuts (Petrella). Two specific needs include a possible clothing donation center and more money for bus passes. They are also trying to create a more representative board that includes members from many different areas of the community.
Community Elements has several current technology goals. Their website is undergoing changes to match their new name and appearance. The website will also be a place to list resources and practices for mental health needs for clients. On the staff side, they are currently transferring their clinical database from CIS to an integrated system that allows complete access to a client’s medical records for approved professionals. Though many of their medical records are still on paper, they want to have full electronic medical record implementation within one to two years. Tele-psychiatry, or psychological services via the phone or Skype, is another possible form of care being considered. They also want to provide public access to computers at kiosks in the main lobbies of their office buildings. A computer could serve as a triage for incoming patients and as a method of providing educational material about mental health. In the HR waiting room, a computer could be available for people who would like to come in and apply for a job.

Community Elements definitely exhibits a need for UC2B. With so many operations across such a wide area, connectivity to the Internet and to each other should be a priority to maintain the organization unity. Therefore, ideally, all of their properties in their various locations would be considered anchor social institutions. In addition, UC2B may help expand the resources available to clients, whether they are homeless or have mental health needs. However, any new implementation of technology must be extremely user-friendly. Says the IT supervisor: “Our people specialize in people, [not technology].” However, technology can be a valuable tool to even the most computer-illiterate person who has a heart for people. Luckily, the staff and patrons at Community Elements have access to an excellent team of IT professionals. They work for an organization that makes technology a priority in order to do get their job done well and make a difference in the lives of individuals.

Webliography


3: Crisis Nursery

Elizabeth Osisek
Master’s student, GSLIS

1 Executive summary

The Crisis Nursery’s mission is to “create an ‘Island of Safety’ dedicated to the prevention of child abuse and neglect by providing twenty-four-hour emergency care for children and support to strengthen families in crisis.” The current technology available at the Crisis Nursery sufficiently meets the staff’s needs to aid their patrons, and staff members also take advantage of social networking opportunities for both advertisement and outreach. For this reason, the broadband service provided by the Urbana-Champaign Big Broadband Project (UC2B) may not have a significant effect on the Crisis Nursery’s daily operations. However, many of the Crisis Nursery’s clients are from low-income families that do not have Internet access. Therefore, the products of UC2B could greatly impact the Crisis Nursery’s clientele, both by providing Internet access to clients who currently do not have it and by increasing potential clients’ awareness of the Crisis Nursery and its services.

2 Maps

The Crisis Nursery’s location in Urbana.
The location of the Crisis Nursery in relation to nearby businesses. Key:

- Restaurant
- Academic building
- Point of interest
- Bank
- Auto repair shop
- Grocery store
- Gas Station
3 Photographs

Outside the Crisis Nursery, 1309 West Hill Street, Urbana.
Executive Assistant Erika Weiss browses the website, www.crisisnursery.net, on one of the computers in the main office. There are four stations similar to this, plus three private offices connected to the main office with the same type of desktop computer.
The playground and sensory gardens provide lots of outdoor fun and learning for children at the Crisis Nursery.
4 History

The Crisis Nursery was incorporated on December 14, 1983. Much of the work to open the Crisis Nursery was done by a nurse at McKinley Health Center and a social worker at Burnham Hospital beginning in 1981. When Burnham Hospital closed in August 1992, the Crisis Nursery relocated to a house donated by Provena Covenant Medical Center at 1409 East Park Street, Urbana. The Crisis Nursery has maintained close ties with Provena, who donate extensively to the organization and pay for the office’s phone system. To accommodate its growth and the needs of the community, the Crisis Nursery
moved to its current location at 1309 West Hill Street, Urbana, in February 2001, doubling its size and its capacity to serve families in need (Crisis Nursery).

In 1993 the Crisis Nursery received the Congressional Point of Light Award, which “recognizes individuals, groups, and organizations who work together ‘with little or no pay or recognition’ to address serious social problems” (Crisis Nursery). Over the years the Crisis Nursery has been granted several other awards for community service, including the Governor’s Cup Award for the best community volunteer program in the state of Illinois in 2002, the President’s Award for community service in Champaign County in 2009, and the Helen R. Weigle Award for Innovations in Children’s Programming in 2009 (Crisis Nursery, Crisis Nursery Financial Summary 2009). The Crisis Nursery has also won two contests in the last two years—the “Office Needs for Good Deeds” contest in April 2010, a nationwide contest which gave the Crisis Nursery an office makeover worth $75,000; and a $10,000 website makeover contest in August 2010 (Crisis Nursery Financial Summary 2010; “Urbana’s Crisis Nursery”; Record; Sizer; Weiss). The fruits of these contests have helped the Crisis Nursery keep its office space and materials up-to-date.

Last year the Crisis Nursery transitioned from a website that “didn’t look sophisticated at all, and didn’t really have any useful information,” to “a really state-of-the-art Website” that allows potential clients to read about the Crisis Nursery’s programs, view photographs, and even take a virtual tour of the Crisis Nursery. The website also provides volunteers with access to paperwork online and allows donors to make donations without writing a check (Weiss; Record).

In addition to using the new website, staff members actively post to the Crisis Nursery’s Facebook page and Twitter account to keep clients, volunteers, and donors informed. They send out monthly e-newsletters as well as biannual paper newsletters for those who are not as active online (Record). While their online presence is very modern, the software available in their office is “outdated and not the most cutting-edge technology” (Weiss). The Crisis Nursery is currently “in the process of updating a lot of things” technologically (Weiss).

In addition to updating technology, the Crisis Nursery has added new programs and ways to donate in the last few years. In July 2008 it implemented the Beyond Blue program to assist mothers experiencing perinatal depression, and in 2010 they added two new child program enhancements—a Spanish-speaking parent–child interaction group and canine therapy (Crisis Nursery Financial Summary 2009; “Crisis”; Crisis Nursery Financial Summary 2010). Additionally, the Crisis Nursery Fund was added to the Illinois State Tax Form as a Make “Giving” Easy! option in 2009, so Illinois tax payers can donate to Crisis Nurseries of Illinois via their IL-1040 form. This raised nearly $38,000 from Illinois taxpayers from 2009 to 2010 (Crisis Nursery Financial Summary 2009).

Today, the Crisis Nursery continues to be an “Island of Safety” for families in crisis situations. As the Crisis Nursery updates its technology, Executive Assistant Erika Weiss says there is a challenge in “moving into the twenty-first century and keeping our grassroots history because that will always be a part of what we are. We still want to look towards the future and grow and expand and keep serving our community” (Weiss). The Crisis Nursery’s staff and board members all seem to face this challenge with confidence.
6 Technology inventory

Desktops: 11
- One per administrative staff member
- One in the program office
Laptop: 1
Microsoft Outlook
- E-mail
- Scheduling
Microsoft Office
File Maker
Databases
- Results Plus for donors
- Separate database for clients and their demographics
- Databases not integrated
Small business server
Tech Support: MCS Office Technologies
Telephone System: AT&T, paid for by Provena Covenant Medical Center
Website: <http://www.crisisnursery.net>
- Website makeover August 2010
- Staff blog about once a month
- Donors can make donations online
- Volunteer paperwork available online
- Photographs, stories, and virtual tour available online
Facebook page: <http://www.facebook.com/crisisnursery.fanpage>
Twitter page: http://twitter.com/#!/crisisnursery

<table>
<thead>
<tr>
<th>Website</th>
<th>Download Speed</th>
<th>Upload Speed</th>
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<tbody>
<tr>
<td>speedmatters.org</td>
<td>2500 bps</td>
<td>413 bps</td>
</tr>
<tr>
<td>speedtest.net</td>
<td>2.25 Mbps</td>
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Forms

<table>
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<th>Online</th>
<th>Paper</th>
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<tbody>
<tr>
<td>Volunteer paperwork</td>
<td>Volunteer paperwork</td>
</tr>
<tr>
<td>Monthly e-newsletter</td>
<td>Biannual paper newsletter</td>
</tr>
<tr>
<td>Website, Facebook page, Twitter page</td>
<td>Brochures</td>
</tr>
<tr>
<td>Ability to make donations</td>
<td>Ability to make donations</td>
</tr>
</tbody>
</table>

7 Analysis

The Crisis Nursery in Urbana is a well-established community organization that may not be significantly affected directly by the Urbana-Champaign Big Broadband Project. The organization has sophisticated technology resources, which include multiple desktop computers, multiple databases for client and donor information, and software that allows staff to work with this information with relative ease. Provena Covenant Medical Center, an institution that has worked closely with the Crisis Nursery since it relocated in August
1992, pays for the AT&T phone system that the office uses, and MCS Office Technologies provides good technology support when needed.

The Crisis Nursery does not appear to need the broadband service that UC2B will provide. The office is equipped with high-speed Internet (download speed is around 2.25 Mbps and upload speed around 0.41 Mbps), and staff use the Internet for advertising, networking, and communication. The computers are equipped with Microsoft Outlook, which allows staff members to send e-mails, e-newsletters, and other correspondence. Last August the Crisis Nursery won a website makeover contest, and their new website allows visitors including clients, volunteers, and donors to learn about the Crisis Nursery’s services, view photographs of the site, take a virtual tour, and even make donations online. The website also allows staff to blog and volunteers to submit paperwork with ease. Additionally, the Crisis Nursery has a Twitter account and a Facebook page that staff members have utilized in the past to notify followers about upcoming events and even to send out a plea for donations when someone who had promised to donate Thanksgiving dinners backed out at the last minute. Thus, the Crisis Nursery’s technology resources appear to be sophisticated enough that faster broadband will not have a huge impact on the staff’s daily operations.

While the Crisis Nursery itself may not be directly affected by UC2B, the project could make a big difference in the daily lives of its clients and could potentially bring more clients. Many of the Crisis Nursery’s current clients come from low-income families that may not have Internet access, and the broadband service provided by UC2B could allow these clients to learn more about the Crisis Nursery and similar services that could help them with the crisis situations that they face. This could include access to legal information, financial help, or even psychological help, depending on the individual client and his or her situation. Moreover, bringing broadband service to these populations could increase the number of potential clients who are aware of the Crisis Nursery’s services, and thus could increase the number of clients the Crisis Nursery receives. Therefore, while the daily operations of the Crisis Nursery’s staff may not be directly affected by UC2B, the project could have a huge impact on the Crisis Nursery’s client base.

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Webliography


4: Cunningham Children’s Home

Claire Griebler
Master’s student, GSLIS

1 Executive Summary
The Cunningham Children’s Home has been a part of the Urbana-Champaign community since 1895. While it started out as an orphanage, the Cunningham Children’s Home now provides residential and education services to severely emotionally disturbed children. They also offer transitional living and independent living opportunities, foster care, and a treatment school. With information technologies come a host of privacy issues for this HIPPA-compliant organization. As of fall 2011 they have plans to build a $25 million school to improve their facilities, placing the acquisition of current technology at the top of their list. However, due to funding restrictions Internet speeds are currently not as quick as some staff would like; the affordability of UC2B could thus benefit the organization greatly.

2 Maps
The Gerber School: it provides special education services to the residents of the Residential Treatment Program (children in grades 4–12).
http://www.cunninghamhome.org/about/tour/gerber.htm
The Administration Building, where the administrative offices are located.
http://www.cunninghamhome.org/about/tour/administ.htm

The Circle Academy, which serves nonresidential students who live at home and are bussed to Cunningham Children's Home by area school districts.
http://www.cunninghamhome.org/about/tour/circle.htm
The Residential Treatment Center, which includes 2 residential units that house up to 10 boys each and one residential unit which houses up to 10 girls. It also contains a clinical services wing, including therapy offices, a health clinic and nurses’ offices, play therapy room, intake/admissions, and program administration. [http://www.cunninghamhome.org/about/tour/RTC.htm](http://www.cunninghamhome.org/about/tour/RTC.htm)

4 Demographics

The Cunningham Children’s Home serves youth of the community ages 6 to 21. The organization currently has 50 children who live on the main campus as residents. Seventy children attend day they live in the community. Thirteen children live in the specialized foster care program.

5 History

The Cunningham Children’s Home has been around since 1895. When it first opened, it was an orphanage. In 1949, the Cunningham Children’s Home began its transition from an orphanage to a residential treatment center. The superintendent at the time had the goal of transforming the campus into a treatment center. She introduced a professional social work philosophy and techniques to Cunningham Children’s Home. Because of her work, the Cunningham Children’s Home eventually met the 1964 Child Welfare of America League definition of a treatment center with social work and therapeutic focus.

6 Technology inventory

220–250 desktop computers
10–12 laptops
Microsoft Office 2003
Microsoft Windows XP
Windows 7

<table>
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<tr>
<th>Staff Computer</th>
<th>Download Speed</th>
<th>Upload Speed</th>
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<td>Speedtest.net</td>
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<td>5.34 Mbps</td>
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</table>
7 Analysis

With plans to build a $25 million school in the hopes of improving their facilities, the Cunningham Children’s Home is certainly placing the acquisition of current technology at the top of their list. The CEO of the Cunningham Children’s Home, said, “[The new school] will be three times the size of our biggest building on campus now. As we continue our plans, we need to look at the technology that’s going to have to be required for this school.” Because the Cunningham Children’s Home is a nonprofit organization, raising the funding for this project seems daunting. However, they are confident that with sufficient planning they will attain their goal.

Internet speed is also an issue for the Cunningham Children’s Home. The CEO defined Internet speed as one of their main challenges, saying, “We are a frugal agency and we need to be because our funding is so constrained. We continue to have concerns and complaints from staff that the system is too slow, particularly during peak times.” The children are the first priority at the Cunningham Children’s Home, suggesting that increasing Internet speed for the staff is not a top priority for the organization.

With over 15 buildings on their campus, staying connected via the Internet is a big issue for the Cunningham Children’s Home. They even stay connected to buildings that are off-campus. The head IT staff member, said,

We have three locations that are group homes, houses for our older kids that are trying to move to a less restricted setting. Those are in the community, not on our actual campus, so we have the connections to those as well for our computer system for the staff to use. The staff in those locations needs to be able to get on our email system and our Microsoft Office system and the client management system, things like that.

Due to the confidentiality of its clients/patrons, the Cunningham Children’s Home has some issues with technology and privacy. For example, this came through when the CEO discussed remote access:

With remote access you have a host of security issues and concerns. HIPPA, the Health Insurance Portability and Accountability Act, is the federal statute regarding the confidentiality of client records. We live and breathe HIPPA here. So say you’re a therapist and you’re at home and you’re working on a treatment or a mental health assessment and then you leave your computer and you leave a document up. Then someone else goes to use the computer and now they have access to that confidential information.

Remote access, therefore, continues to be an ongoing debate for those working at the Cunningham Children’s Home. While many would like to be able to work from home, it may not be an option due to the possibility of violating HIPPA.

Webliography

5: Developmental Services Center

Ashley E. Booth
Master’s student, GSLIS

1 Executive summary

The Developmental Services Center (DSC) is a comprehensive organization that provides services and supports to children and adults with developmental disabilities. The 180–190-person staff serves approximately 1,300 consumers a year and of these about 300–350 each day. DSC manages 14 facilities including group homes, work/training sites, and apartment complexes, as well as the variety of services including case management, family support, residential, developmental training, and employment training.

Everything DSC does revolves around their mission: “to enhance the lives of individuals with disabilities by providing services and supports which enable them to live, work, learn and participate in their communities.” The organization is focused on providing for consumers first and staff second, especially in terms of technology where often the most up-to-date technology can be of the most help to consumers. Fund-raising is always a prime area of concern and activity. There are already waiting lists for most DSC’s services and continuing to diversify and expand fund-raising is a major push going forward.

DSC imagines UC2B could help them in a variety of ways. Connecting all or most of their facilities could potentially allow them to do more live chats with their work facilities and between caseworkers and their families. Faster speed would also greatly benefit the clinical staff and help the organization make the best use of its already robust technology inventory.
2 Maps

This Google Map shows the location of the Developmental Services Center within its neighborhood.

This Google Map shows the location of the Developmental Services Center in the greater Champaign area.
3 Photographs

The outside of the Developmental Services Center main office.
This is an example of what staff computing looks like at the Developmental Services Center.
This is the consumer computer lab at the Developmental Services Center main office.
This is the server room at the Developmental Services Center main office.

4 Demographics of patrons or clients

According to the staff, The Developmental Services Center has between 180–190 staff that serve about 1,300 consumers a year, and approximately 300–350 consumers a day.

5 History

According the Developmental Services Center (DSC) Website, DSC was officially created in 1972 and brought together what had been four separate organizations: The Champaign County Rehabilitation Center, Happy Day School, Mayor’s Action for Retarded Children, and the Togetherness Club.

**Champaign County Community Rehabilitation Workshop.** The Champaign County Community Rehabilitation Workshop was founded in 1962, led by Champaign’s Mayor Emmerson V. Dexter. The workshop began with five clients, a volunteer Director, and rent-free space sponsored by the Holiday Inn. The first major donation to the workshop ($5,000) came from the Junior Service League. Volunteers operated the workshop from 12:30 p.m. – 4:30 p.m. five days a week and the first contracts included sharpening knives, sorting coupons, and repairing Coke cases. By the end of the first year the workshop had 14 clients.

In 1962, the organization moved to a vacant wing of the Outlook Sanatorium and the name was changed to the Community Rehabilitation Center. In 1963, the center and the
State of Illinois Division of Vocational Rehabilitation (DVR) signed their first working agreement.

In 1966, the staff grew to three full-time positions and the center was serving 30 clients. In the first four years of the center’s operation, more than 104 people received services. In July of this year, the name was changed again, this time to the Champaign County Rehabilitation Center (CCRC) and the center became a member agency of the United Fund (now the United Way).

In 1969, the CCRC moved again to accommodate an increase from 28 to 50 clients.

**Happy Day School.** In 1960, the Champaign-Urbana Association for the Mentally Retarded was created by a group of six to eight families, assisted by an advisory group, to complement the Unit 4 Special Education classes provided to children aged 7-15. The Happy Day School began with a day care center serving three children ages three to five, and with an activity class in the afternoon with children over 14 in space donated by the First Presbyterian Church in Champaign.

In 1961, Happy Day School hired their first full-time teacher, and in 1962 the first major donation came from the United Commercial Travelers and Junior Woman’s Club. In 1963 the first Executive Director was hired. By 1965, 50% of the budget was funded by a Grant-in-Aid program from the State of Illinois Department of Mental Health and staff included a director and four teachers. By 1965, Happy Day School day care was serving 18 children and the activities class had 8 students.

**The Mayor’s Action for Retarded Children (MARC) and Togetherness Club.** The Mayor’s Action for Retarded Children (MARC) and Togetherness Club programs were founded by members of the Champaign County Rehabilitation Center and Happy Day School, respectively. In 1966, Mayor Emmerson V. Dexter began the MARC program, a four-week summer camp at Lake of the Woods designed for handicapped children over five. In 1967, the Champaign County Association for the Mentally Retarded (CCAMR), later the Champaign County Advocacy & Mentoring Resource, took over the MARC program. In 1967, the City of Rantoul and both Champaign and Urbana Park Districts began providing support. In 1969, 18 people attended the first Togetherness Club meeting, a club sponsored by the CCAMR that was designed to provide “recreational and cultural enrichment activities to handicapped teenagers and young adults in the area.”

**Recent History.** In 2006, two new group homes, funded by a county developmental disabilities tax implemented in 2004, opened in Champaign. These homes took 13 new clients and 3 existing clients from other group homes (Wurth, *The News-Gazette*).

By 2007, DSC was helping 1,300 people a year, about a 50% increase from 2004. And in 2008, DSC served 1,400 people (Wurth, *The News-Gazette*).

### 6 Technology inventory

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<thead>
<tr>
<th>Hardware</th>
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<tbody>
<tr>
<td>145 computers</td>
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### 7 Analysis

The Developmental Services Center (DSC) provides services and support to adults and children living with developmental disabilities. The organization was excited about UC2B and very accommodating when it came to creating this case study. According to our interviews with the CEO, Executive VP of Support Services / CFO, and a board member, DSC is a comprehensive organization. DSC maintains a large number of facilities. The main office is in Champaign, along with two buildings that house consumers; there is a major training/production facility on Clark Road; there are seven group homes throughout Champaign-Urbana; and there is a twenty-four-unit apartment building in Urbana, another group home in Rantoul, and another work/training site in Rantoul.

Everything DSC does revolves around their mission. The organization provides a wide array of services and support to their consumers including, but not limited to:

- case management
- general family support
- supporting families with children who have, or are at risk for, developmental delays
- individual instruction
- developmental training
- group homes and supported apartments
- vocational training
- employment training

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These services are multifaceted and a simple list does not illustrate the scope and complexity of their work. For example, when looking specifically at employment opportunities, consumers can be helped in a variety of ways. DSC provides services around obtaining employment, educating employers, supporting employers, job training, and continuing support for the hired. In addition, one part of DSC’s organization is its business operations, which hire consumers to work in one of DSC’s three services areas: mailing, packaging, and soap manufacturing. These work centers often run a profit, and this money allows DSC to provide even more services as an organization.

DSC, much like other organizations in the state of Illinois, must constantly worry about funding. The organization has been having trouble being paid by the state in a timely manner and there are always threats of cuts from the state. Although the organization is fortunate to have diversified their sources of funding in the past, the loss of support from the state has made fund-raising a prime area of concern for the organization. There are already waiting lists for most of DSC’s services and continuing to diversify and expand fund-raising is a major push going forward.

In terms of technology, we learned that DSC has been working for the last 20 years to utilize technology in a way that will best help their consumers. It is difficult for DSC to keep technology and software up-to-date, especially when individuals with disabilities have such specialized needs and often it is the newest technology that will help them. For example, during our interview we learned that iPads are on the cutting edge of creating technology designed for people with autism. Although DSC does not have the funds to provide that kind of technology currently, they are focused on consumer technology first, staff second.

During our interview, when thinking about the potential long-term benefits of UC2B, DSC staff did not hesitate to dream big. Having all of their many facilities connected with broadband would allow them to do more live chat meetings between the main office and the work/training facilities, which would cut down on travel. Live chat could also be utilized for case conferences with parents, allowing staff to meet with families more regularly because less travel would be required. In addition, the simple increase in speed would be very beneficial to the clinical staff. Additionally, DSC would like to try and centralize their safety interface. For example if an alarm went off a group home, having that go to one centralized location would allow for more facility monitoring, even for simple things like a faulty air conditioner. Ultimately, DSC is always looking to simply improve their services and allow their consumers to better communicate with the world.

**Webliography**


6: Don Moyer Boys and Girls Club

Emilie Vrbancic
Master’s student, GSLIS

1 Executive summary

The Don Moyer Boys and Girls Club (DMBGC) is a not-for-profit organization that promotes the personal, social, and educational development of children ages 6 to 18. From the time it was established in 1968, the club has been a fundamental organization in the Champaign community. Their mission is to provide “all youth with diverse programming and services in a nurturing environment that encourages them to maximize their full potential.” The club is a place for children to come after school to participate in educational programs, but more importantly it’s a place to hang out, play sports, and socialize in a safe setting.

Funding is a predominant issue for the DMBGC and in the economic downturn their budget has significantly decreased. Through restructuring the organization’s staff and reducing spending, the club is still able to provide quality services to Champaign youth.

Over the years, the club has expanded not only its programs but its technological capabilities as well. The club has two labs comprised of 22 workstations, giving youth the opportunity to explore their creativity through technology. Even though the club has an extensive technology infrastructure the administration is eager to find ways to realize UC2B’s potential. The harnessing of children’s creativity is fostered through the uses of technology, and the staff and administration of the DMBGC is aware of this. Having greater access to technologies and therefore useful life skills is central to both the missions of UC2B and the DMBGC.

2 Maps

Map of the Don Moyer Boys and Girls Club and surrounding area.
3 Photographs

View of the front entrance of the Don Moyer Boys and Girls Club on Park Street.
The upstairs computer lab, which contains 12 student computers.

The downstairs computer lab, which contains 10 student computers.
One of the staff desks. Each staff member has his/her own computer and telephone.

4 Demographics of patrons: Statistics for 2010

Total Youth Served 2010 (January–December): 1,549
Percentage of Registered Members from single-parent households: 77%
Total Registered Member Average Daily Attendance, Sept-May: 125
Total Registered Member Average Daily Attendance, June-August: 156
In 1968, DMBGC became an incorporated nonprofit organization. In October of the same year, they became a member organization of the Boys Clubs of America. The club purchased an old church building at 201 East Park Street in Champaign and has been serving its members at that location since 1969. The club has helped to establish other Boys and Girls Clubs in the surrounding cities of Danville (1989), Bloomington (1992), and Mahomet (1994). In 1994 a $1.45 million renovation took place, which saw the conversion of the original structure into a gymnasium and the construction of an 11,000 square foot addition on the east side of the building. The addition now houses two computer learning labs, classrooms, administrative offices, and a recreational room. In 2010 the DBGC moved their elementary student program into a space at First Presbyterian Church. This move made it possible for age-appropriate programs to grow in each location.

In the last decade the club has improved its technology services immensely. In 2001 the club received a grant through the High-Tech School-to-Work Project from the Champaign Chamber of Commerce to upgrade one of their computer labs. In 2008 Comcast donated the technology for the second computer-learning lab. This included 10
workstations, updated software, and an overhead projector. With a total of 22 computers for student use, the club is able to offer more advanced technological and education programs.

As is the case for most non-for-profit organizations, funding has always been an issue for the club. Many members and organizations of the community recognize that the DBGC is an integral part of the social fabric of Champaign and the need for their programs is deeply felt in the community. Funding is essential to allow this organization to provide fundamental services to the youth of Champaign. The club relies on United Way grants, local, state, and federal grants, and community contributions to fund its yearly programs.

Due in part to federal and state budget cuts, a major restructuring of the staff took place in 2011. Also, several members of the Board of Directors resigned in July of 2011. Citing the opposing opinions concerning the trajectory of the club, the board members felt they needed step down because they were no longer able to fully support the organization. The vacant seats were filled quickly and the board resumed business in a timely manner. Through the economic downturn and the restructuring of the organization, the DMBGC continues to provide quality care and programs to Champaign County’s youth.

6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, Systems, Communication</th>
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<tr>
<td>31 Desktops</td>
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<tr>
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<tr>
<td>7 Printers</td>
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<tr>
<td>2 Servers</td>
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<td>2 Routers</td>
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<td>Facebook</td>
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7 Analysis

The DMBGC is dedicated to providing educational, social, and personal development programs to Champaign County children ages 6 to 18. Their mission, “to provide all youth with diverse programming and services in a nurturing environment that encourages them to maximize their full potential,” is represented in each program the club offers. The club is a place for children to come after school to participate in educational programs, but more importantly it’s a place to hang out, play sports, and socialize in a safe setting. In addition to the formal programs and informal socializing, the club also
hosts special programs directed at different age groups. One such example is a recent information and instruction session for high school students about how to find and apply for college financial aid.

Different forms of technology are used every day at the DMBGC. Because it is a place where kids can come to hang out and participate in educational classes, having up-to-date technologies is very important. The administration has made technology a priority and the club implemented major overhauls in terms of technology infrastructure. The DMBGC is now a WiFi hot spot, has two servers, owns 31 computers, and is represented through its own website and Facebook page. There are two computer labs available for children to use and in 2008 Comcast updated one of them through a generous donation. The newest lab houses 10 workstations, all equipped with the latest software and capabilities. There are regular classes held in those labs and every child has basic computer skills, with some kids utilizing advanced skills in music, video, and photography editing. One need that was consistently expressed is for adequate technology instructors. Instructors who are knowledgeable about new uses in technology and are able to harness the creativity of the kids would be a beneficial addition to the club.

The DMBGC is looking to further strengthen the existing technological infrastructure and update some older workstations. The main outlook for technology within the organization is finding volunteers to bolster the kids’ technological skills. The Executive Director pointed out that most of the kids are not afraid to use technology. They want to learn and are excited to use new programs and software. Fostering good technological skills is essential for the kids because they will be dealing with advanced technologies when they go out in the world. The staff is keep to promote programs and skills that will make the kids better people and citizens.

It will be beneficial for the DMBGC to start thinking of ways that the UC2B Big Broadband project can impact their organization. The Officer Manager pointed out that it is important that some of their kids will be recipients of the broadband service to their homes. It is important that there will be access to technology outside of school or the DMBGC. The club is only open after school and the kids have limited time to do homework. Hopefully, UC2B can start to close the digital divide present in Champaign County. The harnessing of children’s creativity is fostered through the uses of technology and the DMBGC staff and administration are aware of this. Having greater access to technologies and in turn useful life skills is Central to the missions of both UC2B and the DMBGC.

Bibliography

Webliography
http://www.dmbgc-cu.org/


empty tomb, Inc. is a nonprofit that operates on a local, national, and international level. On a local level they serve as a resource between Christians and those in need. They partner with local churches, small groups, and individual volunteers to connect them with individuals who are in need of food, clothing, home repair, health services, friendship, or financial assistance. For this particular outreach they are especially dependent on the phone, word-of-mouth, and some walk-up services. Computers and technology are used by staff in order to conduct their work effectively.

empty tomb, Inc. is located just north of University Avenue, east of downtown Champaign. It is along the edge of the central-most, yellow-shaded area demarking the grant-funded fiber-to-the-home service areas on the UC2B Project Map. The immediate neighborhood contains mostly low-income, single-family homes in a predominantly African-American area. There is regular bus access to the facility and it is within walking distance of the University of Illinois campus.
Map of premises. empty tomb, inc. is located at 301 N, 4th Street, Champaign, IL. The corner of Church and 4th Streets is a moderately busy intersection just north of University Ave, a major area road. It is a large, brick building. In front sit a parking lot and a bicycle rack. People often form a line to wait at the front doors for services such as food and clothing donations. One must be given permission to enter the building through the secure doorbell and intercom system. A loading area is located at the northwest end of the building. Three large empty tomb, inc trucks are usually parked in the parking lot when not on Home Maintenance jobs or delivering furniture.

3 Photographs

An example of staff computers and a desk workstation in an office.
A street view of empty tomb, inc.

4 Demographics of patrons or clients

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Count</th>
</tr>
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<tbody>
<tr>
<td>Medical assistance ($23,042) number of times given</td>
<td>305</td>
</tr>
<tr>
<td>Cribs by referral for newborns (number shared)</td>
<td>66</td>
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<tr>
<td>Layettes for newborns share (some with cribs)</td>
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<tr>
<td>In-kind assistance (e.g., diapers, formula)</td>
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<tr>
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<tr>
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<tr>
<td>Deliveries by congregations, coordinated by empty tomb</td>
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<tr>
<td>Number of people in households receiving food deliveries</td>
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<tr>
<td>Additional families served with food vouchers</td>
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<tr>
<td>Number of times pounds of dried beans shared</td>
<td>808</td>
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<td>Numbers of times cartons of dried milk shared</td>
<td>384</td>
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<tr>
<td>Furniture Items delivered by volunteers</td>
<td>633</td>
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<tr>
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<td>Financial assistance ($39,341) number of times given</td>
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<td>Home Maintenance renovations, including Adopt-a-Projects, Completed</td>
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Last year, empty tomb coordinated 12,785 volunteer hours and people were assisted over *20,223 times. empty tomb does not receive any government funding. Ninety-seven percent of their funding comes from churches and individuals.

5 History

empty tomb, inc. began informally before growing into the large, multifaceted organization that it is today. In the early 1970s, John and Sylvia were both studying at the University of Illinois in Urbana-Champaign. In 1971 they moved into and repaired an empty house on University Avenue. Sylvia stated in an interview that, “The community found us. People began bringing people [to the house] and saying, ‘Oh, here’s this person—they’re just up from Mississippi and they have nothing.’ We would call churches sort of informally and say, ‘We have a family and they have nothing and they need things.’” As they became more involved in the community, it was apparent that Champaign-Urbana was missing a Christian resource organization. empty tomb was incorporated in 1970 and was run full-time from the house provided by a donor for use by empty tomb, inc. by 1972. empty tomb acquired their first Macintosh computer in 1985 and was fully wired for the Internet by 1990 when they moved to their current location, built and designed specifically for their needs.

empty tomb is an historically Christian service and resource organization. It connects people in need with the Christians who have the resources to help. Their goal is to love their enemies, feed the hungry, and serve their neighbors in Jesus’ name. Their office is strategically located in a low-income area that allows individuals to easily access their services. They house a furniture and clothing donation center on site, open Monday–Saturday. Beginning on Monday, the first eight callers per week can receive $30 in cash for help with bills. empty tomb also accepts referrals from area agencies to assist specific individuals/families with financial needs. On Tuesdays and Thursdays empty tomb
makes appointments with individuals to fund prescription medication they cannot afford, no matter the cost. Individuals remain eligible for this assistance every 90 days. In addition, empty tomb works with local church congregations to organize other “direct word and deed service opportunities” (emptytomb.org/about).

From their website, a list of the local assistance they provide:

- **Christian Family to Family Relationships**
  This work provides support structures and encourages financial assistance and friendship between Christians with resources and families in need.

- **Christian Health Services**
  Christian Health Services work helps meet the health needs of financially poorer people by providing limited funds for medical needs, primarily prescriptions; also, layettes and other items are provided to needy families, generally the mothers.

- **Clothing Work**
  Clothing can be dropped off at the site and then is sorted and made available free in Jesus’ name. Help is needed in sorting clothes and greeting people.

- **Free Food Work**
  Congregations receive calls from empty tomb and then deliver groceries provided by the church to the family or individual in need. More congregations who are able to deliver food are needed.

- **Furniture Work**
  Donated furniture is picked up and delivered to needy households. Volunteers are needed both to pick up and deliver the furniture in empty tomb’s furniture truck.

- **Helping Work**
  Limited cash assistance is available for various emergency needs, such as rent, power bills, and automobile gasoline. Additional funds are needed here.

- **Home Maintenance Work**
  Designed to help low-income people who own their homes to make renovations; labor is done free in Jesus’ name. Laborers are needed to work on projects.

### 6 Technology inventory

<table>
<thead>
<tr>
<th>Technology Element</th>
<th>Staff</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktops</td>
<td>13 Macs, 2 PCs</td>
<td>For part- and full-time staff use. PCs used only for bookkeeping.</td>
</tr>
<tr>
<td>Laptops</td>
<td>2 Macs</td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td>Staff telephone system. Each employee has a phone in their office and voicemail. Service through Champaign Telephone.</td>
<td>Heavily reliant on the telephone system for staff and customer use.</td>
</tr>
<tr>
<td>Fax</td>
<td>Yes</td>
<td>Dedicated phone line</td>
</tr>
</tbody>
</table>
7 Analysis

empty tomb, Inc. is a nonprofit that operates on a local, national, and international level. On a local level they serve as a resource between Christians and those in need. They partner with local churches, small groups, and individual volunteers to connect them with individuals who are in need of food, clothing, home repair, health services, friendship, or financial assistance. For this particular outreach they are especially dependent on the phone, word-of-mouth, and some walk-up services.

On a national level, empty tomb also has a project called Mission Match. A church can apply for a matching contribution through Mission Match to assist missions programs elsewhere in the nation or world. Mission Match will give up to $3,000 in matched donations. To fund the Mission Match project, empty tomb has organized the Mission Match Discipleship Tree, which requests a yearly donation of $48 from a broad network of churched individuals. For this outreach, they are highly dependent on both the phone and the Internet. Many people learn about their organization through the Internet and, in turn, contact empty tomb through e-mail or phone. empty tomb uses e-mail to maintain communication with the churches applying for funds and the donor base.
Overall, empty tomb exhibits a high level of resourcefulness and efficiency in their work. This is apparent in the level of technology implemented in their office. They use networked Mac computers almost exclusively. Through some guidance from a consultant, it is evident that empty tomb understands the importance of technology in a nonprofit environment and how it can help them to accomplish their goals.

Like most nonprofit organizations, they operate their numerous works with a tight budget and small staff, and rely on volunteers and donations. A particular area that could benefit from improvement is the organization website. The organization stressed that they are in need of a programmer. By early November 2011, a person was serving in that capacity two days a week. Areas of potential additional use of the website include: sign-up forms being available for a Work-A-Thon scheduled for March 2012; a system for Food Referrals that allows caseworkers to know immediately if someone is within the eligibility timeframe (every 90 days); and a more interactive system for donors to the Mission Match Discipleship Tree and MissionMATCHanExpense.

Bibliography


Ronsvalle, John and Sylvia. At Ease: discussing money and values in small groups. Alban Institute, 1998.


“We Are Here To Tell Them They Are Not Alone.” Organization Brochure. Fall Letter, 2011.


Webliography


8: The Girl Scouts of Champaign

Anna Holland
Master’s student, GSLIS

1 Executive summary
The Girl Scouts of Champaign has been serving the Champaign-Urbana and extended service areas for 70 years. Over the changing course of organization development and membership growth since the organization’s birth in 1912, the Girl Scouts have stayed true to their mission of building girls of strong courage, confidence, and character who are ready to lead their communities and be prepared for the future. On the whole, the Champaign service center reports no internal technology problems. Rather, the major challenge the organization currently faces is serving members north and east of Champaign, where it is more common for members to have limited or no Internet access. With the majority of Web-based resources replacing paper and mail-in forms, members beyond the local level either have difficulty accessing the Internet or express frustration over having to fill out and submit forms, credit card information, or personal information online through the Girl Scouts of Central Illinois’ website.

2 Maps

Location of the Girls Scouts of Champaign within the Champaign-Urbana community; the red pin identifies the Champaign office. Households in areas highlighted in gold are eligible for UC2B’s faster Internet service at a lower cost; community institutions all over the city are eligible.
Legend:

- Girl Scouts
- Place of Worship
- School
- Shelter
- Police Station
- Fire Station
- Library
- Residential
- Area

Neighborhood profile: proximity to surrounding amenities, businesses, and organizations.
3 Photographs

The Girl Scouts of Central Illinois Champaign office and store.
Girl Scout merchandise available in the Champaign service center store.
Network server and administrative computer.
Telephone cables system.
4 Demographics of patrons or clients

The Girls Scouts of Champaign is one of 7 service centers belonging to the Girl Scouts of Central Illinois, which encompasses 38 counties in the central Illinois region. Additional service areas have offices in Bloomington, Decatur, Peoria, Peru, Quincy, and Springfield (headquarters). Together, the Girl Scouts of Central Illinois (GSCI) strive to serve girls across the central Illinois area by providing a nurturing environment, skill- and character-building opportunities, leadership experience, social-conscience building, and ample conviction of their own potential and self-worth (What is Girl Scouting). Like all central Illinois service areas, the Girl Scouts of Champaign serve girls in grades k–12.

The Champaign center services the counties of Champaign, Douglas, Ford, Iroquois, and Vermillion (GSCI Locations). Though specific information about the ethnicity, average income level, educational attainment, or occupation of member parents is not readily available, it is safe to say the Girl Scouts of Champaign serve a diverse number of girls from all walks of life and income levels. Below is a list of GSCI service and giving in 2011 (About Us).

**GSCI Serving in 2011**

- Adult volunteers: 5,029
- Counties: 38
- Girl members: 20,882
- Membership assistance: 5,280
- STEM programming: 8,849
- Summer camps: 1,623

**GSCI Giving in 2011**

- Campership assistance: $30,000
- Membership assistance: $70,488

5 History

The first Girl Scout troop was organized by Juliette Gordon Low on March 12, 1912 in Savannah, Georgia (Facts). Today, nearly a century later, there are over 3.2 million girl and adult members and more than 50 million U.S. women are Girl Scout alumnae (History). The mission which guides the Girl Scouts has remained relatively unchanged through the years: “to build girls of courage, confidence, and character who make the world a better place” (Facts). The Girl Scouts have continued to grow and prepare to serve future generations of girls. Today, “about 80 percent of America’s female business owners and senior executives, along with an outsized majority of women leaders in virtually every field, are former Girl Scouts” (Annual Report 2010, 5).

Technology may not be a term typically associated with Girl Scouting in the early years. But in fact, kitchen technology played a

*“In the 2010 program year, some three million girls sold 198 million boxes for a record $741 million in cookie revenue to support Girl Scouting” (Annual Report 2010, 9).*
major role in the launching of what is now a world icon—not to mention the Girl Scouts’ biggest fundraiser project to-date. In 1917, a troop in Oklahoma held the first ever Girl Scout cookie sale, and just five years later the cookie sale fundraiser had become a national event.

Today, Girl Scout cookie technology has moved out of the kitchen and onto the Web: “Girl Scout cookies have their own Web site, Facebook page, and mobile app, and cookie sales are now designed to teach girls practical goal setting, decision making, money management, people skills, and business ethics” (Annual Report 2010, 6–7). Hence, despite changing times and expanding technologies, the mission for GSUSA has not changed. The Girl Scouts continue to adopt new technologies in order to empower girls and benefit the community. For example, “in 2011, for the first time, some Girl Scouts accepted credit card payments [for cookies] with their smartphones” (Annual Report 2010, 6). Other programs also exhibit the Girl Scouts’ willingness to embrace technology to better the livelihoods and education of girls. The LEGO program is one such example, with a robotics league that introduces girls to STEM (Science, Technology, Engineering and Math) (Program).

The Girl Scouts of Champaign. The Girl Scouts of Champaign is a nonprofit company under the national Girl Scouts USA organization. The Champaign service center was established in 1941 and has been serving the Champaign-Urbana and extending areas for 70 years (Manta Media Inc.). Though little information could be gathered about the changes and history of technology use at the Champaign service center, similar advancements in programing have taken place at the local level as on the national level. The Girl Scouts of Champaign, for instance, also have a LEGO program, and training videos for the cookie program are available online.

6 Technology inventory

Overall, technology use is prevalent at the Champaign office. Two in-house staff members make up the IT department, while an additional staff member has an IT background and can assist when needed. Otherwise, all tech problems are directed to the headquarters in Springfield, where there is a new part-time network administrator who deals with all IT problems.

<table>
<thead>
<tr>
<th>Computer Inventory</th>
<th>Other Equipment</th>
<th>Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Administrative computers</td>
<td>Battery server backup</td>
<td>Blogging</td>
</tr>
<tr>
<td>1 Public computer</td>
<td>Fax machine</td>
<td>Facebook</td>
</tr>
<tr>
<td>7 Desktops</td>
<td>Cash register</td>
<td>Foursquare</td>
</tr>
<tr>
<td>2-3 Laptops</td>
<td>Network server</td>
<td>Twitter</td>
</tr>
<tr>
<td>2 Copiers</td>
<td></td>
<td>YouTube</td>
</tr>
<tr>
<td>Printer</td>
<td>Credit card machine</td>
<td>Event registration</td>
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<tr>
<td></td>
<td>VoIP telephone system</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Download (Mbps)</th>
<th>Upload (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speedtest.net</td>
<td>1.22</td>
<td>1.23</td>
</tr>
</tbody>
</table>
7 Analysis

In total, the Girl Scouts of Central Illinois have 75 staff members between 7 service centers (About Us). The Champaign office has seven full-time employees specifically associated with their office, in addition to part-time and volunteer help.

With limited staffing, employees are expected to be fluent in most technologies in order to perform multiple responsibilities. Specifically, the smaller office forces staff to be adapt when it comes to computers (Norbot 2011). It also requires Champaign staff to expect some level of tech savvy on the part of members and volunteers. For instance, volunteer trainings are available primarily online. So too are 2012 fall cookie and product training videos for girls, which are posted on the GSCI YouTube channel (GirlScoutsCentral IL’s Channel).

As of September 1, Volunteer Essentials, an online guidebook for volunteers, replaced the primary hard-copy Volunteer Resource Guide and Safety-Wise. In a stated effort to “be more green” the GSCI printed a limited number of copies. The Essentials guide is available in its entirety online and on CD. The CDs are available at local service centers (Publications & Forms). Thus, as evidenced, the general trend for the GSCI is digital.

Eliminating the need for one-on-one training and shifting to a more online-driven format makes sense and the benefits certainly outweigh the drawbacks. Going digital saves the Girl Scouts of Champaign money and time. Nevertheless it remains a double-edged sword. Today, the key challenges facing the Champaign service center revolve around the issues of Internet access. Two questions that the Champaign service center struggles to address are:

- How do we serve the areas and individuals who do not have or cannot afford Internet access, particularly north and east of Champaign in the Danville and Waseca-Hoopeston-Gilman areas?

- Does the availability of online resources benefit those who live too far away to visit the office? Or do they still face difficulty in accessing resources?

Because the Champaign office services a very large area including surrounding towns such as Danville, Hoopeston, Gilman, Mahomet, and Savory, members are strongly encouraged to register for camps and submit membership and program forms online. In fact, the majority of paperwork and forms are available on the Web. Online forms can either be printed out and returned to the Champaign office or submitted electronically. However, the organization encourages e-registration for events because it is quicker. With e-registration for summer camps, for example, there is no waiting. Summer camps fill up quickly, and with the shift to register digitally slots now become available at midnight and there is no waiting for the office to open at 9:30 a.m. to submit a form.

Many parents express frustration with the technology resources available and fear surrendering personal information over the Internet, despite the secure GSSI network and server. A lot of parents do not want anything to do with the Internet: “There are people who are scared to use credit cards online … [and] people that won’t e-mail…. [T]hey say, “Call me and I’ll give you the number.”” (Norbot 2011). Moreover, there is the additional issue of Internet access, especially north and east of Champaign. A number of
people there cannot afford Internet access and do not have available hours during the day to visit public computing spaces.

Aside from the fear of and difficulty of accessing the Internet mentioned by those they serve, internally the Girl Scouts of Champaign currently faces no other technology difficulties. When it comes to file sharing the systems operations, all seven service branches run off the Springfield headquarters and server. Occasionally, the Champaign office runs into issues with the server, but “the network seems to work 99.9% of the time,” and it therefore is not much of a concern (Norbot 2011).

Though as an organization the Girl Scouts of Champaign has not encountered any Internet-based problems that interfere with program or operation management, they would likely nonetheless benefit from faster Internet download and upload speeds because of the relatively high amount of online posting and business they do. Also, UC2B is likely to benefit local girl members and volunteers by providing them equally fast Internet in their home or other public computing spaces.

However, UC2B will do nothing to aid the large number of members north and east of Champaign with limited to no Internet access. Therefore, UC2B does not provide a solution to the major challenge that the Champaign center presently faces of serving girls without easy access to Internet resources. And many of these girls live too far to easily drive to the Champaign store to either fill out or drop off paper forms. Girls without Internet access thus run the risk of getting closed out of a camp or program because mailing a form is much slower than registering online.

**Bibliography**


**Webliography**


1 Executive summary

Habitat for Humanity has been a part of the Urbana-Champaign community since 1991. They build and sell quality affordable houses to those in need using 90% volunteer labor, and operate a resale store in Champaign, which sells gently used household items to the community at a discounted price. Technology use is mostly administrative, and is limited due to the prioritizing of home building and clients’ needs. They utilize mainly donated equipment and software, and thus could benefit from the free installation and low cost of high-speed Internet through UC2B.
3 Photographs

Habitat for Humanity’s resale store and offices in Champaign.

Online interest form for families interested in applying for a home.
Habitat for Humanity’s Facebook page.

4 Demographics of Champaign County

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>201,081</td>
</tr>
<tr>
<td>White</td>
<td>73.4%</td>
</tr>
<tr>
<td>Black</td>
<td>12.4%</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>0.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>8.9%</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
<td>0.1%</td>
</tr>
<tr>
<td>Persons reporting two or more races</td>
<td>2.7%</td>
</tr>
<tr>
<td>Persons of Hispanic or Latino origin</td>
<td>5.3%</td>
</tr>
<tr>
<td>White persons not Hispanic</td>
<td>70.9%</td>
</tr>
<tr>
<td>Foreign-born persons, 2006–2010</td>
<td>10.9%</td>
</tr>
<tr>
<td>Language other than English spoken at home, age 5+, 2006–2010</td>
<td>15.1%</td>
</tr>
<tr>
<td>High school graduates, persons age 25+, 2006–2010</td>
<td>92.3%</td>
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<tr>
<td>Bachelor’s degree or higher, age 25+, 2006–2010</td>
<td>41.2%</td>
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<tr>
<td>Housing units</td>
<td>87,569</td>
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<td>Housing units in multiunit structures, 2006–2010</td>
<td>35.2%</td>
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<tr>
<td>Median household income, 2006–2010</td>
<td>$45,262</td>
</tr>
<tr>
<td>Persons below poverty level, 2006–2010</td>
<td>20.5%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau State & County QuickFacts. Data is for 2010 unless otherwise specified
5 History

Habitat for Humanity International was founded in 1976, and the Champaign chapter was established in 1991. Since then, the international organization has built over 400,000 homes in 3,000 communities all over the world, and the local chapter has built 60 houses in the Champaign-Urbana community.

6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six desktops</td>
<td>HabiTrack Family Tracking Database</td>
<td>12 staff</td>
</tr>
<tr>
<td>Cash register in ReStore</td>
<td>Website, content management system</td>
<td>8 board members</td>
</tr>
<tr>
<td>Microsoft Enterprise servers</td>
<td>Microsoft Office</td>
<td></td>
</tr>
<tr>
<td>Time clock in ReStore</td>
<td>MyHabitat.org connection to other Habitat sites</td>
<td></td>
</tr>
<tr>
<td>DSL modem</td>
<td>Windows XP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quicken bookkeeping software</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Facebook page</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Database of donors and volunteers</td>
<td></td>
</tr>
</tbody>
</table>

7 Analysis

The local Habitat for Humanity chapter is part of a large organization with over 3,000 offices around the world. Their mission is to provide “the life-changing opportunity for people to purchase and own simple, quality, affordable homes.” (About Us) Funding is mainly through donations, and 80% of administrative costs are covered by revenues from their resale store, which serves the dual purpose of raising funds and providing inexpensive and recycled home furnishings to the community.

Most of the houses built by Habitat for Humanity are bought by families with children at or below 60% of the median income for the area, though occasionally a family with slightly higher income level will be approved for a house. Candidates go through an extensive selection process and are chosen according to housing need, ability to pay, and a willingness to partner with the organization. (About Us) Most of the homes are between 1,100 and 1,300 square feet, with 3–4 bedrooms and 1–2 bathrooms, and are built with 90% volunteer labor and donated funds, land, and materials. Homes are sold to families.
with a 0% interest mortgage, and all payments go toward building more houses. The organization also provides educational programs on financial management and home maintenance.

Policy is determined by a board of directors with 8 members in conjunction with a professional staff of 12, 6 of whom use desktops in their offices on a daily basis. Because the bulk of donations go directly to clients and houses, the organizations’ technology budget is limited and most hardware and software is donated. They rely on a nonprofit organization called TechSoup, which distributes donated technology equipment to nonprofits who go through an application process. Though Habitat for Humanity does not view itself as a heavy user of IT, the technologies it does use allow the organization to work more effectively so that an even higher percentage of donation dollars may go directly to houses and families.

Office desktops run Windows XP with the Microsoft Office suite, and the internal network is linked to a Microsoft Enterprise server. The server is relatively outdated and will be replaced soon. Currently the network is set up so that most storage is on local devices, and shared file storage was mentioned by both of the interviewees as an important need that would facilitate much of their file sharing. The network is also connected to the cash register in the ReStore and a time clock for employees and volunteers. They run software for tracking families and mortgage payments for the families who receive houses, while much of the application paperwork is archived on paper. However, families may apply using forms accessible on the organization’s website, which is updated and maintained using a content management system. They also maintain a Facebook page, mainly for marketing and recruiting volunteers.

Habitat for Humanity’s network is currently connected to the Internet through a DSL modem, which they switched to from Comcast cable due to cost. They currently have no point of contact in their conference room, which sometimes poses a challenge during board meetings when members would like to share online content. UC2B could provide high-speed internet at a low cost, enhancing the organization’s connectivity to other institutions.

Habitat for Humanity’s clients vary widely in terms of their own IT use—some use computers, the Internet, and cell phones, while others must be contacted through landline phones or traditional mail. There is generally no Internet connectivity built into their homes, though an organization several years ago installed free DSL in two homes with grant funding.

Habitat for Humanity of Champaign County is an excellent example of a community organization that is effective because of their focus on clients’ needs. However, with the priority of putting donations toward building homes, sometimes office technology can be less than ideal. UC2B holds a lot of potential for organizations such as this, facilitating world-class connectivity at a very low cost.

Webliography

http://www.cuhabitat.org/about_us/index.php accessed 3/26/12
10: Land of Lincoln Legal Assistance

Abigail Sackmann
Master’s student, GSLIS

1 Executive summary

The Land of Lincoln Legal Assistance office in Champaign provides vitally important services to residents of the 14 counties it serves. These include legal help and advice about housing, family, consumer, public benefits, health, senior citizen, and education legal issues. The office uses information technologies much like many other organizations, for example for administrative tasks, communications, and keeping track of client records. Though a faster Internet connection through UC2B could help these daily tasks run faster and more smoothly, there is even more potential for legal assistance services more generally; with increased internet access in low-income communities in Champaign-Urbana, more people may have access to online legal resources provided, for example, by Illinois Legal Aid Online. Possibilities may also open up for attorneys to video chat and conference with clients, cutting down travel time and easing remote access to client records and ultimately allowing Land of Lincoln to provide legal assistance and resources for more clients.

2 Maps

Land of Lincoln Legal Assistance of Champaign is located at 302 North First Street.
The offices are located in a historic area especially significant to the history of the black community in Champaign. Important neighbors include Rose and Taylor Barber Shop, Don Moyer Boys and Girls Club, and the Historic North First Street Farmer’s Market.
3 Photographs

An example of a staff computer and telephone.

IllinoisLegal Aid online form for self-help legal advice.
Examples of legal advice videos that are available through the Illinois Legal Aid website.

4 Demographics of patrons or clients

Land of Lincoln Legal Assistance provides services to individuals and families whose income puts them below 200% of the federal poverty line in 14 counties in central Illinois: Champaign, Clark, Coles, Crawford, Cumberland, DeWitt, Douglas, Edgar, Effingham, Ford, Jasper, Moultrie, Piatt, and Vermilion.

<table>
<thead>
<tr>
<th>County</th>
<th>Population</th>
<th>White</th>
<th>Black</th>
<th>Latino</th>
<th>High-School Graduates</th>
<th>Median Household Income</th>
<th>Below Poverty Line</th>
</tr>
</thead>
<tbody>
<tr>
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<td>12.4%</td>
<td>5.3%</td>
<td>92.0%</td>
<td>$42,101</td>
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<tr>
<td>Clark</td>
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<td>87.1%</td>
<td>$43,003</td>
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<td>Coles</td>
<td>53,873</td>
<td>92.9%</td>
<td>3.8%</td>
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<td>88.8%</td>
<td>$37,790</td>
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<td>Crawford</td>
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<td>88.2%</td>
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<td>87.1%</td>
<td>$45,821</td>
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<td>0.8%</td>
<td>86.1%</td>
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<td>0.9%</td>
<td>81.8%</td>
<td>$45,758</td>
<td>10.8%</td>
</tr>
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</table>
5 History

In 1972, seven local legal aid offices combined to form Land of Lincoln Legal Assistance, which served 13 counties. Five more counties were added to the service area in 1977, when the first satellite offices opened in Springfield and Decatur, the latter a result of a merger with Legal Aid Society of Macon County. Over the next few years many counties were added and new offices opened; in 1981 the numbers stabilized at 13 offices, with a projected staff of 126 and covering 65 counties.

The following year, however, funding was cut nationally at the Legal Service Corporation (LSC) by 25%, which by 1985 resulted in 5 office closures and a staff reduction of 30 positions. That same year, the Lawyers Trust Fund of Illinois made its first distribution of funds to Land of Lincoln. This organization has become the second-largest funder for the legal assistance organization, driving most shifts in technology use. Prior to 1991, Champaign staff used IBM Selectric Typewriters and analog Dictaphones; while the typewriters have been retired, the Dictaphones are still used occasionally. That year, funding from the Lawyers Trust Fund provided the first computers to all Land of Lincoln offices.

In 1996, LSC funding was cut by 28%, leaving 8 offices with a staff of 66 and only 44 attorneys to provide services to 65 counties. The following year Land of Lincoln conducted long-range planning, and given the budget cuts developed goals of diversifying its funding sources, developing new service-delivery methods, and implementing a centralized intake-and-advice unit. In 1999 the Legal Advice and Referral Center opened, and within two years was providing telephone intake, advice, and referral to all counties in Land of Lincoln’s service area. By 2000, the organization had diversified its funding sources to the extent that the LSC contributed less than half of total revenues.

Still, in 2005, when LSC funding was cut further in light of 2000 U.S. Census data, Land of Lincoln reorganized to leave only 5 regional offices with 3 satellite offices, still serving the same 65 counties. The Champaign office serves 14 of these counties, with a staff of 10 attorneys, 4 other full-time employees, one part-time employee, 1 attorney in a satellite office in Charleston, and numerous volunteers.

Technological advances have been prompted by funding increases from the Lawyers Trust Fund of Illinois, so that when interest rates increase it means updated technology for the offices. This organization also drives statewide changes that affect other legal aid organizations in Illinois, including Prairie State and Legal Assistance Foundation (LAF), together covering the northern Illinois counties not covered by Land of Lincoln. In 2008, for example, all of the legal aid organizations moved to a system called LegalServer for case management. This system is online, which makes it possible for attorneys at the regional offices to coordinate and communicate client details with the Legal Advice and Referral Center, which is the telephone hotline run out of East St. Louis. It also permits attorneys to access client information from a remote location, allowing them to work within the system when away from the office.
6 Technology inventory of the Champaign Office

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Systems and software</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Microsoft Remote Desktop Services (server in East St. Louis)</td>
</tr>
<tr>
<td>Phones</td>
<td>Acropolis Technical Support</td>
</tr>
<tr>
<td>Scanners</td>
<td>Microsoft Office 2010</td>
</tr>
<tr>
<td>Voice over IP phone</td>
<td>LegalServer case management</td>
</tr>
<tr>
<td>2 wireless routers</td>
<td>Internet fax</td>
</tr>
<tr>
<td>Digital projectors</td>
<td>Various Web-based reporting software</td>
</tr>
<tr>
<td>Analog Dictaphones</td>
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</table>

<table>
<thead>
<tr>
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<tr>
<td>Speedtest.net</td>
<td>2.52 Mbps</td>
</tr>
</tbody>
</table>

7 Analysis

The Land of Lincoln Legal Assistance office in Champaign provides vitally important services to residents of the 14 counties it serves. These include legal help and advice about housing, family, consumer, public benefits, health, senior citizen, and education legal issues.

Initial contact for services is generally over a telephone hotline that serves all of the 65 counties in the service area of Land of Lincoln, called Legal Advice and Referral Center (LARC), which operates out of the central office in East St. Louis. The purpose of LARC is to filter those who are eligible for services and determine what type of help they need, which may range from a brief conversation to representation in court or at administrative hearings. When needed, the cases are then assigned to attorneys at one of the regional offices. One attorney from the Champaign office uses a voice over IP phone to connect to the hotline during the hours it is available, weekdays from 9:00 a.m. to 1:30 p.m.

This system works very well, but the window of time LARC is available sometimes prevents potential clients, who work during the day, from contacting Land of Lincoln. That said, it would not be possible for Land of Lincoln to take on all of the clients who are eligible for their legal services. A solution to these potentially competing challenges is being looked at—to make legal resources (including applications for services) and self-help resources more readily available online. Land of Lincoln currently coordinates technology resources including the LegalServer case management system with both Prairie State and LAF, and there is great potential in these partnerships to increase online access to legal resources for all of Illinois.

There is also a trend toward more online self-help resources, which could potentially be of great service to those who are ineligible for services through Land of Lincoln, as well as to potential clients the organization cannot currently reach. Illinois Legal Aid Online already serves as a great resource (see the Photos section above for examples from their website), and if UC2B increases the number of access points in town, free legal information would be more readily available to a larger segment of the population both at
home and where computers are available for public use. These spaces include libraries, churches, barber shops and beauty salons, and other businesses; the potential for effective and ubiquitous public computing is only increasing with affordable access to high-speed Internet through UC2B. This increased access to free legal information is an amazing opportunity which could be made a reality by increasing awareness in the UC2B service area of the online resources and trainings that Illinois Legal Aid Online provides.

UC2B also has the potential to increase the speed of access in the Champaign office itself. The current wireless in the office, mostly used by student volunteers who bring their own laptops, had a relatively slow speed of about 2.5 Mbps download and 0.4 Mbps upload when it was tested, which is dwarfed by the lowest level of service from UC2B of 20 Mbps. In addition, the office computers operate through an RDS connection to a server in East St. Louis, which often causes delays. Both the RDS and LegalServer services are available over the Internet, and it is often faster to connect this way than directly through the Land of Lincoln server, especially for high-demand applications such as training videos. Decisions about network connections are managed through the main office in East St. Louis, and the main issues influencing this choice are speed, security, and price.

The Champaign office also has initiated in the last few years a partnership with Carle Foundation Hospital and the Frances Nelson Health Center to provide a direct link between medical and legal facilities. Services include disability benefits, Medicaid, medical debt, and related issues such as domestic violence and unsafe housing. They are beginning to offer some of the services of this Medical-Legal Partnership in the Danville area, and could offer faster and more readily available services through the use of video. A client in Danville could, for example, connect either at home or at a public computer directly to a Medical-Legal Fellow in the Champaign office, which would cut down on travel time and expenses. The office computers do not currently have video cameras, but they should have the capabilities the next time they receive an upgrade. Video chat is also increasingly available on devices such as smartphones and tablets, which could increase services to clients in rural areas.

The greatest potential of UC2B broadband service to un- and underserved neighborhoods and anchor social institutions is the impact it can have on laying the technological foundation to level the digital playing field. However, the digital divide that exists in society and in Champaign-Urbana today is merely a symptom of much larger inequalities, many of which are addressed by the legal aid provided by Land of Lincoln. If the services of this and other legal aid organizations can be made more accessible through UC2B, it will showcase the potential for an amazing ripple effect.
11: Muslim American Society

Mary Looby
Master’s student, GSLIS

1 Executive summary

The Muslim American Society of Urbana-Champaign, Illinois is the local chapter of the national organization, MAS National. The organization’s mission is “to educate, organize, and empower the Muslim community to be active, contributing citizens who play a significant role towards positive social and spiritual change.” (http://masurbana-champaign.org/?page_id=31) MAS-UC sees technology as playing a large role in achieving this mission. The group has been interested in the prospect of UC2B and the opportunities the broadband project could provide, especially because the community center, the physical location of the organization, is located in one of the underserved census blocks identified in the UC2B grant. MAS-UC anticipates faster, efficient technology and the Internet as being a way to perform better outreach and provide more valuable services to its immediate community and neighborhood as well as its members. However, one of the biggest obstacles to the group and organization’s mission is funding and materials, items which the UC2B grant, unfortunately, will not be able to provide at this point in time.

2 Maps

The Muslim American Society’s Community Center (A) is located at 2011 Brownfield Rd in northwest Urbana. The center is 2.7 miles from the Urbana Free Library(D); roughly 4 miles from the University of Illinois(B); and about 5 miles from the Champaign Public Library(C). The community surrounding the MAS Community Center does not have a neighborhood computing center and is relatively far from the typical points of access, such as public libraries or the University of Illinois.
Aerial view of the MAS Community Center facilities. A houses the gymnasium; B is the school and library; C is under renovation with the goal of becoming a banquet hall. The three buildings have a total of 17,000 square feet and sit on more than 2.5 acres of land. Recently the organization has installed a playground in the grassy area behind B.

3 Photographs

One of the computers and printers located at the Community Club of the Muslim American Society of Urbana-Champaign.
Another printer and the modem that is connected to the computer in the picture above.
One of the three buildings that make up the Community Center owned by the Muslim American Society. This is the banquet hall that is currently under renovation. When it is finished it will be used for celebrations and special events of the organization and will also be available for rent by community members.
A view of the play area between the three buildings of the facility. In the background the rural nature of the immediate community is evident.

4 Demographics of patrons or clients

According to the president of the MAS – UC, the organization has about 40 active members and 40 active helpers or volunteers, for a total of about 80 people who are regularly involved in the activities and services of the organization. The organization is not restricted to Muslims, and welcomes those of other religions. Because the center houses a school and just added a playground, there seems to be a focus on youth, so there is a large youth population and young families are involved with the organization.

<table>
<thead>
<tr>
<th>Demographic of census block group</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population change (2000-2010)</td>
<td>33% reduction</td>
</tr>
<tr>
<td>White population (2010)</td>
<td>78%</td>
</tr>
<tr>
<td>Black population (2010)</td>
<td>14%</td>
</tr>
<tr>
<td>Asian population (2010)</td>
<td>3.5%</td>
</tr>
<tr>
<td>Hispanic population (2010)</td>
<td>3.8%</td>
</tr>
<tr>
<td>Population of another or multiple races (2010)</td>
<td>4.5%</td>
</tr>
</tbody>
</table>
Median Household Income (2010)  $42,708
Individuals below Poverty line (2000)  6%

Source: facefinder2.census.gov

5 History

The Muslim American Society was established in 1993 as a nonprofit national organization that attempts to address “charitable, religious, social, cultural, and educational” issues. It has grown to have more than 50 chapters in the United States and is now considered a “grassroots movement… that [provides] opportunities for community service, interfaith initiatives, youth programs, and civic engagement.” (http://www.muslimamericansociety.org/main/content/about-us)

The chapter of the Muslim American Society in Urbana-Champaign was started in 2007 by the current president. It was established as a not-for-profit religious, educational, social, and activist organization, as well as a branch of the national organization. In 2009 the organization was able to purchase the land and three buildings at 2011 Brownfield Road in Urbana that was once the site of a Baptist Church. Having a physical place to call home has helped the organization better serve its members and the community, create collaborations with other social institutions, and give the organization a central place to plan and implement its services and programs. Before having the physical facility, for about three years MAS used lecture halls or offices at the University of Illinois. The facility has three buildings, one of which is being renovated. At this Community Center, MAS offers a weekend or part-time school for young children, a small library, and a social services and activism office.

6 Technology inventory

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<th>People</th>
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<td>Volunteers</td>
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<tr>
<td>Stereo Mixer</td>
<td>Website</td>
<td>Members</td>
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<td>AV Projector</td>
<td>Yahoo E-mail group</td>
<td>Staff</td>
</tr>
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<td>Laptop</td>
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<td>4 Public computers</td>
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Speed of Comcast connection at Community Club
7 Analysis

The Muslim American Society of Urbana-Champaign is about four years old and has only had a physical place for about two of those years. For a small newly established organization, they have put technology to good use. They have a cable Internet connection, a sound system, some computers, a working website, and plans to move and grow into the future.

MAS views technology as a way to enhance the organization and its structure as well as serving the community’s needs. Their website, www.masurbana-champaign.org, presents the mission and vision of the organization, contact information, future goals and plans, updates about the Community Center purchase and renovations, a gallery of pictures and YouTube videos, and different resources to learn more about the organization, as well as ways to donate and listings of upcoming events and programs. Members of the organization can also join a Yahoo group that belongs to MAS and they have seen larger numbers of people joining from year to year. Acquiring a building in 2009 helped with more physical, tangible technology. For example, the MAS Community Center has an Internet connection through Comcast, and uses four computers to access the Internet. Volunteers have installed wireless in one of the buildings of the facility so members or people in the community can bring their own devices to access the Internet.

The educational building houses the school’s eight classrooms and is connected to the gymnasium. The gym has the most technological equipment, including a stereo mixer, a surround sound system, an AV projector, and a laptop. This area is meant for video conferencing, programs, and other events and the organization makes good use of the technology. For example, when the research team visited the site, the sound system was playing religious material, broadcasting a schedule of prayer times, and the gym floor was being used for a hajj simulation activity for the youth of the organization.

The organization has many plans for the future which include raising awareness, attracting new members, and serving the larger community by providing access to information technologies as well as by using those information technologies to communicate and interact with other communities and organizations throughout Urbana-Champaign. The facility and organization already has a room set aside in the anticipation of setting up a computer lab. The Community Center would like to have a lab of 15 computers, 2 black-and-white printers, and 2 color printers, all of which would be open to the public. Other plans are to have at least one computer in each of the classrooms and a PA system connected throughout the facility, inside and outside. MAS also hopes to expand the library’s collection, as well as install a drop-down projector for videoconferencing in the room.

As stated previously, one of the main goals of the MAS’s future computer lab is to improve access to hardware and digital skills in the area around the Center. Currently, according to the president of the organization, “The level of living and the class of living around us, I don’t expect high levels of proficiency using technologies. But I think they might be very much willing to learn and I think that is one of the objectives of our participation with UC2B – is to provide a chance for learning to help with the computer literacy [in the] area.” The neighborhood, as the map above shows, is removed from many of the amenities and resources of the cities of Urbana and Champaign, including
the public libraries and the university. The community is multiracial and working-class, and has few businesses. According to research by UC2B the area is underserved, having less than 40% broadband adoption. The Muslim American Society sees the neighborhood as being in need of a public facility for computers having high-speed Internet access and computer training or workshops, and they see the Community Center as the place to meet those needs. They also see training and access to be important aspects of being involved with UC2B.

Indeed, MAS has been involved with UC2B from the beginning. Since the group received the first solicitation letter, the members and administrators have been very excited about the opportunities that UC2B could afford the organization. The Muslim American Society is very interested in reaching out to the surrounding neighborhood and being the “anchor institution” that the UC2B grant is asking it to be, by providing a place to access the Internet and other information technology resources. Even though there was great enthusiasm for UC2B from MAS, the parts of the grant that would arguably have been the most beneficial to MAS were not approved. The actual hardware—items such as computers, printers, laptops, routers—and money for training and personnel are not a part of the initial phase of UC2B. Instead the Muslim American Society will have to find and fund these items without the help of another grant, which is also true for many anchor institutions around town. The question of IT staff and digital skills of members or the community will also be an important factor in the future of the Muslim American Society. Currently, the organization uses forms of social capital: it relies on its own people to help overcome technology issues. In the future, if the organization hopes to continue to embrace information technologies and support its community, having the proper support staff will be essential. The Muslim American Society is preparing for a future with a variety of information technologies and has important plans to expand its offerings.

Webliography


12: Orpheum Children’s Science Museum

Sunghwan ‘Sunny’ Kim
Master’s student, GSLIS

1 Executive summary

The Orpheum Children’s Science Museum is an educational institution in Champaign that provides camps, after school programs, classes, special events, exhibits and field trips, in addition to birthday parties, and facility rentals. Like many other organizations in this area, Orpheum is faced with rapid change in the information environment. Since the museum’s major patron group is children, who are usually familiar with computers, it is difficult for them to keep up with their users’ needs. The museum is also housed in an old, historic building, in which it is not easy to install network lines or a computer lab. It would be very expensive to remodel the entire structure, and the museum lacks the funds to do so, as its revenue is derived solely from donations and admission fees. As a result, the organization is looking forward to a UC2B connection, both for internet access and in order to provide online services for other local organizations and schools over the 1 GB local connection.

2 Maps

The Orpheum Children’s Science Museum is located at 346 North Neil Street in downtown Champaign, an area with a long history. The museum’s location is convenient in terms of transportation, and thus this institution has a very large service area.
The main patrons of the Orpheum museum are children, in particular elementary school students, and their parents and teachers as well. Thus the distribution of nearby elementary schools is very important to this institution. There are about 30 elementary schools in the city of Champaign-Urbana area, and 20 more elementary schools in Champaign County. The Orpheum Science Museum is centrally located, so it is easy to take a field trip there.
3 Photographs

The exterior of the Orpheum Children’s Science Museum: the building is not a complex structure since it was originally a theater. Almost all of the science exhibits are on the first floor. The empty lot next to the museum is used for displays such as the dinosaur excavation field and for the playground.

Online resources booth, which mainly offers internet accessibility to help the parents register for a museum membership.
A presentation computer, which is used for group activities or children’s science conferences.

Each staff person has their own work station. There is also a computer for volunteers, which allows them to search information for their work or adjust their volunteer schedule.
4 Demographics of patrons or clients

There is no demographic data available for the museum, but it does have its own brief definition of target groups. Most of this museum’s actual users are children. Elementary school students and younger kids are the main patrons. The museum categorizes them as preschool students, K–2nd grade students, and 3rd–5th grade students. The museum recommends exhibits and activities based on this classification. Kids are the museum’s primary patrons, but they depend on their parents or teachers to visit. In addition, parents’ memberships and field trips are the museum’s main source of income. The museum therefore targets promotional materials not only at kids but also at adults.

5 History

1914: The New Orpheum Theatre opens on October 19th, as both a vaudeville theater and a “moving picture” house. All the great stars of the Orpheum Theatre Circuit played Champaign, and it was considered the finest theater in downstate Illinois.

1986–1990: The Theater closes in 1986 and stands vacant until 1989, when the Preservation and Conservation Association (PACA) begins its campaign to save the theater. PACA hires theatre consultant Michael Hardy to do a feasibility study of the Orpheum. He suggests, in July 1990, a children’s museum as a possible use for the
building. The Champaign-Urbana area does not have a children’s museum and there are already several successful performing arts facilities in the area.

1992: The Discovery Place, Inc. holds its first board meeting on February 5th. The first Discovery Place fundraising/publicity event—a Kids Building Fair—is held on June 20th in the parking lot in front of the Orpheum. The Champaign City Council votes to approve the sales contract of the Orpheum Theatre building to The Discovery Place, Inc. on July 7th. The first major fundraising event—“Bids For Kids,” a fine arts and antiques auction—is held in the Robeson Building on November 20th.

1994: The grand opening of the new children’s science museum in the storefront space takes place on December 27th. Two hundred-eighty people attend the first day and over 1500 visit during the first week of operation. This year marks the 80th anniversary year of Champaign’s New Orpheum Theatre.

1997: The museum’s name is changed in April to “The Orpheum Children’s Science Museum” to better reflect the heritage of the building.

2000: Phase II remodeling is completed in October. The entrance lobby, grand foyer, and mezzanine are restored for use as exhibit spaces.

6 Technology inventory

This institution’s network speed is not bad. They are using broadband provided by private company, Comcast.

<table>
<thead>
<tr>
<th></th>
<th>Download speed (Mbps)</th>
<th>Upload speed (Mbps)</th>
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<td>25</td>
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<table>
<thead>
<tr>
<th></th>
<th>Staff computers</th>
<th>Patron computers</th>
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</thead>
<tbody>
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<tr>
<td>Quantity</td>
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<td>2</td>
</tr>
</tbody>
</table>

There are two kinds of computers in this museum. For patrons, there are two information search kiosks. These computers are somewhat old, but good enough to perform simple tasks such as Internet searches and membership account creation. The museum staff people have better computers, which are able to run Windows 7 and other office programs.

7 Analysis

It is not surprising that there are only a few computers for patron information searches in the Orpheum Children’s Science Museum, because the museum’s primary goal is not providing regular educational materials but rather special scientific experiences through
unique exhibits. That said, computer and information technology are quite important to the museum. First of all, like many other professionals, the staff people are using the Internet and office programs to perform routine tasks. They use e-mail and word processing programs, as well as some advanced programs such as Google docs and a shared calendar. Furthermore, as Blaine (2009), Strom (2007), and Diaz (1999) have noted, museums are using the Internet as a touring space. This museum also provides a cyber-tour, “Castle Workalot” (http://www.orpheumkids.com/forkids/cw/). By accessing this Web page, kids can experience the trial version of exhibits and learn what basic science theories are involved.

In addition, by means of websites, museums can meet their fund-raising goals in less time (Villano, 2010). The Orpheum Children’s Science Museum is also trying to make money through its own donation Web page. Creating membership accounts and scheduling field trips require Internet accessibility. For these reasons, a fast and reliable network is crucial for this museum. If they lose their connection or make people to wait too long, they will lose income. It is not easy to extend accessibility to this museum, however, since it is housed in an old historic building barely suitable for the installation of broadband lines in it. As a consequence the museum staff people are using not only cables, but also Wi-Fi. Even so, it is hard to cover all the building.

This museum has no tech-support team. Although all of the staff people are good at using computers, they rely on the help of volunteers and the private network vendor’s A/S when they have technical problems.

So there are two advantages that UC2B can bring to the Orpheum Children’s Science Museum. Firstly, UC2B will provide a reliable network which will make it easier for people to become members and donate to the museum. Secondly, UC2B can connect major anchor social organizations in this area, so the science museum will be able to link up with elementary schools. It will enable the creation of many other advanced services, such as video field trips. Though the museum is centrally located (see map above), it can still be difficult for some schools or community groups to arrange transportation for field trips; the potential to stream video over the 1Gb local connection may provide an exciting opportunity to extend services at the Orpheum to groups that cannot afford to travel to the physical site.

Bibliography


Webliography


13: Restoration Urban Ministries

Julianne L. Breck
Master’s student, GSLIS

1 Executive summary

Restoration Urban Ministries (RUM) is a Christian nonprofit organization in Champaign, IL. They aim to support needy families and individuals who want to take steps towards independent living. In order to provide for a person’s physical needs, they primarily offer transitional housing and food distribution. In addition, RUM seeks to provide comprehensive care that includes classes and programs in personal, educational, and spiritual growth in order for individuals to live self-sufficiently and as part of a community.

RUM struggles to meet their budget through private funding and donations. They use and embrace technology but cannot afford to update or maintain it regularly. Most staff members have Windows XP operating systems on their computers. Two computers can be made available to residents but are not openly accessible at this time. There is wired Internet access in both office buildings. Future technology goals include using donated computers to install a computer lab to better accommodate residents, and creating TV spots to broadcast on the public access TV station to generate publicity for their organization. RUM would benefit from a UC2B connection because it would allow the organization to make better use of technology to raise funds, increase staff productivity, and educate residents.
(A) Restoration Urban Ministries within the city of Champaign, IL. RUM is located on the northwest side of the city of Champaign, IL. It is along the westernmost edge of the red ring demarcated on the UC2B project construction map and within access of three major highways: 57, 72, and 74. It is situated along Mattis and Bradley Avenues at a busy intersection. Within walking distance are a Kraft Foods manufacturing plant and Parkland Community College. There is regular bus service.

Restoration Urban Ministries Campus. View Interactive Map + Pictures Here: http://g.co/maps/em6wq.
RUM occupies four buildings, all painted bright green. Two of the buildings share a gravel parking lot on the same side of the street. The residents’ buildings are within sight, just a short walk eastward across Parkland Ct., closer to N. Mattis Ave. The Residents’ Facilities are two-story converted motels. The Classrooms/Church/Office Building is a two-story former warehouse. Residents take classes, attend church, and eat occasional meals here. The building also contains a large four-stove kitchen where residents may cook, a childcare center, and the offices of the director and finance manager. The Main Offices/Food Pantry Building is a one-story office building. The front desk and staff offices are in the front. The back is a warehouse for the food pantry where staff inventory food and residents collect food boxes, and a clothing storage area

3 Photographs

Example of a staff computer.
Computer available for use by residents.

Main Office/Food Distribution Center.
Residents’ Facility and Playground.

Church, Offices, Classrooms, Kitchen, and Childcare.
4 Demographics of patrons or clients

At any given time, there are about 200 people living on campus. About 99–100% of their clients are below the poverty line. Most are African-American or white. Many are from the Champaign-Urbana area, but some also come from St. Louis or Chicago in order to leave urban areas. About 20 of the 24–25 staff members were former residents and graduates of the program. Staff members are mostly African-American and white.

The RUM website lists the following statistics for housing for 2009:

- 85 adults (43 men, 42 women); 90 children
- 49% successfully completed Self-Sufficiency Requirements
- 28% of participants have a felony record
- 51% of participants recognized they had a substance abuse problem upon intake and enrolled in the Recovery Program
- Cost of program per family unit: $783/month
- Eight double rooms in use in 2009 and 54 single rooms.
- 17 rooms that were in disrepair were remodeled in 2009

(Restoration Urban Ministries, “Organization Facts”)

The RUM website lists the following statistics about the food distribution service:

- Serves all of Champaign County
- Serves 3600 local individuals per month.
- Individuals may collect food every two weeks.
- In 2009, RUM provided 25,877 individuals with boxes of food, totaling 234,675 lbs. of food, or 9.7 lbs. of food per person.
- Donations of 30,000 lbs. of food.
- The price of distributing the food was $28,365.

(Restoration Urban Ministries, “Organization Facts”)

5 History

“For I was hungry and you gave me something to eat, I was thirsty and you gave me something to drink, I was a stranger and you invited me in, I needed clothes and you clothed me, I was sick and you looked after me, I was in prison and you came to visit me.” –Matthew 25: 35-36 (NIV), RUM brochure

Restoration Urban Ministries was established in 1993 by Reverend Ervin T. Williams, Executive Director. The outreach program began by serving food from the back of a truck in 1993. The residential program began the same year in a four-bedroom house. It moved to a small apartment building and grew into a 22-unit motel. It transferred to its current location in 1997 at 1206 and 1208 Parkland Ct., Champaign, IL. In 2004, RUM acquired a 10,000 square foot warehouse at 1213 Parkland Ct. and an office building next door to provide worship, classrooms, childcare, and offices that were previously housed
in rented space on Mattis Avenue. Currently three different churches converge in this facility for worship on Sundays.

RUM’s history of technology use varies. In 1999 RUM’s staff operated four Windows computers used for bookkeeping and communications. In 2008, a computer lab was installed on premises for resident use. However, because of abuse of computer rights, public access has been revoked until a monitor can be hired to operate the computer lab. Occasionally, computers have been available as part of an after-school program that meets at RUM. Today RUM provides about 14 Windows XP computers for the staff.

Today RUM operates on a budget of $700,000 a year. Church services are on Sunday at 8 a.m., 11:15 a.m., and 6 p.m. On a weekly basis they also offer Sunday school, Bible Studies, and Prayer Group. Substance Support Groups meet three times per week. The food distribution center is open from 10 a.m. to 1 p.m. Monday, Tuesday, Thursday, and Friday at no cost to those receiving food. Free clothing is distributed 10 a.m. to 3 p.m. Monday, Tuesday, Thursday, and Friday. Some appliances and furniture are also available for distribution on a limited basis.

6 Technology inventory

<table>
<thead>
<tr>
<th>Technology Element</th>
<th>Staff</th>
<th>Residents</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktops</td>
<td>About 14 for staff use.</td>
<td>Two–four available for public use w/Internet connectivity. Two computers available in an office for job applicants and computer skill training.</td>
<td>Some donated “all-in-one’s” available but not in use.</td>
</tr>
<tr>
<td>Laptops</td>
<td>None</td>
<td>Some residents bring personal laptops.</td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td>Staff telephone system. Each employee has a phone in their office and voicemail.</td>
<td>Removed all phone jacks from rooms because of outdated, irreparable system.</td>
<td></td>
</tr>
<tr>
<td>Fax</td>
<td>Yes</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Scanner</td>
<td>Yes</td>
<td>N/A</td>
<td>Trying to upgrade to Windows 7. Have 18 licenses but cannot use them because of insufficient hardware.</td>
</tr>
<tr>
<td>Software</td>
<td>Windows XP</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Social Media</td>
<td>Facebook Group</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td>Staff Server. Ethernet Internet connection.</td>
<td>No Internet connectivity in rooms.</td>
<td>Two main buildings are wired together with fiber optic cable to connect staff network.</td>
</tr>
</tbody>
</table>

Website Features
http://restorationurbanministries.net
Transitional Housing Application and Information
7 Analysis

Despite adversity, RUM is a strong organization backed by passionate people who seek to serve Christ and the needy. It is evident from the staff’s interaction with each other and the residents that it is a personable, compassionate organization that is working to positively change individuals and the community. However, RUM struggles with the same trials that many private nonprofits face. Funding is the self-proclaimed greatest issue in every department. RUM relies completely on private donations, which can be erratic and varied in quality. Therefore they have limited control over what technology they own. As the Office Manager stated: “Any time that you get donated equipment…it’s because somebody has replaced it with newer technology. Most people don’t do that until they absolutely have to. So the computers we get…aren’t the best technology or the most recent.”

Currently, technology is used most often by the staff for administrative duties. This includes online research, e-mail, background checks of residents, and bookkeeping. There is a need to upgrade the computers from Windows XP to Windows 7 in order for the staff to function more time efficiently. The Internet operates slowly due in part to the outdated operating system and hardware.

Many of the residents at RUM have felt the effect of forced displacement and suffer the isolating consequences. In order to ease this trauma, it is critical for the residents to feel connected with their families, communities, and the world around them. Regular access to the Internet can aid this process by connecting individuals not only with their friends and family, but with job prospects, education opportunities, and information about their current communities.

There is a need for and an interest in creating a computer lab for the residents. The residents’ greatest computing needs are communicating with friends and family, acquiring computer literacy skills, completing job applications, and fulfilling educational goals. In addition, a lab could be used for an after-school program that meets at RUM.
Such a lab would need to be monitored by an individual to prevent abuse of the computers. The residents would also greatly benefit from a regular computer instructor to encourage and teach computer literacy skills.

In addition, most of the staff and a variety of the residents have basic or below-basic computer literacy skills, with the exceptions of a few trained staff and those who had computer training in school. Technology support for the staff is provided on a need basis. Most staff troubleshooting needs require help with e-mail, printing, or Internet connectivity. A volunteer intermittently maintains the organization website. Irwin maintains the Facebook page, newsletters, press releases, and overall presentation of the organization.

RUM would benefit from a UC2B connection because it would allow the organization to make better use of the passion they already have to support their mission. An increase in Internet speed and a decrease in Internet price could provide technology to raise funds, increase staff productivity, and educate residents. If it chooses, RUM could also use UC2B to provide Internet access to residents in a computer lab or in their private accommodations. However, even with an optimal Internet connection, RUM still lacks the necessary hardware and software to take full advantage of up-to-date computing services.

Overall, RUM cares deeply about the people they serve. Their main goal is to serve the physical and spiritual needs of their residents. Technology is an important tool in achieving this goal, but can also detract from this goal if it interferes with the recovery process. Therefore, RUM’s main priorities lie in comprehensive care. In the end, technology is merely a tool that may or may not play an important role for a person seeking to achieve self-sufficiency and independence.

Bibliography

Webliography


14: St. Jude Catholic Worker House

Lauren M. Graham
Master’s student, GSLIS

1 Executive summary

St. Jude Catholic Worker House is an entirely volunteer-run organization providing temporary housing and daily access to the homeless population of Champaign and Urbana. Because the organization’s services are based solely on volunteers and donors, funds for technological improvements are limited. The building has phones available during their open hours, but no public computer or reliable internet access. Inexpensive broadband through UC2B could potentially be useful to the Catholic Worker House, but even the base rate may be too expensive for their minimal operating budget.

2 Maps

St. Jude Catholic Worker House, 317 South Randolph Street, Champaign, IL
The Worker House is located near Neil Street and Springfield Avenue, in the vicinity of West Side Park and close to downtown Champaign, IL. It is within walking distance of the Illinois Terminal, the main transportation hub for Champaign-Urbana, where the local mass transit district (CU-MTD), Amtrak, and Greyhound lines all stop.
3 Photographs

Exterior of St. Jude Catholic Worker House; view of front porch and visitor/patron entrance (east entrance).
Front porch and identification sign, view looking southwest.
Interior of Catholic Worker House; open-use phone in front alcove at northeast corner of premises. This phone is available for use by the public between the hours of 11 a.m. – 3 p.m. daily.
4 Demographics of clients

The Worker House serves the homeless population of Champaign-Urbana. The facilities offer two distinct services: temporary housing, and daily house access. The demographics are constantly changing, and by nature of the informal setup of the house, no concrete demographic information is available. However, St. Jude’s “house of hospitality” philosophy focuses on providing short-term living arrangements and an open space for those who are currently homeless. Generally, this means that they serve those whose income falls below the federal poverty line. The Worker House serves men, women, and children of various ethnic and social backgrounds in the two ways listed above.

Temporary Housing. St. Jude Catholic Worker House offers temporary living arrangements for women and their minor children (if any). At any given time, approximately 12 people are living in the house. Of those who have children, some have their children living with them at the Catholic Worker House full-time, while others have their children visit during the weekend per custody arrangements.

Overall, the children are much more computer literate than their mothers, due to exposure to ICTs in the school setting. Currently there is one child under five living at the house full-time and one who is in middle school. The latter is provided with a laptop by his public school in order to work on homework.
Daily Facility Access. The Worker House also provides access to its facilities on a daily basis between the hours of noon and 3 p.m. The primary amenities open to the public are the shower, the laundry, and the Worker House’s long-distance phone line, along with use of the communal living space. Some also use the Catholic Worker House as their mailing address, and stop by to pick up their mail. The individuals who use the Worker House’s facilities during this time are largely men of varying racial, social, and educational backgrounds. They are all currently homeless. Residential volunteers suggest that the technological skill of these patrons is highly variable, as they range from being completely illiterate to highly competent.

5 History

The Catholic Worker Movement. The St. Jude Catholic Worker House is part of the larger Catholic Worker Movement, founded in New York in 1933 by Dorothy Day, a journalist and activist, and Peter Maurin, an French immigrant worker and scholar. It was founded largely in reaction to the Great Depression, in order to provide services for the many put out by the economic crisis. Its ideals come from left-wing socialist theory, and seek to reject the present social order, withdraw from capitalist society, and actively participate in social justice movements of all kinds.

There are currently approximately 197 active communities within the United States, and an additional 20 active communities internationally, including sites in Belgium, Canada, Germany, Great Britain, Mexico, New Zealand, Sweden, the Netherlands, and Uganda. The funding for these communities is supplemented by residents’ part-time jobs or “cottage industries” of a particular location, but the majority of support comes from donations, both of goods and in kind.

By nature, Catholic Worker Houses do not apply for tax-exempt status, and have “no board of directors, no sponsor, no system of governance, no endowment, no pay checks, no pension plans” (Forest, 1997). This is by design, in order to eliminate bureaucracy and political influence on the Worker Houses, in order to better serve the community outside of the “impersonal charity of the state.” As such, there is no traditional staff or board of directors for a Worker House; daily operations are staffed and financed entirely by volunteers and donors.

St. Jude Catholic Worker House. Founded circa 1977–1980 (accounts vary), the St. Jude Catholic Worker House in Champaign-Urbana was originally located in a house at 1308 University Avenue in Urbana. Originally donated to St. Patrick’s Catholic Church, the house began serving as a temporary residence for the homeless after its original intended residents, a family of Asian refugees, were unable to secure passage to the United States.

At this location, the Worker House offered temporary living arrangements for up to 17 people and a soup kitchen that served 30 to 80 people each afternoon. As of 1985, St. Jude’s had 3 live-in co-directors, and a nightly count of around 15 temporary residents. Food, utility, and program costs were all supported by private donations. The house itself was provided, rent-free, by an anonymous donor.

In the late 1980s, a combination of financial hardship and an expansion by Covenant Medical Center forced the Worker House to move. By 1989, monthly operating costs
averaged $850, and the anonymous owner had become interested in selling the property. St. Jude’s began looking for new premises that year, eventually settling on the house at 317 W. Randolph Street in Champaign, which was purchased for $73,000 in 1990. The next year saw significant renovations to the property, mostly focusing on increasing the number of bedrooms in the house. With renovations completed, the Worker House reopened, at the present location, in November 1991.

In 1992, they acquired the property to the rear of the Randolph St. house, at 314 Cottage Court, for $32,000. This property was remodeled to complement the Randolph St. house by providing community gathering space, an office, and multipurpose rooms for volunteers and residents.

By 1993, St. Jude Catholic Worker House was down to one live-in volunteer, forcing them to cut noon lunches down to two days a week. As more volunteers moved in, lunches were again offered on a more regular basis. In 2000, the Randolph St. house kitchen underwent a significant renovation, made possible by a donation willed to the St. Jude’s by Josephine McDonnell. This renovation updated the nearly 100-year-old kitchen, and nearly doubled the size of the cooking and preparation space. At the time of the renovations, the soup kitchen was serving 50 to 100 meals daily.

In 2009, the Steering Committee of St. Jude’s made the decision to discontinue the soup kitchen at the Worker House and instead focus the Worker House’s efforts on hospitality and social activism.

A volunteer cites the effect that the large number of men milling around the house had on the residential portion of the house’s service: “it [wasn’t] conducive for them feeling safe and that this is their home.” Its meal program volunteers reorganized off-site, founding what is now the Daily Bread Soup Kitchen in Champaign, about a block away from St. Jude’s.

With the closure of the soup kitchen, the Worker House found that many of the donations it had relied on for operating costs were redirected to the new, separate soup kitchen. Volunteers suggest that donors were confused as to what St. Jude’s was doing for the community, if not running the soup kitchen. Finances subsequently got tighter and the Worker House was forced to eliminate one of its two phone lines, and reduce service on the remaining phone line to domestic long-distance only. At the time, there was discussion of getting Wi-Fi service to the Worker House, but the lack of donations meant they simply couldn’t afford it.

As of 2011, the Worker House currently has 7 residential volunteers, along with approximately 12–15 women and children who live in the Cottage Court house. St. Jude’s opens its doors daily from noon to 3 p.m. to allow nonresidential patrons to use the phone and other facilities. Worker House members are also active in social justice movements, and take part in outreach and protests.

6 Technology inventory
The Worker House has three phones—one specifically designated for public use between the hours of noon and 3 p.m. daily; the other two is restricted to use by residents, both the
women who live there temporarily and the residential volunteers (see Section 3, Photographs).

A few of the residential volunteers have personal computers, but do not have access to reliable Internet within the house. They either attempt to connect to any unrestricted network they can find, or must visit libraries or cafes to use the Internet there.

**ICT Inventory**

<table>
<thead>
<tr>
<th>TECHNOLOGY</th>
<th>ACCESS POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone – landline</td>
<td>3 (one line)</td>
</tr>
<tr>
<td>Telephone – resident mobiles</td>
<td>Varies (4+)</td>
</tr>
<tr>
<td>Computers – communal</td>
<td>0</td>
</tr>
<tr>
<td>Computers – personal</td>
<td>3</td>
</tr>
</tbody>
</table>

**7 Analysis**

St. Jude Catholic Worker House is sorely in need of additional technology in order to serve both their residents and the patrons who visit the facilities daily, as well as to effectively engage and communicate with the surrounding community. The move of their soup kitchen to an off-site location led to the loss of much of the donations they had relied on to support the operating costs of their two houses. Among its effects was the elimination of one of their two phone lines and the downgrading of service on the remaining line to domestic calling only. They are currently behind on basic utility bills and other expenses, and Internet connectivity has become a “non-issue” for the Worker House, since they simply cannot afford it.

The lack of Internet access, specifically, within the Worker House has negatively affected their ability to minister with new media tools. They are reliant on access points within the community in order to use the Internet, and the number of people active in the Worker House can be a roadblock to actually going and using the Internet at these sites (space, availability, etc.). Instead of being a resource for their visitors, the staff members are often reliant on the same resources. The effects of this can be seen in their current Web presence. Their official Wordpress blog has not been updated since June 30th, 2010, and their Facebook page has not seen member activity since March 11th, 2009. There is potential use the UC2B access to reach out to potential donors, the community at large, and other organizations within the community, through the creation a community network integrating several social activist projects in order to make each of them more effective and more wide-reaching. He hopes that UC2B, both within the Worker House and throughout Champaign-Urbana, will help the Catholic Worker House to further integrate its mission into the community, and let more people know what exactly it is they are doing.
However, there is also some hesitation among residential volunteers about obtaining a wireless network for the house. Some members are concerned that such access would diminish the communal aspect of the house, encouraging members to instead spend more time on their personal computers than with other members of the house. This kind of technology-driven personal isolation would go against the “house of hospitality” mission of the house, instead of facilitating it. They would be interested to see if there is a nonwireless option for UC2B, perhaps limiting the Internet access to a designated computer in a communal room of the house. This would also give them the option of opening up access to this computer for patrons during the midday open house hours, along with access to the phone line. A group computer would allow them to both expand their house of hospitality to others, as well as more easily work on their social justice and outreach as a group.

There were also financial concerns. Despite the possible financial benefit of having access to a VoIP phone line, there is concern about the effect of a communal computer, and possible increased personal computer use, on the power bill for the site. Additionally, they would need to purchase a desktop for open use before they could even start offering that option to visitors. As their current financial situation stands, this does not seem feasible.

The St. Jude Catholic Worker House is a very informal, unregimented organization. There do not seem to be any clearly delineated roles within the Worker House—everyone pitches in where needed. While reflecting and supporting the mission of the Catholic Worker Movement, this also means their role in the community is sometimes not as clear, organized, or visible as other nonprofits in the area. Participation in UC2B could be beneficial in supporting the visibility of their mission, as well as helping them more effectively manage their financial and physical assets.

Overall, if and when the St. Jude Catholic Worker House gets linked to fiber-to-the-premise connectivity, it has the potential to expand their role in the community in three distinct ways:

1. the ability to offer expanded services to their visitors;
2. increased outreach, fundraising, and education about the Catholic Worker Movement and its mission; and
3. increased involvement as an institution within the Champaign-Urbana social welfare community.

In order to be fully beneficial to the Worker House, further outreach to the site by the UC2B project is needed. Steps should be taken to integrate the Worker House’s residents into the process, to gain understanding of how they could use the technology to broaden their service to the community and function more effectively as a community institution. Initial hesitance should be addressed and engaged. During the interviews, I tried to stress the ways UC2B could be helpful when these fears arose during our conversation, and have also offered to follow up with them in regards to their questions about UC2B’s capabilities and limitations. Both parties would benefit from a continued, mutual conversation about UC2B and its role in the Worker House’s services and mission.
Bibliography


Webliography


15: Salt & Light

Emily Williams
Master’s student, GSLIS

1 Executive summary
Salt & Light is a nonprofit Christian organization which seeks to provide those in the Champaign County area who are at or below the poverty line with their basic needs. This is accomplished mainly through their food pantry and clothing closet, which take donations from the community and provides free access to those they serve on certain days of the week. The organization uses digital technologies for many daily activities. Salt & Light currently has download speeds of about 20 Mbps, the same as will be offered through UC2B, though upload speeds are much slower than the proposed symmetrical service.

2 Maps
Salt & Light is pinpointed here in relation to the north side of Champaign.
View of the neighborhood where Salt & Light is located.

3 Photographs

The front of the Salt & Light building, as seen from the street.
A view of some of the shelving in the food pantry area.

Computing area of one of the staff members.
Future site of the nine-station computer lab, still a work in progress. One of the refurbished computers is being worked on here.

4 Demographics of patrons or clients

Salt & Light seeks to serve those in Champaign County who are at or below the poverty level. Champaign County is fourth on Illinois’ list ranking its counties by poverty rate (Wurth).

Exact demographic statistics of the people Salt & Light serves are not currently available, although it is the hope of the administration that a system can be put in place soon to track more information about the people it serves. Those estimations are represented in the following table.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>50–55</td>
</tr>
<tr>
<td>White</td>
<td>30–35</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>10–15</td>
</tr>
<tr>
<td>Other nationalities (Middle Eastern, French-speaking African, Asian)</td>
<td>5–8</td>
</tr>
</tbody>
</table>
5 History
Salt & Light was founded in 2003 and opened its doors in 2004 to serve the public. The three founding members are still involved in Salt & Light. The organization is Christian based, as the mission is to “share the love of God by helping those in need.” The name Salt & Light comes from Matthew 5:13–16, which is where Jesus tells his disciples to be the salt of the earth and the light of the world.
Salt & Light’s main ministry is its food pantry and clothing closet, through which they provide free food and clothing to residents of Champaign County who are at or below the poverty level. The organization also offers financial literacy education, using Dave Ramsey’s thirteen-week course, Financial Peace University. One-on-one counseling is also available for those with specific financial issues.
Although Salt & Light has seen steady, and sometimes overwhelming, growth ever since their doors opened, the biggest turning point for the organization came in 2009 when a member family was chosen to be on Extreme Makeover: Home Edition. In the process of building the family a new home, the crew of the show also performed major renovations of the Salt & Light building and facilities. The publicity of the event also rapidly increased community awareness of what the organization does and their need for volunteers and donations. Since Extreme Makeover, Salt & Light has seen rapid growth of the number of people lining up to receive help. In addition to their weekly hours of food and clothing distribution, Salt & Light has hosted special events to help the community, such as filling backpacks with the necessary back-to-school supplies for the families they serve and serving Thanksgiving dinner.

6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, Systems, and Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless desktops</td>
<td>New Website</td>
</tr>
<tr>
<td></td>
<td>(<a href="http://saltandlightministry.org/index.html">http://saltandlightministry.org/index.html</a>)</td>
</tr>
<tr>
<td>Laptops</td>
<td>Facebook page</td>
</tr>
<tr>
<td>iPhones</td>
<td>Twitter Account</td>
</tr>
<tr>
<td>Security cameras</td>
<td>Monthly newsletter</td>
</tr>
<tr>
<td>2 Printers</td>
<td>email</td>
</tr>
<tr>
<td>Touchscreen computer</td>
<td>Landline phone connection</td>
</tr>
<tr>
<td>Telephones</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test</th>
<th>Down (Mbps)</th>
<th>Up (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>19.692</td>
<td>5.760</td>
</tr>
<tr>
<td>Speedtest.net</td>
<td>20.10</td>
<td>4.00</td>
</tr>
</tbody>
</table>

7 Analysis
Salt & Light is a nonprofit, Christian organization which seeks to provide those in the Champaign County area who are at or below the poverty line with their basic needs. This is accomplished mainly through their food pantry and clothing closet, which take
donations from the community and provides free access to those they serve on certain days of the week.

Salt & Light has seen significant growth since opening its doors in 2004 and continues to find ways to both grow and accommodate the growth to help the greatest number of people possible. The most significant turning point in the organization’s history was the renovations and publicity that the *Extreme Makeover: Home Edition* TV show provided.

While technological resources are limited, the staff at Salt & Light have a lot of ideas they would like to implement as the resources become available. The most imminent is nine-station computer lab that will soon be available for the public. UC2B will definitely benefit this project by providing Internet access to a neighborhood where many may not have access. However, the real barrier will be with the actual computers themselves and whether they will be updated enough to work with the broadband. The computers they have now are refurbished and several years old. The staff working on this project are worried about whether the computers will be able to function at the speed that UC2B broadband will provide.

There was also some concern about the lack of information being circulated about what exactly the UC2B project is, especially to the organizations it will directly affect. One staff member was concerned about how the cities, school districts, library districts, etc. found the money to donate to this project in the current economic situation. Confusion was expressed about why tax dollars were being donated to the project but the broadband would still cost a monthly fee.

Overall, the staff at Salt & Light seemed open to the possibilities a big broadband connection may provide for technological advances in the future. However, the lack of knowledge of the project seemed to lead to hesitancy. Salt & Light is very interested in improving their facility and services technologically, but recognize that having the resources to use the big broadband connection in the ways they envision will be another step in the process.

8 Webliography


16: Salvation Army Red Shield Center

Lily Grant
Master’s student, GSLIS

1 Executive summary

The Salvation Army is a large and important charitable institution, both locally and around the world. The Red Shield Center in Champaign, Illinois provides vital emergency services to those in need in Champaign County. The Red Shield Center houses administrative offices, an emergency social services office, a thrift store, and a men’s shelter. It also hosts various events throughout the year, such as a winter coat drive and Christmas assistance for families.

The majority of services that the Salvation Army offers are meant to serve the neediest in our community, and help clients meet their most basic needs: food, water, clothing, and shelter. Technology is not a major focus of their work, and it is unclear what, if any, benefit the UC2B project will bring to their organization.

2 Maps

The Salvation Army Red Shield Center is located in the northeast section of Champaign.
The Salvation Army Red Shield Center is located at 2212 North Market Road in Champaign, Illinois. The neighborhood is dominated by the Marketplace Mall and other large stores, but it also includes some residential areas.

3 Photographs

The Red Shield Center at 2212 North Market Street in Champaign, Illinois. The building houses a thrift store, food pantry, emergency social services department, administrative offices, and the Stepping Stone Men’s Shelter. It has additional space used for various programs, such as the winter coat drive and Christmas assistance programs.
Staff member welcomes clients at the intake computer station in the Social Services Department. Salvation Army staff members help clients register for assistance programs at these stations.
The computer lab in the Stepping Stone Men’s Shelter: once this project is complete, it will help residents of the shelter to find employment opportunities and complete job applications.

The Salvation Army Mobile Canteen: this vehicle delivers food, drinks, clothing, and other supplies to those in need in the Champaign-Urbana area.
4 Demographics of patrons or clients

Though the Salvation Army does not require documentation of income as part of eligibility for all of the services they offer at the Red Shield Center, it can safely be assumed that, with the exception of thrift store customers, the majority of the clients they serve are at or below the poverty line. Gender and ethnicity statistics were not provided for this study.

Residents at the Stepping Stone Shelter are all adult males, and are living below the poverty line. Though exact figures were not provided, one staff member estimated that 60% of the men are Champaign residents, 20% are from Urbana, 10% are from Rantoul, and the remaining 10% are from other locations out of town.

No documentation of need is required to receive services from the mobile canteen. Indeed, not all served by the canteen are necessarily low income, as the canteen also helps distribute food and drinks to first responders (firefighters, police) during major disasters.

5 History

The Salvation Army is one of the best-known religious and charitable institutions in the world, and has a long tradition of helping society’s most vulnerable and needy populations. The Salvation Army was founded by William and Catherine Booth, a husband-and-wife team who dedicated themselves to bringing the word of God to the poorest and most desperate neighborhoods of London. William Booth embarked upon ministerial work in 1852, and by the 1880s the Salvation Army was going strong, finding many converts in England and around the world. Today, the Salvation Army operates in 124 countries and is one of the world’s largest providers of social aid.

The Salvation Army began working in Illinois in 1885, and by the mid-twentieth century was an established presence in the Champaign-Urbana community. The Red Shield Center on Market Street opened in 2006, after relocating from its previous location at 119 East University Avenue.

6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, Systems, Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Desktops</td>
<td>E-mail</td>
</tr>
<tr>
<td>Staff Desktops</td>
<td>E-mail Newsletter</td>
</tr>
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<td>Fax Machine</td>
<td>High-speed Internet Access</td>
</tr>
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<td>Telephone System with Landline</td>
<td>Facebook page</td>
</tr>
<tr>
<td></td>
<td>Twitter Account</td>
</tr>
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<td></td>
<td>Local, regional, national and international Websites</td>
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<table>
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7 Analysis

The compassionate and dedicated staff and volunteers at the Red Shield Center work hard to serve those in need in Champaign County. The center houses an emergency social services center, a men’s homeless shelter, a thrift store, and administrative offices. The center also organizes numerous charitable events and programs. Such programs include providing free winter coats, Christmas toys, and holiday meals to local residents.

Times are hard for those in our community who have the least, but times are also hard for those organizations that endeavor to help them. Like many charities, the Salvation Army is dealing with dwindling state funding at a time when demand for their services is very high. Though the majority of the Salvation Army’s funding comes from donations rather than from government grants, the reduction in public funding has not been insignificant.

However, money is not the only pressing issue facing the Red Shield Center. The organization excels at providing emergency assistance to meet basic needs such as food, clothing, and shelter, but the center’s director would like to be able to do more. They want to help clients make real long-term changes to their lives. One way in which the center is attempting to break the cycle of poverty and dependence is through the employment assistance it offers the residents of the Stepping Stone Shelter. In addition to providing the men there with a place to live and food to eat, the shelter staff help them locate employment training resources in the area and work with the men to identify what types of jobs they might be best suited for. They offer classes in job search and interview techniques. To support these efforts, the Salvation Army is installing a computer lab in the shelter. So far, there is only one computer there, and it is not yet online. Once it is, the men will be able to use it to search for job openings and to apply for jobs.

The Salvation Army does not at present have the resources to provide computer training, though it is something that they would like to do. Some men at the shelter have advanced skills and are familiar with programming, while others are taking basic computer literacy courses at Parkland College. It is hoped that, in lieu of a formal computer training program, the men at the shelter who have computer skills will be able to assist those who do not.

In addition to the work that is done at the shelter, the Red Shield Center’s social services office provides a variety of assistance to local residents. They have a food pantry that is able to provide three days’ worth of groceries to those seeking food. They also offer vouchers that can be redeemed for clothing and household goods at the thrift store across the hall. They are able to assist with transportation costs, such as a bus ticket or cab fare, and they occasionally put people up in hotel rooms who have no other place to stay. Limited assistance with prescription costs for the uninsured is also available. Grandberry noted that food, clothing, and prescription assistance are in particularly high demand at present. The office also administers programs to help people who cannot pay their utility bills. One such program is the Warm Neighbors, Cool Friends program paid for by a grant from Ameren Illinois. During the winter, the program helps with heating bills, and in the summer it helps with electrical bills. For each season, Ameren specifies a particular set of criteria that those seeking assistance must meet.

Not all of those who need assistance make it into the Red Shield Center, but that does not mean that their needs are neglected. To help those populations, the Salvation Army uses a
“mobile canteen,” a well-stocked truck that is used to deliver basic services around town. Sometimes these mobile services are employed when a major disaster strikes, such as a fire. In those instances, the Salvation Army goes out to assist both those impacted by the disaster and the first responders who are at the scene. More commonly, however, the canteen goes out into the community to provide food, water, clothing, or even just a kind word to those that need it most. These may be people living on the streets, or people just having a hard time getting by. No documentation is required to receive these services, and assistance is offered to anyone who asks.

Apart from the computer lab project in the men’s shelter, most of the technology used by the Salvation Army relates to basic office operations and record keeping. The center also makes some use of Twitter and Facebook to inform the local community of news and events. For administrative tasks, the center uses a program custom built for the Salvation Army called Sallie A. This is a database program used for record keeping; it is an old program and very limited in its functionality. The office would like to find something better, but most off-the-shelf computer programs are inadequate for their needs. In addition to searching for better software, the organization is also striving to update their computer hardware: “We are bringing our computer system up into the 21st century here—some of it still trying to bring it into the 20th century,” remarked Fuqua.

Though the administrative side of the organization’s work does, out of necessity, concern itself with computer and technology issues, most of the services that the Salvation Army offers its clients deal with far more basic needs. Their mission focuses on matters of survival, so naturally, issues of computer literacy and computer access are secondary to these concerns. Fuqua made mention of A. H. Maslow’s famous Hierarchy of Needs (fig. 1), in which needs basic to survival are placed at the bottom, and must be satisfied before one can attend to less-pressing needs: “We’re the guys down here. And technology is up here,” he explained.

Because of their focus on meeting basic needs, it is unclear what, if any benefit the UC2B project will bring to the Salvation Army. At present, the Red Shield Center seems primarily concerned with simply acquiring relatively current computer equipment and software for their staff and shelter residents to use. The center also already has Internet access with speeds adequate for their current needs. Their computer technology needs are basic, and the staff I spoke to do not foresee implementing any major changes in technology use, so it is difficult to see how UC2B would have a significant impact upon the center.

Though the impact that the UC2B Program might have on the Salvation Army is unclear, the impact that the Red Shield Center is having upon the community of Champaign-Urbana is not. Though theirs is not a high-tech operation, the staff and volunteers at the Champaign Red Shield Center are succeeding admirably at their task of providing the most vulnerable in our community with food, shelter, comfort, and hope.
Bibliography


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Webliography


17: Stake Family History Center

Emily Williams
Master’s student, GSLIS

1 Executive summary
The Champaign Family History Center is a branch of the Family History Library, funded by The Church of Jesus Christ of Latter-day Saints, which provides the world’s largest collection of family and genealogical records and resources to the public for free through its online sites. There are five computer stations with access to several subscription-based online resources. This organization is not included in the original UC2B grant, but is among those who hope to eventually be added at the end of the grant project. The staff at the center believe UC2B will be a significant benefit in their efforts to promote family history research.

2 Maps

The Champaign Family History Center on the south side of Champaign.
A closer view of the area surrounding the Champaign Family History Center.

3 Photographs

The outside of the Champaign Family History Center, which is housed in a meetinghouse of The Church of Jesus Christ of Latter-day Saints.
Several of the computer stations used for researching family history.
Microfilm and microfiche reader stations.
A microfilm reader connected to a computer, which can digitize the material so the patron can copy or print it and take it home.
4 Demographics

The Family History Center attracts mostly experienced genealogists who know what they are looking for. According to the staff, this makes up about two-thirds of the patrons who come into the center. The other third are people who are relatively new to genealogy and the study of family history.

There are also a few instances of patrons who have come into the Family History Center for other reasons not associated with family history. The staff and volunteers are able to show them the family history resources available at the center and many of these patrons walk out of the center with information on their own personal family history. This does not happen very often, but it is very exciting for those at the center when it does.

5 History

The Champaign Family History Center is a branch of the Family History Library, which is based in Salt Lake City, Utah. The library was founded in 1894 in an effort to gather genealogical records and data in order to assist the members of The Church of Jesus Christ of Latter-day Saints and others in their research of family history and genealogy. It is open to the public at no charge and is the largest collection of its kind in the world.

The Family History Library is involved in several projects to digitize their records. As records are digitized, they are sent to thousands of volunteers around the world who then index names, dates, and other valuable genealogical data. The indexes and original images are made available online, for free, for all people interested in researching their family history. For example, the entire 1930 U.S. Federal Census was recently indexed and is now available online, indefinitely, at no cost.

Since its opening, the Family History Library has expanded to provide its services in over 4,500 centers in 70 countries. One of these centers can be found in Champaign in the Champaign meetinghouse of The Church of Jesus Christ of Latter-day Saints. The meetinghouse building was constructed in 1972, and the Family History Center itself was opened shortly thereafter in its own room in the building. At the time of the center’s opening, all of the records that could be accessed were on microfilm or microfiche. As patrons in Champaign ordered microfilms and microfiche from the Family History Library in Salt Lake City, the Champaign Family History Center’s collection grew. It now houses almost 2,000 microfilm and tens of thousands of microfiche, which can be used by local patrons for their own family history research.

As more and more people have gained access to computer and the Internet, The Church of Jesus Christ of Latter-day Saints has developed their own computer applications for the organization and retrieval of genealogical data. When online access became available, they were able to move the church’s database applications online. These applications are available to the public at no charge. Patrons of the Champaign Family History Center also have access to outside subscription (fee-based) services related to family history and genealogy studies. The Family History Center underwrites the cost of those services and patrons can use them at no cost while they are at the center. The Champaign Family History Center, like its counterparts around the world, also provides free access to its microfilm resources to anyone in the community and surrounding region.
6 Technology inventory

The space for the Family History Center is limited but they have multiple storage units for their microfilm resources, several film readers, and computer stations to access online resources.

Sites for Information: The Champaign Family History Center does not have its own individual website. But the Family History Library and its subsequent branches have an extensive information and resource web source that is called Family Search (www.familysearch.org). Information about the library and centers can be found on this page, as well as resources for accessing and researching family history. Each family history center has access to various online family history resources through this website, as well. These subscriptions can cost $200 per year per person, but The Church of Jesus Christ of Latter-day Saints offers free access to anyone who wants to come into the center and use them.

Future need for technology: as the Internet becomes more ubiquitous, there is a move to digitize all of their family history records so they can be made available online. This will allow for more complete and faster access to those records around the country and the world. All of these records will need to be indexed as well. The online resources typically include significant amounts of data and resources that are better accessed with a faster Internet connection. Currently, each resource takes some time to load. The center is also hoping to be able to offer classes on researching family history and using the resources available at the center. Ideally, this would be done by the individuals bringing their own laptops. However, in order for this to work, the Internet connection will need to be able to support multiple computers concurrently downloading large document images so they can be indexed. Their current Internet service will not support this much access at one time.

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Internet Speed Test Results
7 Analysis

The Champaign Family History Center is a branch of the Family History Library, funded by The Church of Jesus Christ of Latter-day Saints, which provides the world’s largest collection of family and genealogical records and resources to the public for free through its online sites. It houses thousands of records on almost 2000 microfilm reels along with microfilm readers. Records can also be shipped from the Family History Library in Salt Lake City for only the cost of shipping. There are also five computer stations with access to several subscription-based online resources and a digital microfilm reader that patrons can use to print or save electronic copies of microfilmed documents.

There are 13 volunteers who work in the Champaign Family History Center and a handful of administrators and ecclesiastical leaders who oversee its operation. There is a collective passion about the study of family history and helping others on their own personal family history journey. Limited staffing means the center can only be open a few days a week, but there are multiple volunteers during each shift in order to provide one-on-one interaction for those using the resources at the center.

The administrators of the Family History Center were disappointed to find they were not included as one of the anchor social institutions in the original grant but are very hopeful about the possibility of their eventual inclusion. The staff at the center believe UC2B will be a significant benefit in their efforts to promote family history research. Every day, more family history resources move online and the amount of those already online is significant. The speed of their current Internet connectivity is a hindrance when searching through several of the vast databases to which they have access. They also hope to hold online classes in the future on researching family history, which would require a greater bandwidth than what they currently have. UC2B would go a long way towards remediying those issues.

Bibliography


Webliography


18: United Way of Champaign County

Rachel Lux
Master’s student, GSLIS

1 Executive summary

United Way of Champaign County (UWCC) is a nonprofit organization that coordinates fundraising and volunteer efforts on behalf of other community organizations, companies, and individuals. By forming relationships with Community Impact Partners—other organizations in the greater Champaign-Urbana community who strive to serve the people who call this county home—UWCC enables much growth, programming, and development in this community. Because of UWCC’s mission and business responsibilities, they heavily rely on a good Internet connection (currently a T-1 line) and a specialized donor database. The staff is expected to be computer literate, and while they do not have an in-house IT staff person, they do have staff members who are comfortable with troubleshooting, along with paid outside resources for larger issues.

While UWCC may be better equipped than other anchor social institutions when it comes to information communications technology, some of their partner agencies would benefit from big broadband, thus possibly benefiting UWCC indirectly. UWCC has also expressed a desire to become more active in social media and marketing, so expanded technology capabilities that do not put an added financial strain on their resources could also benefit the organization.

2 Maps

United Way of Champaign Country’s location, 404 West Church St., Champaign (designated by the A).
This map shows United Way of Champaign County’s office in context of other neighborhood organizations, businesses, and public transportation.

3 Photographs

The front view of United Way’s office building.
A typical staff desk/computing area at United Way of Champaign County. Note both the laptop and the desktop monitor in use (which is not the case for every employee desk).
The main server (top photo), located in a supply/technology room (above), along with a photocopier and printer. It supports the organization’s T-1 connection.
4 Demographics of patrons or clients

UWCC’s fundraising efforts and campaigns are designed to serve all of those in need in Champaign County. The 2011 Community Report issued by United Way breaks down many county demographics:

<table>
<thead>
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<th>Category</th>
<th>Data</th>
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<tbody>
<tr>
<td>Population</td>
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<tr>
<td>Median Age</td>
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</tr>
<tr>
<td>Minority Population</td>
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<tr>
<td>People in Poverty</td>
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<tr>
<td>Median Household Income</td>
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<td>Non-English speaking at home</td>
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<td>Unemployment Rate</td>
<td>8.3%</td>
</tr>
<tr>
<td>Estimated Homeless</td>
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</tr>
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</table>

The report also determines that out of a random selection of 100 people in Champaign County:

- 10 are over the age of 65, 6 are under the age of 5
- 3 speak Spanish at home, 7 speak an Asian language at home
- 74 are white, 12 are black, 8 are Asian, and 4 are Hispanic
- 21 are University of Illinois students
- 10 have no access to a vehicle
- 7 are receiving food stamps
- 20 are living below the federal poverty guidelines

UWCC’s current partner agencies include: American Red Cross, Anabel Huling Early Learning Center, Big Brothers/Big Sisters, Boy Scouts-Prairielands Council, Catholic Charities, Center for Women in Transition, Champaign County CASA, Champaign County YMCA, Church Women United-Rantoul, Community Elements, Community Service Center of Northern Champaign County, Crisis Nursery, C-U Schools Foundation, Cunningham Children’s Home, Developmental Services Center, Don Moyer Boys and Girls Club, East Central Illinois Refugee Mutual Assistance Center (ECIRMAC), Eastern Illinois Foodbank, Family Service of Champaign County, Frances Nelson Health Center, Girl Scouts of Central Illinois, Greater Community AIDS Project, Habitat for Humanity, Land of Lincoln Legal Assistance, Mahomet Area Youth Club, Migrant Head Start, Peace Meal Senior Nutrition Program, Prairie Center, Rape Advocacy Counseling Education Services (RACES), Regional Office of Education, Salt & Light, Smile Healthy, SOAR, The Reading Group, The Salvation Army, University YMCA, University YWCA, Urbana Neighborhood Connections Center

5 History

The groundwork for United Way was laid in Denver, Colorado, in 1887 when a woman from the community and four religious leaders “recognized the need for cooperative action to address their city’s welfare problems” (United Way, “History”). By 1948, more than 1,000 communities nationwide had established their own United Way organizations.
(originally called Community Chests), coordinating fundraising efforts to benefit their communities.

As United Way’s scope increased, the organization established partnerships with major companies such as the National Football League (1973), the Atlanta Committee for the Olympic Games (1995), Bank of America (1999), and the Bill and Melinda Gates Foundation (1999), just to name a few, which strengthened United Way’s presence and ability to provide more aid than ever before, both for fundraising and training/mobilizing volunteers.

In 2000, after more than 100 years in service and raising billions of dollars worldwide, United Way launched a brand management strategy to help differentiate itself from being merely a “fundraiser” to becoming the leaders of community impact organization. This year they also launched the United Way State of Caring Index®, which measures the needs of the country and each state, as well as the caring and compassion of the nation. In 2007, the United Way Financial Stability Partnership™ was introduced, which focuses on helping low- to moderate-income people achieve financial stability.

The timeline for the greater United Way organization is important to consider when looking at the history of United Way of Champaign County, as the local chapters’ missions reflect that of the overall organization, and many of the national programs have been implemented at a local level. In 1923, the board members of United Charities (now known as Family Service) took the necessary steps to start a local chapter of United Way (then called Community Chest). It first opened at 303 S. Wright Street in Champaign, where it shared space with Family Service and the American Red Cross. In 1957, the Community Chest was renamed the United Fund of Champaign County, Inc., and began soliciting businesses to support its charitable efforts. In 1971, the name was changed to United Way of Champaign County, though the mission has remained to best identify the community’s needs and then gather the resources to meet those needs.

In terms of technology, several major changes have taken place in the past decade. In the early 2000s, UWCC began using the Andar Database, which is a specially made database system for keeping track of donor information. More than 50% of United Way offices use this Andar system, which processes thank you letters, designated payments, generates donor-based reports, and aids in scheduling donor campaigns, etc. About five years ago, UWCC was using a local company to develop and update their website. Two years ago, they switched to a website company that is not local, but that services many United Way offices. That company is responsible for creating the template for the website, but they train a staff member in-house to update content as needed.

This past spring, UWCC upgraded their Internet connection to a T-1 line, which also allowed for a Voice over Internet Protocol (VoIP) to be put in place. Because the phone system is now run through the VoIP, staff members have greater remote access to voicemail and messages, and conference calling has become easier.
6 Technology inventory

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7 Analysis

According to their mission statement, “United Way of Champaign County brings people and resources together to create positive change and lasting impact for our community.” Throughout the year, money is raised through a wide variety of fundraisers, paycheck charitable deductions, matching funds programs, etc. UWCC then determines how to distribute funds to Community Impact Partners based on need. In their 2011 Community Report, UWCC defined seven key issues, which serve as the basis for their fundraising and volunteer efforts:

- basic needs;
- housing and homelessness;
- family support and child care;
- education;
- access to health care;
- mental health; and
- employment and the economy.

With these seven community focus areas in mind, UWCC distributes funding to Community Impact programs on a two-year cycle (applications for the next cycle will be accepted later this fall). Once a Community Impact program is accepted for funding (having undergone an intense application process), the actual money UWCC can contribute is still determined based on the amount of money raised through various campaigns during the year. Beyond the two-year cycle Community Impact program funding, UWCC has off-cycle funding opportunities through Safety Net Funding (one-time grants), Community Initiative Funding (new grants initiated by UWCC staff,
volunteer committees or boards to bridge gaps recognized as important community needs) and Special Opportunities Funding (one-time grants to bridge the gap until the next two-year cycle begins).

UWCC is in a unique position in terms of UC2B. Because they help raise money for many of the other anchor social institutions, they have greater technology resources and information communications technology (ICT) than many other organizations. However, this does not mean that UWCC does not have needs or could not benefit—even if it’s by association—from UC2B. While speaking with three staff members at UWCC, we discovered that like many organizations, nonprofits, businesses, and individuals, UWCC is seeing the effects of the economic recession. While UWCC itself does not qualify for state aid, many of its partner agencies do. Because state funding has undergone significant cuts, the need for fundraising efforts is greater for many partner agencies to make up the difference. Similarly, while UWCC does not qualify for state aid, they do qualify for state reimbursement for some of the work they do; however, through the interviews it was revealed that the state timeframe for reimbursements has become unreasonable, which naturally puts a strain on UWCC’s available resources.

UWCC’s tech and ICT needs are mostly met—they are very satisfied with their T-1 line and VoIP, which was installed this past spring. UWCC leadership has encouraged staff members to be mobile with their e-mail and voicemail and to have smartphones for personal use. UWCC is also a subscribing member of TechSoup, which is an organization that distributes deeply discounted software and other needed tech items to nonprofits and libraries, which has allowed them to keep their operating systems updated to the latest editions. All staff members have basic computer skills, and often are called to help one another depending on their area of strengths and weaknesses; two staff members in particular are considered the “go-to” people for troubleshooting. However, anything dealing with network issues or website design needs to be farmed out. UWCC acknowledges this can be a problem, as those services are not free, but they simply do not have the resources to have a full-time IT person on staff. Technology changes UWCC would like to see in the future mostly revolve around their Andar database software and enhancing their social media presence. Andar is perhaps the most important tool at UWCC’s disposal for in-office work, and updated modules are available for purchase, but are very expensive. Further, UWCC would like to use social media to their advantage for marketing purposes and to keep up with technology uses. Their current Facebook “Group” page is scheduled to be archived, so they are hoping to update it to a more functional Facebook “Page” in the near future. They would also like to have a stronger e-newsletter presence. They have good resources available through Constant Contact, but not necessarily the time/manpower to make this a priority at the moment.

It is clear that there is a digital divide between UWCC and some of their partner agencies. The biggest tech challenge many of the partner agencies (which also make up a portion of the anchor social institution list for the UC2B study) face is not having reliable computers. A lot of agencies accept hand-me-down or refurbished computers that don’t necessarily have the best operating systems. Perhaps before UC2B can really make a difference to the anchor social institutions, the disparity between ICT and physical equipment must be addressed.
UWCC can potentially benefit from UC2B by the aid it will bring to Community Impact Partners and to individuals in Champaign-Urbana. Two of UWCC’s seven focus areas are education and access to health care. If UC2B allows local schools and health care providers to be networked together via the 1 Gb connection, then theoretically many more resources will be available—and at a much quicker speed—for individuals and other organizations who are also connected. Anything that would increase community members’ access to resources could be a boon to UWCC’s mission, on many different levels.

**Webliography**


19: Urbana-Champaign Independent Media Center

Pawel Szponar
Undergraduate

1 Executive summary

According to UCIMC.org, “The Urbana-Champaign Independent Media Center is a grassroots organization committed to using media production and distribution as tools for promoting social and economic justice in the Champaign County area. We foster the creation and distribution of media, art, and narratives emphasizing underrepresented voices and perspectives and promote empowerment and expression through media and arts education.” The UCIMC operates out of the historic downtown Urbana post office, providing performance space, a radio station, production and art studios, a library, and meeting spaces. Given their position as a media center, their technology use is advanced, and they even run a public computing center with a computer help desk for the community. They look forward to the UC2B project both to improve the services they offer and because it furthers their mission in the larger Champaign-Urbana community.

2 Maps

Location of UCIMC
Surrounding Businesses and organizations

3 Photographs

Graffiti on the outside of the IMC, showing the unique nature of the institution.
Staff computers used to create, edit, and publish media.

The old post office building, which has become the home of the IMC.
4 Demographics of patrons or clients

There was not much concrete data available for evaluation concerning the demographics of patrons of the IMC. However, the researchers observed that the patrons of the IMC tend to come from very different backgrounds. Some of the patrons visit the IMC because the IMC does not charge for access to the Internet and other services; others visit because they have programs for which they want to utilize IMC’s stage or are actively participating in the creation of IMC content. The IMC also operates a free computer help desk, assisting about 50 community members per month with technical support concerning hardware and software issues. The total population served in 2010, which included the users of every listserv, all readers, radio listeners, and so on, was 256,198. The IMC had 1213 volunteers that year as well. Finally, 387 children under 18 benefited directly from the services of the IMC, and 510 local artists were helped as well.
5 History

The Urbana-Champaign IMC was founded on September 24\textsuperscript{th}, 2000 by a group of 12 local activists and community artists with the goal of creating a localized media and arts center that would be run by the local residents with a focus on social justice and empowerment of the community. The founders used their own personal computers and technical equipment at first and began broadcasting locally. In the beginning, the IMC operated out of the organizers’ homes, but soon thanks to pledged donations it moved into the historic Stephens building at 218 West Main Street. Not long after it was established, it became a center for independent media and arts in the Midwest; furthermore, it reached beyond the local area to create ties with other independent media organizations around the country. The organization quickly outgrew its base of operations and in May of 2005 the IMC purchased the historic Post Office building in downtown Urbana, at the same time allowing the Post Office to continue operating within the building, free of charge. The IMC members renovated and reconfigured the space to fit their new needs and desires. Since its creation, the IMC has been involved in a variety of activities on the local and national level, such as broadcasting, arts and media education, community Web hosting, and wireless network development. The IMC also has served as a project incubator, providing fiscal sponsorship to organizations with goals consonant with the IMC’s general mission. One such organization is CUWiN, an internationally recognized leader in open source mesh network software, which deployed the first outdoor Wi-Fi network in Champaign-Urbana. Today, the IMC is a key institution in Champaign-Urbana and beyond, with great plans for expansion for the future.

6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software and Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Staff Desktops</td>
<td>Free Wi-Fi</td>
</tr>
<tr>
<td>4 Public Access Stations</td>
<td>Server network</td>
</tr>
<tr>
<td>Radio broadcasting equipment</td>
<td>List Serves</td>
</tr>
<tr>
<td>Several Servers</td>
<td>News Groups</td>
</tr>
<tr>
<td></td>
<td>E-mail</td>
</tr>
<tr>
<td></td>
<td>Website hosting for community groups</td>
</tr>
<tr>
<td></td>
<td>Facebook, Twitter, and YouTube</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Download (Mbps)</th>
<th>Upload (Mbps)</th>
</tr>
</thead>
<tbody>
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<td>4.165</td>
</tr>
<tr>
<td>Speedtest.net</td>
<td>22.60</td>
<td>4.20</td>
</tr>
</tbody>
</table>

7 Analysis

Urbana-Champaign Independent Media Center is an anchor social institution of great importance to the region. The organization is founded on a mission for social and economic justice through media production and distribution, and strives to make tools of production available to all in the Champaign-Urbana community. The organization
provides a vast array of services including production and performance space, public computing, computer help desk, art studios, a library, meeting spaces, and a radio station. One full-time operations manager, a part-time bookkeeper, several AmeriCorps volunteers and numerous other volunteers and members participate in the management structure, which includes working groups, steering groups, general membership, and a board of directors.

Several organizations operate in the building, including Books to Prisoners, Community Connections, Makerspace Urbana, The Public I newspaper, Chambana.net, and WRFU. In addition to their involvement with these and other local support groups, community projects, and other volunteer-based initiatives, the IMC serves as an extremely positive outlet for the community to explore their creativity through learning and producing new content. The IMC serves as a base for people to make their voices heard and to be able to create content for others to learn from and enjoy is both beautiful and fulfilling.

From a technological perspective, the IMC has great intentions and expansion plans for the future, which are closely aligned with the ideas behind UC2B, and as such they hope to be one of the key players in the introduction of the broadband network in the area. The organization is working on a method to broadcast free Wi-Fi through UC2B, and hope to offer this option to other anchor institutions as well. Through the various technological workshops and the free access they provide to technology and the Internet for the general public, the IMC is an extremely efficient, technologically savvy organization. Through various ideas such as the Wireless Initiative, the IMC is hoping to expand the reach of UC2B and eventually create an impressive Internet coverage network for the whole area. The level of commitment and the vast number of ideas that the IMC has for bettering the community and giving back to its patrons are incredible.

The UCIMC currently provides an array of technology-related workshops and classes for casual users, and plan to expand these offerings to certificate programs for job training in the future. They also have plans for a mobile teaching lab in order to reach out to populations that cannot make it to downtown Urbana.

The IMC serves as one outlet for a community grappling with the digital divide, and is able to deal with this issue on a larger scale than any one individual could ever hope to do. The level of commitment and the vast number of ideas that the IMC has for bettering the community and giving back to its patrons are incredible.

Bibliography

Webliography
"Ten Years at the Urbana-Champaign Independent Media Center." UCIMC. n. page. Print. <http://ucimc.org/content/10-years-urbana-champaign-independent-media-center>.
Places of Worship and Spirituality

20: Bethel A.M.E. Church

Yueh-Mei Lin
Doctoral Student, Department of Education Policy, Organization and Leadership

1 Executive summary

The Bethel A.M.E. Church in Champaign, Illinois, is one of the major religious and social centers of the African American community in Champaign. Currently, they have a volunteer technician who has knowledge of both software design and hardware repair, but they are in need of more and better hardware. They currently have eight computers and four additional towers that do not have monitors, mice, and keyboards, but at the present time the church does not have space to set up a permanent computer lab. Hence, they need laptops because they can be moved around easily, and when not in use can be put in storage, making that space available for other activities. Another major concern of the administration is how to maintain the security of the church when it gets laptop computers.

In principle, the administration of Bethel AME Church welcomes the UC2B project and is willing to connect to the network. If broadband was made available to their church, they would use it in four areas: 1) for those people who do not have access to computers; 2), for tutoring children concerning their homework; 3) to help senior citizens who did not know how to use computers; and 4) to organize computer workshops and other religious activities.
This is a map to Bethel A.M.E. Church, which is located at 401 East Park Street, Champaign, IL. “A” is GSLIS and “B” is Bethel A.M.E. Church.

Bethel A.M.E. Church is located one block north of University Ave.
Bethel A.M.E. Church and its neighborhood in greater detail.

3 Photographs

Bethel A.M.E. Church consists of two main sections. The section to the right has a big classroom and two small classrooms which are used for youth Sunday school and sometimes as a computer lab when there is a workshop. The building on the left has the major hall for worship services and a classroom for adult Sunday school. Behind the major hall are administrative offices.
This is a classroom for teaching computer courses and workshops.

Another room for computer courses, specifically for advanced students.
The computers are kept in a corner of an administrator’s office, because the church does not have a room to use as a computer lab. The classroom and service hall sometimes are used as computer labs when there are workshops for computer classes.

This room is usually used as a classroom for youth Sunday school. When there is a computer workshop, it is turned into a computer lab.

4 Demographics of patrons or clients

According to the administrators, the congregation has around 200 or so members. The majority of the members are from the African-American community in Champaign. A couple of them are from Danville. Around 160 members come to church regularly. Several of their members are retired teachers.
5 History

The Bethel A.M.E. Church in Champaign, Illinois, is one of the major religious and social centers of the African American community in Champaign. The church, according to its record, was organized in 1863 because the Quarterly Conference Journal of 1891 maintained that the church was 28 years old at that time. The record also said that in 1864, a small group of people who gathered together for prayer meetings and other religious meetings raised funds to build a small church on the property of Mr. Jake Taylor at 405 E. Park Street. In 1877, the church was moved to its current location, 401 East Park Street. On October 5, 1892, a meeting was held to incorporate the church and take action to build a new church. At this meeting it was also decided that the church would be named “The African Methodist Episcopal Church of Champaign, Illinois.” The first church-like building was constructed between early June 1892 and January 1893. It was funded by a loan from the Urbana Citizen’s Building Association, A.M.E. Extension board, and members and friends of the church. The current church building is a reconstruction that was built between 1958 and 1959.

The formal historical record of Bethel A.M.E. Church was initiated on July 14, 1938 when there arose a discussion of the early history of the church. Accordingly, the pastor Rev. Thomas H. Stoner appointed a Committee on Church History to carry out research in order to make a record of the factual events of the early history of the church. In 1990, the church organized committees to pull together and update their history. The event was under the leadership of the pastor Rev. Steven A. Jackson, who assigned Mrs. Esther P. Kemp to this task. To bring about this updating, various committees were formed and the work began, which lasted from 1990 to 1991. The major tasks of this project included inviting Bethel members and community members with any written, visual, or historical information to share it with them. The data and information collected forms the foundational components of the early history of the church. In 2004, the chair of the 141 Church Anniversary, Mrs. Debrae Lomax, asked organizations in the church to provide brief sketches of their group’s history in order to continue to update the historical records of the Bethel A.M.E. Church and the work done by those first committees. The historical information about the church which is on their website (http://www.bethelamechampaign.org/) is what was collected by the 1990–1991 and 2004 committees. Later some events and activities may have been added to the historical record of the church.

The growth of the church’s membership, according to the website, was gradual. The number of its congregation members in 1888 was 62, and by 1938 it was 270. The church has a history of engagement in the community. During the period of segregation, the church maintained a park for neighborhood children on Ellis Street with volleyball, croquet, and tennis nets. The church also ran a Reading Center, located in the 100 block of East University Avenue in Champaign. In addition, the church had a library, organized a church orchestra, and served as a gathering place for Black students who attended the University of Illinois. The church also has had several active groups, including the Steward Board, the Trustee Board, the Stewardess Board, the Sunday school, the Lay Organization, the Helping Hand Club, Adult/Youth/Young Adult Choirs, Women’s

6 Technology inventory

<table>
<thead>
<tr>
<th>Technology</th>
<th>Number</th>
<th>Software</th>
</tr>
</thead>
<tbody>
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<td>Microsoft open sources</td>
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<tr>
<td>copy machine</td>
<td>1 with scanner and fax machine</td>
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</tr>
<tr>
<td>projector</td>
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<td></td>
</tr>
<tr>
<td>projector screen</td>
<td>1 in lecture hall</td>
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<tr>
<td>digital camera</td>
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</tr>
<tr>
<td>speakers</td>
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</tr>
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<tr>
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</tr>
<tr>
<td>Ipad</td>
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</tr>
</tbody>
</table>

7 Analysis

Bethel A.M.E. Church, although a small church, can play a significant role in carrying out and maintaining the UC2B project. The reasons are threefold: first, their positive attitude toward UC2B project; second, their clear vision of using UC2B to improve technology resources in the community, and third, the congregation members’ unique education backgrounds, which are related to either education or technology.

The positive attitude toward the UC2B project is shown not merely by their pastor’s leadership, but also by their congregation’s enthusiasm for participating in this project. During my second visit to the church, one woman approached me and said that she would like to sign up for having broadband installed in her house. Another woman also said that her daughter was very interested in being part of this project and would like to know
more about it. She wanted me to e-mail her the website so that she could read more about UC2B. In particular, the church’s pastor, Rev. Lewis, not only keeps a keen eye on the development of UC2B, but also encourages the congregation to participate in the project. In the second worship service which I attended, Rev. Lewis announced that there were jobs available doing surveys concerning UC2B and encouraged the congregation members to apply for these jobs.

In terms of the church’s clear vision for assisting the underserved community, according to Rev. Lewis the church plans to use broadband to help four targeted groups. First, it will be for those people who do not have access to computers or do not know how to use them but would like to learn how to do so. Second, it will be used to help children with their homework, because nowadays many teachers ask their students to submit their homework online. Although most of the students have experience with computers, not all of their families can afford to pay the monthly fees for using the Internet. For this reason the church wants to provide free access for those children. Third, the church will make broadband access available to senior citizens who want to learn how to use computers or go online. Lastly, the broadband can also be used to serve those people who live in nursing homes and have difficulty coming to church. Broadband can be used to transmit live broadcasts of the church’s services and pastor’s sermons.

Finally, the unique education background of some of the members of the congregation will be a big asset. Through my research I found that the congregation has several members who are either retired teachers or currently work as teachers. For this reason the church pays attention to education, including technology education, and accordingly, the attitude toward UC2B is positive and welcoming. Moreover, according to the administrators, at least six members have either intermediate or advanced knowledge of computers.

**Webliography**

For more information about Bethel A.M.E. Church see [http://www.bethelamechampaign.org/history.html](http://www.bethelamechampaign.org/history.html)


21: Center of Hope Church

Opubo T. Idoniboye
Master’s student, GSLIS

1 Executive summary

The Center of Hope Church in Champaign, Illinois, was founded by Chief Apostle Robert Smith, who is also the pastor, in 1995. The church is situated at 409 E. Grove Street, Champaign, Illinois. Its congregation is made up of African Americans, Latinos, and one white person. As of September 2011, the church had a congregation of 150. The church also carries out a number of philanthropic activities including administering a food bank, and giving free computer lessons and training. They use digital tools regularly, and have posted video of services online to reach those in their congregation who must miss service. They also hope to attract new congregants via the Internet, particularly through social network sites such as Facebook and You Tube.

2 Maps

Center of Hope Church (map courtesy of Champaign County GIS Consortium).
Figure: Map showing businesses near the Center of Hope Church

Hand-drawn map showing businesses near Center of Hope Church.
3 Photographs

Center of Hope Logo.
4 Demographics of patrons or clients

The Church’s congregation is primarily African American with four Latino members and one white member. Approximately one-third of the congregation’s members (50 members) are below the age of 19. Five of the members are college students. Most of the members of the staff are college graduates. According to Chief Apostle Smith, 85% of the congregation is below the poverty line, while 15% is unemployed.

5 History

Chief Apostle Robert L. Smith founded the church in 1995. The church started in the Douglas Center Annex on Grove Street, Champaign, Illinois. Later, the church was moved to 1201 North Champaign Street. After two years at the latter address, the church was moved to its present location of 409 E. Grove Street. In 1997, the church purchased the current building and its annex. It has now been about 10 years since the church moved to its present location.

6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software and Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Desktop computers</td>
<td>Windows OS</td>
</tr>
<tr>
<td>Printer</td>
<td>Facebook Page</td>
</tr>
<tr>
<td>Sound System</td>
<td></td>
</tr>
</tbody>
</table>

Download | Upload
| Speedmatters.org | 0.83 Mbps | 0.18 Mbps |
| Speedtest.net   | 0.60 Mbps | 1.17 Mbps |

7 Analysis

It is not trite to say that the Center of Hope Church had made some leaps and bounds since its foundation in 1995. Starting with a small congregation at the Douglas Branch Annex at Grove Street and having grown now to have a congregation of at least 150 is a great achievement. More importantly, they own the church building and its annex at 409 E. Grove Street. Knowing that there is a fierce competition for Christian churchgoers amongst the churches in Urbana-Champaign, it is quite remarkable that the Center of Hope Church has been able to maintain its “market share” of the ever-dwindling “flock.” I have a great feeling that the church has been able to do this because of Chief Apostle Smith, a towering and charismatic person, and his able and talented “cadre.” Above all, the church is engaged in social and humanitarian service, such as providing financial and material assistance to its needy members.

Webliography

Center of Hope Church, Champaign, IL. “MA Bridges Preach The Word of God,” accessed February 24, 2012, http://www.youtube.com/watch?v=R...Center of Hope Church Champaign...
22: Church of the Brethren

Claire Strillacci
Master’s student at GSLIS

1 Executive summary

Church of the Brethren is a small congregation that meets near the intersection of Neil and Bradley in Champaign. The church uses information technology regularly, for example to record services for those who are not able to attend, to project hymn lyrics on a screen, and in their existing public computer lab. They also have a fairly solid relationship with the UC2B project. The church is expecting eight computers to get their public computing space up to date. The space functions admirably given the state of the current technology, but a combination of fast broadband and modern software will surely prove to be a potent combination for a congregation that has already done so much to help their members transition into a digital age.

2 Maps

Champaign’s Church of the Brethren shares its space with several other congregations and affiliates. The building, even on Google maps, is labeled “Motherlands Multicultural Resources,” a program run by Dawn Blackman, Church of the Brethren’s Church Steward Board Chair.
Church of the Brethren is the T-shaped building shown above. The church runs a public computer lab. Currently the computers are stored in an alcove of a larger room, but the hope is that soon they will be able to screen off that alcove. There is an entrance at in the T branch closest to the top of the photograph that would allow patrons to enter the lab directly without disturbing the rest of the building, and afford them a degree of anonymity and privacy.

3 Photographs

One of several entrances to the church, which looks out on a large parking lot and does not require any navigation of stairs to reach. A chair lift is available at the Garwood entrance to be used in reaching the lower level.
Above is one of the much talked-about Church of the Brethren signs; in canvassing others prior to my interviews it was often referred to as “the church with the funny signs!” It is one of many tactics used to encourage attendance.
Monitor’s desk. From this vantage point the Monitor can keep an eye on all in-use computer screens to make sure that children are not visiting any inappropriate sites.
Computer lab. The row pictured here shows three of the six desktops at Church of the Brethren that are available for public use.

4 Demographics of patrons or clients

The Church of the Brethren’s membership is primarily white and middle-aged to elderly. As the congregation has trended toward more elderly members, there has been a large increase in the number of widows in the group. An interviewee reported that the congregation sees intermittent attendance by Asians and African Americans, but as of now they have a dwindling population of such attendees. It should also be noted that though the physical church building is focally located in a neighborhood, few members of the congregation actually live nearby; most commute to the church from further away.

The staff is slightly more varied. Currently between permanent pastors, the church rotates between four individuals who give sermons on Sunday, one of whom is African American, as is the member who fills in when one of these four is ill. Disparities are not ignored—the staff engages in an ongoing struggle to capture and keep the attendance of their occasional visitors. In fact, one of the church ministries, Motherlands Culture Club, is an outreach afterschool and summer program for community children and is lauded as a “multicultural resource.” Similarly, the church is the fiscal agent for The Randolph Street Community Garden, which provides gardening space and assistance to neighborhood participants.
5 History

The national Church of the Brethren is purported to have been established in 1708. The Champaign congregation was founded in 1901 with the arrival of the minister Charles A. Lewis, who had moved his family here with precisely that goal in mind (Buckingham 1950, 138). With the help of a religious Brother and others a well-attended meeting was held in a building on West Main Street in Urbana, and soon after in a schoolhouse.

Eleven years later Lewis, aided by the district’s mission board, sought to establish a place of worship in north Champaign, where a tent was erected towards that purpose on Market Street, a structure which still stands (Buckingham 1950, p. 139). This church was completed in 1914, and saw Rolland Leatherman become the new minister. The church continued to grow rapidly in membership, and is reported to have had 75 “charter members” within a year of completion (Buckingham 1950, p. 140).

In 1918 J. W. Kitson took up the mantle of pastor, and under his care “a new eight room parsonage was built,” and “Sunday-school rooms and new seats in the sanctuary [were] been added” as well (Buckingham 1950, p. 140). When he retired the church went without a fixed pastor for a year, much as its contemporary Neil Street manifestation is doing today. It came to take on new pastors every odd year or so until 1934, when Merlin Garber settled down for 15 years of ministry. After his retirement the new pastor Neils Esben saw “ground ... broken for the new church at the corner of Neil and Garwood” where the Church of the Brethren still meets today (Buckingham 1950, p.142). It was completed in 1953.

The Church of the Brethren recognizes history keeping as an important aspect of their faith. The national church’s website even maintains a guide to collecting historical materials, reminding members that “[i]t is understood that the records of the various agencies of the Church of the Brethren are to be preserved. In fact, records generated while in the employ of the church are the property of the Church of the Brethren and not of the person who created them” (Guide for Local Church Historians 2011, p. 5). Parties interested in the church’s history may visit the Brethren Historical Library and Archives where at least three copies of available publication are kept, or they may seek out information in a library, as this researcher did, where their literature may be viewed upon request.

6 Technology inventory

<table>
<thead>
<tr>
<th>Technology</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephones (w/ answering machine)</td>
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<tr>
<td>Printer/scanner/fax (available for private use)</td>
<td>1</td>
</tr>
<tr>
<td>Computers (available for public use)</td>
<td>6 (the number is expected to grow to 8 shortly)</td>
</tr>
<tr>
<td>Computers (available for private use)</td>
<td>2</td>
</tr>
</tbody>
</table>
Accessible Internet stations | All (DSL hookup)
---|---
Internet Presence | 1 website (soon to be updated)

7 Analysis

Technology is an everyday resource for Champaign’s Church of the Brethren. During worship a screen is lowered that displays the words of the hymns. Every service is recorded so those who are unable to attend may still hear their message. Even the organ syncs electronically with a keyboard so that music can be prerecorded and played on days when the organist is unavailable. Like most churches, they also have a sound system.

Church of the Brethren also has a public computing center. It has undergone several upgrades since its inception; what began as eight computers utilizing various operating systems purchased by a member of the congregation at garage sales soon progressed to units donated by the University’s College of Information and Library Science that ran on Windows ’95 and then ’98. Currently they have six computers available to the public that run on Windows XP (as well as a unit for a Monitor, who supervises the underage computer users). Promised to them by UC2B are eight new units, but the given date has come and gone with no computers yet delivered. The church itself has a computer and printer with fax capabilities separate from the lab for staff use; the lab has a similar printer with networking capabilities, though that feature has proved difficult to access. In the lab the computers are equipped with both an adult and child logon; when children log on, there is a filter in place that routes them to the Disney homepage when they stray somewhere untoward. Usage by adults is not restricted by a filter. Current lab hours designate it as a children’s computer lab Monday, Wednesday, and Friday from 4 to 6 p.m., while adults may come in on Wednesday evenings from 6 to 8 p.m. However, the lab is open to public use whenever a staff member is available to allow them access, and there is commonly someone in the church who can do so.

There is no real technology support; members of the church work on a volunteer basis, and bring their own knowledge to work with them. One member got a second part-time job to raise funds for the printer. While UC2B will provide the fiber-optic cable, the church arranged for an electricity upgrade and the phone line installation as this infrastructure was not provided for them in the grant. When funds become available, the church hopes to erect a barrier around the computer lab—which now openly abuts a larger room—and use an exterior door that would be for access that room only. Church of the Brethren has a strong vision for the future of their computer lab; unfortunately, the reality of available space and outdated machines keeps it from being fully realized.

If the acknowledgement of one’s problems is half the battle, then Church of the Brethren has already won the war. One interviewee admitted, “I realized there was a digital divide a long time ago, and I thought it was important that our ministry to the community address it.” When approached by the UC2B program about creating a public computer space, she replied “Well, what public, because every kid in the neighborhood’s in here already, you know? How much more public could you get?” Indeed, Church of the Brethren already has the human tools necessary for a successful public lab; the Monitor
doubles as a “Cybernavigator,” being no more than a few feet away and available to help with whatever she can.

The church also developed a program where children in the neighborhood could instruct those in need of some guidance with using computers, and in return the elders instructed the children in a nearby community garden. This arrangement allowed all involved to feel fulfilled; the adults could bestow upon their young professors a sense of accomplishment in their instruction, while they gleaned insight into the computer realm. The church can even boast a success story: one such adult member is now their financial secretary, and works with computers frequently. Church of the Brethren is public computing at its finest, as the public plays a great role in helping educate themselves collectively.

Unfortunately, knowing the divide exists does not make its consequences vanish. Church of the Brethren suffers, as is not uncommon, from the economic hardship of keeping up with the rapidly evolving electronic world. Describing their computer acquisition process, one interviewee said, “So we started off and we have some clunkers, and we started off slow and have kind of been steadily upgrading.” In this case “steadily upgrading” means replacing older computers with slightly newer ones, and then replacing those again once they become defunct. Another exclaimed about past units: “The ones that were ‘98, you just couldn’t do anything! You couldn’t download any updates!” Even with their current computer setup, while the towers are fairly new, the monitors are giant monoliths, and take up a great deal of space in the public area. The sad fact of the matter is, in a church run primarily by volunteers, odds are the equipment is always going to be slightly behind the times. Church of the Brethren is expecting eight replacement computers to be provided, but grant funding will not keep anyone supplied forever. What will happen when, in two or three years, their technology is once again made outdated by a newer operating system?

Luckily, the staff is filled with dedicated members who are willing to give of themselves to reach a greater goal. Oftentimes their donated computers only had the basic monitor and tower—no printer, or mice, or even speakers! Through extra work and savvy they have managed to procure everything they need to make their lab fully functioning.

What really makes it noteworthy is the community effort that has gone into maintaining it; any progress made will owe most of its success to Church of the Brethren, with UC2B meriting an honorable mention. The project will enable their vision, but even without it is unthinkable that Church of the Brethren will not find another way to help their community. Their faith believes in the “priesthood of all believers,” and they will continue to provide for each other as best they can regardless of their resources. For them UC2B is just one of many important ‘ministers’ doing good works in their community.

**Bibliography**

Webliography


23: The Church of the Living God

Andrei Rosulescu
Master’s student, GSLIS

1 Executive Summary

According to its website, “The Church of The Living God of Champaign, IL is affectionately known in Champaign-Urbana as ‘The Love Corner,’” because of its beneficial role in the community. The organization is very active in the community through the wide variety of its ministries and Sunday school programs it supports on a regular basis. While the church’s main focus is on youth, it aims to serve all in the community. The church is currently expanding its building through a much-anticipated construction project called: “Share the Love Capital Stewardship Campaign.” The expansion of the space has the aims of accommodating a larger number of community and developing larger facilities

The Church broadcasts its services on a regular basis and distributes CD/DVD copies of those services to the community, and supports digital literacy classes for both children and adults in its annex where the computer lab is located. The organization desires to do even more in terms of digital literacy service in the community with the help of UC2B.
The Church of The Living God and Annex, where the computer lab is located and where most of Sunday school activities take place. The Annex, “A,” is located right across from the church, “B,” on 310 Bradley Avenue.
3 Photographs

Church of the Living God sign
This is one of the many computer lab “After School Program” sessions. Young patrons get help with homework and improve their reading and writing skills while becoming digitally literate.
One of the monitors and the sound mixing board in one of the two server rooms. The CDs above on the second shelf are used for recording the broadcast and for distribution of church worship services.
Second server room with the mainframe computer used for footage processing.

4 Demographics

The six maps below represent the general demographic data for Census Tract #2, in which the Church of The Living God is located, together with its targeted population groups. The Church of The Living God serves a population concentration of predominant African-American descent as the high percentage indicates on the first of the six maps. Another map shows the income level of the local population: 66% earn less than $30,000.
Despite the high percentage of people who could be categorized as below middle class based on income, it can be observed from the above left map that the median monthly rent—$755—is very high relative to the income level of that population. The map above center shows that the median home price is also high, given that mortgages are consuming 30% of the income of home owners. And the map at top right shows that the majority of people have only high school diplomas and just 10% have at least a bachelor’s degree; while the map above right shows that a relatively low number of students are enrolled in private elementary schools.

5 History

The Church of The Living God was first organized by Elder Lee Munson in 1946. Munson was the church’s first pastor; and along with Brother Johnnie Agnew, Brother Lee Thompson, and Brother Fitzhugh Odom all laid together the foundation and started The Church Of The Living God.

The church’s first religious worship space was initially provided through the kind assistance of Deaconess and Sister Agnew, who made her home at 709 N. Fourth Street, Champaign available. She was the first deaconess of the church and the wife of Elder
Munson as well. Over the years, the ministry felt blessed in the way that it grew larger. It was then because of the growing numbers in the congregation that there was soon a need for more worship space. As a result, they started to worship throughout the 50s “at a funeral home and then also went through a couple of other church buildings before they got permanently established into a permanent place of their own” (Bishop Gwin). At first the “services were held in the Agnew's home, the Seventh Day Adventist Church, and Parker and Sons Funeral Home, until a new church building was constructed in the Fall of 1960, at 801 N. Poplar Street, Champaign.” (e).

Upon his retirement in 1967, Pastor Munson appointed Eldress Mary Mullen to take over the pastoring of the Church. The church at this time grew such that they decided to build the current worship location of the Church of The Living God

Eldress Mary Mullen became the overseer for the organization right after her retirement in 1981; and then in July of that same year; “Elder Lloyd. E. Gwin (now Bishop) was appointed as the third pastor of the Champaign church.” (e). Bishop Gwin continues to serve as pastor.

The following is a timeline of technology history at the church.

1992 – The organization starts selling audio/ video recordings of its religious services and saw the advent of the future “Audio/Video Tape Ministry” that was to become the “Media Store.”

1994 – The church starts broadcasting its religious services via what are called “The Love Corner Victory Broadcast.” This regularly airs on WBCP - 1580 AM Radio on Sunday mornings at 11:30 a.m.

2000 – The first website version of the organization is launched, having been designed by relatives of the staff on a volunteer basis.

2002 – The church starts television broadcasting its worship services on a regular basis. The Love Corner Experience is aired on WBUI – CW TV (Channel 12 or 914 HD) on Sundays at 8:00 a.m.

2006 – The TLC Annex building located right across the street from the Church opens its doors to host the majority of the Sunday school classes and the computer.

2008 – The Church starts the After School Program (k through 12), through which kids learn how to read better through a variety of digital gaming/learning activities.

2009 – A Job Training program is initiated and runs quarterly. It offers ACT preparation for high school students, art classes, job searching/interview skills, and computer training.

Early 2010 – The church redesigns the old website.

2010 – All computers for staff use are integrated into a single network, and the church launches its online-based version of the Media Store for community members.
6 Technology Inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
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</thead>
<tbody>
<tr>
<td>7 PCs for public computing</td>
<td>Windows 2000 operating system</td>
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<tr>
<td>7-10 Office PCs</td>
<td>Internet Browsing Interfaces</td>
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<td>5-10 TVs throughout church</td>
<td>Open Office 3.1 suite</td>
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<td>Surround Sound Clip Speakers System</td>
<td>Office: Windows 7 Home Premium Version 6.1</td>
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<td>Several DVD/VCR Players</td>
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<td>Several routers and modems</td>
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<tr>
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<td>1 CD Duplicator</td>
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<td>Audio equipment including mixers, speakers, etc.</td>
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<td>Several Camcorders and Digital Cameras</td>
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<table>
<thead>
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<th>Upload (Mbps)</th>
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<td>Speedtest.net</td>
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</table>

7 Analysis

Digital learning activities at the Church of the Living God are a tremendously important tool for member empowerment, as an increased number of community members find themselves lacking in resources to effectively enter the job market; are spatially isolated and entrapped by poverty; and struggle in the community with basic reading, writing and computer literacy/Internet browsing and basic social media/digital literacy skills. One example of the activities geared toward adults is a business entrepreneur and stock markets class, a component of which is the development of the necessary digital literacy skills required of a business entrepreneur.
The institution is trying to contribute to the educational welfare of the community by focusing on both basic literacy and digital literacy skills development for youth in a unified approach. This approach makes use of interactive computer-based games for keeping young patrons interested and entertained. These games foster critical thinking and basic reading/writing classical literacy skills in their content, as well as the development of electronic literacy by having kids use digital software for the creation of written and audio/video content and by allowing them to interact with the Internet and various social media technologies.

There is also a specialty software program, “Power Church Plus,” that is proprietary to The Church of The Living God and used for organizational data administration purposes. The church uses the most current version. This database contains membership information and data about people who join the church. It is also used for information input and access pertaining to mailings to the community. This database is also used for keeping track and compiling birthday lists of church members and for sending individual birthday cards to people in the community. A common practice is to post a compiled list of birthday greetings in every weekly bulletin release; organizational reports state that members love to be greeted on their birthday and see their birthday posted in an official organizational document such as the church bulletin. The database contains photographs of church members’ photographs. This database is also used to keep track of church donations as well.

Another type of technology use by the church specifically relates to its Audio/Video Ministry. Community members are given the opportunity to purchase recordings of the services through the Media Store so that they can refer back to the religious message, as well as pass it along to other people in the community who do not attend a church service on a particular day. The church has an extensive technology infrastructure in place to carry out its evangelical mission. This is accomplished by means of its regular TV and radio broadcasts of religious services and the distribution of these recorded services in the form of CDs and DVDs. There is a special group comprised of three staff members who are responsible for this realm of church activity.

There are two video cameras in the Church. The first camera shoots the image by the pulpit area and is mounted on a tripod at the very back end of the church right behind the congregation. There is a second camera which shoots the image from the right side of the sanctuary. The cameras record the music, prayer, and sermons, capturing what is going on in the church in a panoramic view.

A key component of the audio/video ministry is the church’s media store. The store offers inspirational traditional worship music, as well as books, including one of the bishop’s own poetic reflections on building a sustained relationship with God into one’s daily life. This book is called Reflections and Praise.

The church also uses other digital computing technology and software such as CSS, PHP, and HTML for reaching out to the community via its website. The website has been recently redesigned and updated with relevant content for community members. It was created by the church’s technology staff members in cooperation with volunteers who happen to be technologically savvy family members of some of the church’s staff.
Bibliography and Webliography


24: Cornerstone Baptist Church (formerly Garden Hills Baptist Church)

Ivy Renee Green
Undergraduate, College of Media

1 Executive Summary

Cornerstone Baptist Church is a congregation of about 130 members, and has recently moved from their location in Garden Hills. It was centrally located on Bloomington Road in Champaign, and has since moved to a building on Oak Street in Research Park. Access to and knowledge of technology helps them in their effort to grow their ministry, and will continue to help the congregation prepare for effective ministry at a new location.
2 Maps

Cornerstone Baptist Church at Champaign County Gateway Building at Research Park 1800 S Oak St, Champaign, IL 61820
Cornerstone Baptist Church (formerly known as Garden Hills Baptist) was located at 1601 West Bloomington Road, Champaign, until that location was sold in 2010.
3 Photographs

Deacons’ Retreat, October 2005. Photo supplied by www.gardenhills.org
Reverend Steve Diehl uses his BlackBerry mobile device to answer e-mails.

Reverend Steve Diehl checking e-mail using his personal mobile device, a BlackBerry.
This is the where the members of Cornerstone Baptist Church worship. Note: the people pictured are not members of the church.

4 Demographics of members

When Cornerstone Baptist Church moved from its permanent location on Bloomington Road, it lost some of its members. There are about 130–140 active members, but not all of them attend services every Sunday. On Sunday, 30 October 2011, the church recorded a total of 65 members attending service. Usually, there are 70–80 people in service on Sundays. The majority of the church congregation are white and middle-class; there are three African Americans and a few members of Asian, South American, and Brazilian descent. The average age of members is 45 and up. Many families with younger children left the church to attend other churches. Some college-age students attend service on Sunday. The numbers of high school and middle school children is low as well. Members travel from all over to attend the church. Some come from other towns in Illinois, such as St. Joseph, Thomasboro, Tuscola, Rantoul, and Urbana.

5 History

1957 to Present

In 1957, led by Dr. A. C. Queen, Temple Baptist Church in Champaign saw the need for a church in northwest Champaign. In October, services were begun in the Community Room of the Garden Hills Elementary School with 37 people present. In June 1960 a groundbreaking service was held for a building to house the Garden Hills Baptist Chapel.
In August 1960 services were held in the unfinished building with Rev. Beecham Robinson serving as part-time pastor. Rev. A. F. Tuck was called in September of 1960 as the first full-time pastor. The mission grew under his leadership and God’s blessing and guidance. It became financially self-supporting within 18 months. On May 6, 1962, the mission was constituted as the Garden Hills Baptist Church with 106 charter members. Within a year, GHBC had outgrown the building, and more space was needed. In the summer of 1963, planning began on a two-story educational building with an auditorium seating 200. The first service in the new facility was held on March 1, 1964.

The church called Rev. Normal L. Langston as pastor in August 1979, and he served until August 1983. Rev. Kenneth O. Willoughby was called in August 1984, and served as pastor until May 1987. In September 1988 Rev. M. Harold Roberts became pastor. Under his leadership, the church selected a building committee. Construction of a new worship center began in October 1989. Many volunteers from the church and the East Central Illinois Baptist Association, plus teams from Oklahoma and Mississippi, turned plans into reality. On Easter Sunday, 1990, a sunrise service was held on the concrete slab of the new Worship Center. The first service in the completed Worship Center was held on December 16, 1990. On May 26, 1991, the church dedicated a new building, including office and music space. The beautiful stained glass window above the baptistry was designed and donated by Dr. and Mrs. Ronald M. Shelton in memory of his parents, Russell and Mildred Shelton, who were charter members and served many years at Garden Hills Baptist Church. In May, 1996, Pastor Roberts retired from the full-time pastorate. Rev Stephen W. Diehl became Senior Pastor on June 8, 1997. Though paid staff members in the music ministry had been part of the church staff for years, Rev. Steven D. Hronec was first full-time Associate Pastor, from September 15, 2004 until May 27, 2007.

In 2010, the church sold its property on 1601 W. Bloomington Rd. and relocated to an interim site at 1800 S. Oak St. in Champaign. In the Spring of 2011 they changed their name to Cornerstone Baptist Church of Champaign County.

### Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, systems, and communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audiovisual system with projectors and screens</td>
<td>Internet provided by rented building</td>
</tr>
<tr>
<td>Portable sound system</td>
<td>Power Church Plus software</td>
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<tr>
<td>Wireless printer</td>
<td>Website <a href="http://www.gardenhills.org">www.gardenhills.org</a>, set up by outside company and maintained by the church</td>
</tr>
<tr>
<td>Laptop</td>
<td></td>
</tr>
<tr>
<td>Digital Printer</td>
<td></td>
</tr>
<tr>
<td>Desktop PC</td>
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</tr>
</tbody>
</table>
7 Analysis

In terms of the digital divide, Cornerstone Baptist Church’s autonomy of use of technology is insufficient due to its temporary place for worship. In Ester Hargittai’s study, “Differences in Peoples Online Use,” she defines the “digital” and “divide” and suggests that five dimensions exist along the divide:

1. technical means (software, hardware, connectivity quality);
2. autonomy of use (location of access, freedom to use the medium for one’s preferred activities);
3. use patterns (types of uses of the Internet);
4. social support networks (availability of others one can turn to for assistance with use, size of networks to encourage use); and,
5. skill (one’s ability to use the medium effectively).

While in some aspects the church may be facing a dilemma in all five areas, the second dimension best describes Cornerstone’s situation. The church is currently renting space from the Gateway Building in Research Park. Research Park is just south of campus. It houses many corporate and private companies. Inside the Gateway Building is a meeting room, fully equipped to facilitate meetings, but it is not a church. Many of the members do not feel comfortable praising inside a professional building, because they are accustomed to a church building. The introduction of technology to the members may be problematic when they are not even comfortable in the current place of worship. Before issues like technical means, use patterns, social support, or skill are addressed, location of access must be confronted. Most of the equipment the church uses for Sunday services cannot be stored at the building overnight, so every Sunday members volunteer to come in early to set up audio and sound equipment and often leave late to break all of it down. On the other hand, the church has access to faster Internet connectivity which makes it easier for them to update church records, record sermons to be uploaded on the church website, and print church programs and announcements in a timely matter. Research Park operates on the same Internet connectivity as the university. But the church only has access to the faster Internet capability when in the building—on Sunday mornings. Because of the temporary setting of their current services, it is not known whether their permanent home will have access to the UC2B network in the first wave of connection. Still, the church uses advanced technology for their services and this continues to support their ministry.

Bibliography


Webliography


25: First Christian Church

Lily Grant

Master’s student, GSLIS

1 Executive summary

The First Christian Church of Champaign is a thriving organization committed not only to the teachings of Christ, but also to putting those teachings into action in our community. The church has a large membership, drawing between 1,500 and 1,700 attendees to Sunday services each week. There are numerous activities taking place on a daily basis at the large church campus, and those who cannot make it to the church as much as they would like can stay involved via the church’s impressive website. The website links parishioners to the church’s blogs and Facebook page, and offers a variety of video and audio files of sermons and other church events. Parishioners can use the website to learn about upcoming events and programs, to make donations, and to contact ministers and other church staff members. Though the church has already found many ways to leverage the power of computer technology in service of their ministries, this does not mean that the UC2B project has nothing to offer them. Because of their remote location at the outskirts of Champaign, their Internet connection options are limited. At present, they are using a wireless connection, but the increased speed and reliability offered by a fiber-based connection would allow them to improve the efficiency and usability of their current operations, so that they could extend the reach of the many services that they offer to their members and the community at large.
2 Maps

Neighborhood map. The First Christian Church is located at 3601 South Staley Road, near the corner of South Staley Road and West Curtis Road. The area consists primarily of farmland, with a few residential houses. The church is located a short distance from I-57.

Area map. The First Christian Church is located in the far southwest portion of Champaign, Illinois.
3 Photographs

The First Christian Church, located in southwest Champaign.
The production room located within the Worship Center: this audiovisual equipment is operated by a team of volunteers and is used to record and broadcast services.
Parents of small children use these stations to electronically check in their children before classes and events.
The Oasis offers many opportunities for entertainment and recreation, including these Wii stations.

4 Demographics

The First Christian Church does not record information for their membership rolls beyond name and contact information, so demographic information is not available. The congregation is primarily white, but as the church membership has grown, so too has its diversity. Since it is a well-established church that has been present in the Champaign community for over 50 years, a mixture of all age groups is active in the church, ranging from newborns to seniors.

The exact number of current members could not be determined, as the records that the church holds are not current, owing to the transient nature of the Champaign community. The church draws many from the University of Illinois campus community, and those members tend to come and go as their ties to the university change. However, the church draws between 1,500 and 1,700 to their services each Sunday. Actual membership is assumed to be somewhat higher, however, as the number of those members who are partaking in services via the online sermons has not been recorded.

5 History

In February of 1952, a group of people met at the home of Mr. and Mrs. Dean Butts to discuss the formation of a new Christian church in Champaign. During the following year, more meetings were held and collections were taken to fund the purchase of a church building. While the group sought out a permanent home, the first worship service
was held in March of 1953 at the McKinley YMCA and attracted 38 attendees. By the end of August the church had attracted an additional 59 members by transfer and 17 by baptism.

In September of 1956 a groundbreaking ceremony was held at what would become the original location of the First Christian Church, 1509 W. John Street. By June of the following year, construction had been completed and a dedication ceremony was held on June 9th. In the late 1960s, the church made an addition to the original building, and created a new sanctuary, which was dedicated in November of 1966.

In the 1980s, Senior Pastor Robert Phillips’ emphasis on evangelism drew many more members to the church. This growth continued into the 1990s, when additional construction was needed to accommodate the growing church community. In 1992, a third wing was added, which included the Fellowship Hall and Education Wing. In 1997, it became necessary for the church to hold three Sunday services in order to accommodate all of its worshipers. In 2000, the church moved to four services each Sunday. Additionally, it became necessary to use a shuttle bus to bring parishioners from the Centennial High School to Sunday services because of the limited parking available at the West John Street location.

By 1998, it was clear that the church was outgrowing its original location, and relocation and expansion options were studied. On Easter Sunday of 1999, it was announced that the church would relocate to a twenty-acre site at the corner of Staley and Curtis roads in southwest Champaign. A fundraising effort, “Growing Together,” was implemented and the church managed to raise $2,011,000. Work began on the new 48,400 square foot building in 2001 and it was completed by January of 2003. The first service held in the new building attracted 1,491 worshipers. In March of 2003, a Dedication Service and 50th Anniversary Celebration was held, and four of the original charter members of the church were in attendance: Georgia Hill, Bill Scattergood, Barbara Butts Anderson, and Bill Keiser. Also in 2003, the church’s current Senior Pastor, J. P. Jones, began work as the church’s Preaching Minister.

Though it is now situated in a spacious location at 3601 South Staley Road, the church continues to attract many new members and is quickly outgrowing its present location. After the initial Phase I of the new building was completed, the church began work on Phase II, which offers additional fellowship and educational spaces for children and young adult members of the church. Phase II has been mostly completed, with the exception of a little interior finishing work, which the church is currently in the process of undertaking. Phase III construction, which will add a church sanctuary, is planned but has not yet begun.

### 6 Technology inventory

Though a comprehensive list of all technology items used by the church was not available, the network normally supports around 50 devices operated by staff (computers and printers) on a daily basis. In addition to these devices, there are a constantly varying number of laptops and other mobile devices that are using the public Wi-Fi network at the church.
In addition to computer equipment, the church uses an extensive array of audiovisual technology to record and broadcast Sunday services. These include cameras, microphones, sound mixers, video screens, and computers for editing. Again, a complete list of all items was not available, but the system includes a large bank of audiovisual equipment located in a production room in the Worship Center, as well as several flat-screen television and movie screens located within the Worship Center, just outside in the coffee shop area, and in the Oasis area.

The church prints many of its flyers, newsletters, posters, and mailings in house. A large color poster printer is used to produce posters and Adobe Creative Suite Design is used to produce their printed works.

The church uses both Mac and Windows systems, and allows staff members to choose which operating system to use for their work. All staff members use e-mail, fax, and telephones for their communication needs, though e-mail is the dominant form of communication. Additionally, the MS Office Suite and Apple iWorks Suite are used for general office work. Shelby Systems database, software developed specifically for churches, is their primary means of computer record keeping. Adobe Creative Suite Production is used for audio and visual editing, and Vimeo.com is used for video hosting.

Internet Speeds range from 8.32 to 14 mbps for download and 5 to 8 mbps for upload.

7 Analysis

The First Christian Church of Champaign is a vibrant and growing organization that has successfully leveraged the power of modern technology to foster fellowship and community among its members. The church employs many online and print resources to communicate with its parishioners, and to promote community service within the Champaign-Urbana area and beyond. The First Christian Church clearly understands the important role that communication plays in community building.

The church is located at the outskirts of Champaign, far from the center of town, but it is not a lonely or isolated place. The church campus, comprised of two large buildings, is abuzz with activity on a daily basis. The church’s structure is organized into several different ministries to serve various populations of the church community. There are ministries for all ages of children: Early Childhood (birth through kindergarten), Elementary (1st through 5th grade), Junior High (6th through 8th grade), and High School. Ministries for adults include groups for men, women, and seniors. Each of these ministries organizes classes, programs, and events specially tailored to the needs of the group that they serve. This approach creates an atmosphere that is welcoming and engaging to all members of the church community.

For families, there is a large indoor playground that is open to the public. It features a play area, an eating area, and a walking track around the play area for those who would like to exercise indoors. There is also free Wi-Fi available, a feature very popular with parents who bring their children to play. In addition to the playground area, there is the Oasis, a large rec-room-like center primarily used by teen and junior high members of the community. It features a large stage with musical instruments, comfortable seating (including some diner-like booths), a cafe, many types of video games, foosball, and
other amenities. There are also several large screens so that Sunday services can be viewed in a more relaxed and casual atmosphere.

The main building contains numerous classroom and meeting areas that are available to both church members and to the general public. In addition to holding church-related classes and events here, local youth groups, support groups, and community organizations use the spaces for a variety of events. In order to keep all members and the general public informed about the activities taking place, the church maintains a sophisticated website that features an online calendar of events and information about ongoing and upcoming programs. Additionally, the site contains information about church core beliefs and their mission statement, information about the various ministries of the church, contact information for all pastors and staff, options for online giving, and audio and video files. The church’s Facebook page and blogs are also linked from the church’s website.

For those church members who are less computer savvy, or who simply prefer reading a paper to reading a screen, church information and announcements are made available via flyers, postcards, posters, newsletters, and other mailings and handouts. Recently, the church has begun producing most of its flyers, posters, and mailings in-house as a cost-saving measure. The church employs a self-taught graphic designer to help design their printed items. The staff members use Adobe Creative Suite software to create their publications, and have high-quality printers, including a very large poster-sized printer.

The church has also taken advantage of modern technology to expand the reach of its Sunday services. The large Worship Center is equipped with many cameras and three large screens that display images of the preacher during the service so that even those in the back have a good view. The cameras and other recording equipment are operated by a team of volunteers working out of a production room just to the side of the stage. The room is filled with screens, recording equipment, and computers that enable the team to record the service and broadcast it throughout the building. Large screens are located just outside the Worship Center so that those who arrive late or who may need to attend to a crying baby will not miss any of the service. The service is also broadcast on a large screen in the Oasis.

In addition, the recording of the service is uploaded to the church website so that those who are not able to make it to the service in person can still attend virtually. The services are available in video or audio-only formats to accommodate a variety of internet connection speeds. Videos are hosted on Vimeo.com and, though they are produced by volunteers, they are of professional quality. The audio-only files can be streamed online or downloaded in mp3 format for later listening.

The number of children at the church is increasing rapidly, so the needs of children and parents are a major focus of church activities. The church maintains an Early Childhood Blog that includes news about current programs and classes as well as video files, so children can practice class songs from home, and shows videos of prior recital performances. The church offers many classes and activities for children of all ages. To ensure the safety of children attending such events, children from newborns to 5th graders are checked in using a computer check-in system. At the check-in stations, parents enter the last four digits of their phone number and select their child from a list of names found
in the church records. The station prints a label that includes a sticker badge for the child to wear and a matching receipt for the parent to retain. The receipt is required to pick up the child when the program or class is over. The information on the badge includes the child’s and parent’s names, parent’s phone number, and allergy or other pertinent medical information.

Though the First Christian Church has already found many innovative ways to use technology to enhance the work of their ministries, this does not mean that the UC2B project has nothing to offer them. The church was not included in the original grant for the UC2B project, but they are very interested in being included, should additional funding become available. An important benefit of having a fiber-based connection rather than their current wireless connection would be increased reliability. Though connection outages are less common than they used to be, when they do occur they bring nearly all of the church’s work to a halt. The church is currently researching the feasibility of moving their data into a cloud-based system and the question of connection reliability will play an important part in their decision. If they were able to connect via UC2B, they would be able to move from their somewhat antiquated current database system to something more efficient and user-friendly.

Additionally, UC2B would bring increased options for connecting with other organizations in the Champaign-Urbana community. The church values community service and is very active in projects that benefit the Champaign-Urbana community. Recent projects include helping families living in the north end of Champaign with home improvement and repair projects, and “Operation Cannonball,” a project in which church members were challenged to think of creative ways to use $100 to make a difference in the lives of people in their community. Though the church has many internal resources to draw upon, they also partner with other churches in the area. Having all local churches and other service organizations wired for fast and consistent communication via UC2B would facilitate partnerships through Web conferencing and sharing of electronic resources.

Though the church campus is very large, church membership is expanding so quickly that lack of space is becoming a problem. This problem could perhaps be eased if the church and its members were all wired through UC2B and could utilize Web conferencing and online classes. Though the church has plans to add to and renovate their current building, opportunities to further expand into a virtual space as their church grows would be highly beneficial.

It is easy to see why the First Christian Church is growing in membership at such a rapid rate. The church has successfully created a place that is welcoming to all members, whether they prefer printed newsletters and phone calls or Facebook and e-news. Though rooted in the ancient teachings of Christianity, and traditional in its values and beliefs, the First Christian Church is thoroughly modern, and has found impressive ways to harness the power of computer technology to enhance their mission and ministries.

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Webliography


26: First United Methodist Church

Qiyuan Liu
Master’s student, GSLIS

1 Executive summary

First United Methodist Church is a fairly large church located on Church Street in Champaign. They have 12 computers, including two laptops, that are used mainly for office work. Though they have internet access with wireless capabilities, the connection speed is slow, especially considering that it is shared between at least nine computers on a regular basis. They are thus looking forward to learning more about UC2B and what benefits it may bring them. They are interested in possibilities of doing online services, like online study groups Members are also eager to know if UC2B would provide training, because there are some people who would benefit from such services.

2 Map

Google map locating the First United Methodist Church.
First United Methodist Church is located at the NE corner of State Street and Church Street.
The pictures above show the staff office (room). Staff members handle daily office tasks using computers, software including MS Office, and phones, etc.
Staff and volunteers operate this equipment in order to play music, show slides, and control audio output.

4 Demographics

<table>
<thead>
<tr>
<th></th>
<th>Staff</th>
<th>Board</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>25</td>
<td>40</td>
<td>725</td>
</tr>
<tr>
<td>White</td>
<td>100%</td>
<td>100%</td>
<td>99%</td>
</tr>
<tr>
<td>Black</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Average Education</td>
<td>Bachelor’s Degree</td>
<td>Bachelor’s Degree</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Average Income Range</td>
<td>$49,777–$180,001</td>
<td>$49,777–$180,001</td>
<td>$49,777–$180,001</td>
</tr>
</tbody>
</table>

This is a rough estimate based on data collected from interviewees, the church’s website, and personal observations. All the data provided regarding income and educational level are a guess, as they have no hard data.
5 History

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1860</td>
<td>The first Methodist church is built at the corner of Church and State, which is dedicated three years later.</td>
</tr>
<tr>
<td>1868</td>
<td>To serve 99 members of their congregation who lived east of the railroad tracks, they build a church on the northeast corner of Sixth and University. This church is known at Conference as the University charge, but locally it is referred to as Second Methodist.</td>
</tr>
<tr>
<td>1878</td>
<td>The first parsonage is bought at 206 W. University.</td>
</tr>
<tr>
<td>1889</td>
<td>Construction of a new brick church is completed. Membership is 400.</td>
</tr>
<tr>
<td>1895</td>
<td>Another parsonage is built at 306 W. Hill Street.</td>
</tr>
<tr>
<td>1902</td>
<td>A third parsonage is purchased.</td>
</tr>
<tr>
<td>1907</td>
<td>Construction of a stone church is completed to replace the brick church. Membership is 813.</td>
</tr>
<tr>
<td>1912</td>
<td>The church renames itself as the First Methodist Episcopal Church of Champaign.</td>
</tr>
<tr>
<td>1917</td>
<td>They build a new parsonage at 407 W. Hill Street, their fourth.</td>
</tr>
<tr>
<td>1923</td>
<td>Construction of their Parish House is completed.</td>
</tr>
<tr>
<td>1940</td>
<td>Following the merger in 1939 of the Methodist Episcopal Church and the Methodist Protestant Church they drop the word “Episcopal” from their name and become the First Methodist Church of Champaign.</td>
</tr>
<tr>
<td>1957</td>
<td>They begin the process of founding Faith Methodist Church. In January the church buys 5.2 acres of land on Prospect Avenue where Faith now. They also purchase the lot on which their Educational Building now stands.</td>
</tr>
<tr>
<td>1989</td>
<td>First Church celebrates 100 years on the corner of Church and State. This celebration comes 26 years late because the frame church stood on this corner in 1863.</td>
</tr>
<tr>
<td>1995</td>
<td>The Church receives an award “For Exemplary Efforts In The Area of Church Growth.” This award was for having, among churches of their size, the most members who joined by profession of faith.</td>
</tr>
</tbody>
</table>
## 6 Technology inventory

### Inventory of the First United Methodist Church’s Technology Resources

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktops</td>
<td>10</td>
<td>Three of them are running Windows 7, others are Windows XP, and they need three more.</td>
</tr>
<tr>
<td>Laptops</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Server</td>
<td>Windows 2003</td>
<td>1</td>
</tr>
<tr>
<td>Data/File Management system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church Windows (management program)</td>
<td>1</td>
<td>Everyone who needs to can access, only for church use</td>
</tr>
<tr>
<td>E-mail system</td>
<td>1</td>
<td>By the third party. They can send e-mails to all the members at one time.</td>
</tr>
<tr>
<td>UMIS (United Methodist Information System)</td>
<td>1</td>
<td>Used before</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.champaignfumc.org">http://www.champaignfumc.org</a></td>
<td>1</td>
</tr>
<tr>
<td>Social network sites</td>
<td>Facebook page</td>
<td>1</td>
</tr>
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### Item

<table>
<thead>
<tr>
<th>Item</th>
<th>Applicable</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT&amp;T DSL</td>
<td>Yes</td>
<td>Slow, because they sharing that among maybe nine step-machines</td>
</tr>
<tr>
<td>Wireless spots</td>
<td>Yes</td>
<td>Very slow, because wireless routers are five years old.</td>
</tr>
<tr>
<td>Telephone system</td>
<td>Yes</td>
<td>They prefer e-mails to communicate.</td>
</tr>
<tr>
<td>Databases</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microsoft Office including Word, Excel, PowerPoint</td>
<td>Yes</td>
<td>For multimedia tasks (video programs)</td>
</tr>
<tr>
<td>Special Multimedia processing software including Fireworks</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Electronic resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audios</td>
<td>Yes</td>
<td>Based on the website</td>
</tr>
<tr>
<td>Videos</td>
<td>Yes</td>
<td>Based on the website</td>
</tr>
<tr>
<td>Webpages</td>
<td>Yes</td>
<td>Based on the website</td>
</tr>
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</table>

### Speed Test Results

<table>
<thead>
<tr>
<th>Means</th>
<th>Download (Mbps)</th>
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<tbody>
<tr>
<td>Speedmatters.org</td>
<td>1.907</td>
<td>0.634</td>
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<tr>
<td>Speedtest.net</td>
<td>3.27</td>
<td>0.64Mbps</td>
</tr>
</tbody>
</table>
7 Analysis

The main general issue of First United Methodist Church is that they are trying to help their neighbors to know more about them, to reach out to their homes and find out what people need, and how can they serve people. They have about 25 staff and most are part-time. Their information technology skills are some basic necessary computer skills vary according to the job. They always seek technical help from church member. Currently First United Methodist Church has 725 members, and the board has 40 members.

There was not much use of electronic equipment 15 years ago. At that time the most advanced system was Windows 3, and people seldom made Web pages. They had typewriters many years ago, and then they built their network. The file management system they used before was called UMIS, which is short for United Methodist Information System.

At present they have 12 computers, which are all Windows based: two are laptops and the rest are desktops, and three of them are running Windows 7. They have a server running Windows 2003 that takes care of their file sharing and security in their building. For the connection to the Internet, they have DSL from AT&T, and very weak wireless spots (the wireless routers are probably five years old) shared by nine computers. People in the church building can access the Internet if they have a password via Wi-Fi. Most of the time, they use Microsoft Office to handle daily affairs; they have their own file management system, Church Windows, which is only for church use. This system is used to generate e-mail, and it also does accounting. For certain tasks, they use some special software, such as Fireworks, to finish multimedia tasks. Their powerful website is on the server of a company with which they have a contract, and that company is responsible for maintenance of their webpages, hardware, and their e-mail system. However, they have a management system in the website, so staff or volunteers can update the site at any place and time. They do a lot of communications via e-mail, and the e-mail system is powerful enough that they can send e-mails to all members at one time. The e-mails are generated by them and then sent by that company (third party). Sometimes they also use Constant Contact, which can be seen as a templates (including colors, backgrounds and pictures) provider. In addition, they have a Facebook page.

The main technology issues the First United Methodist Church is facing now is their internet service, which is shared among nine machines. Because of the limited bandwidth, they even have not thought about the things that would be possible with broadband. A lot of their older church members have computers and they can access the Internet. But right now their communication with them is probably limited to viewing the church’s website or using e-mail. They haven’t got beyond that because they do not have technological abilities and enough bandwidth. Also, as a volunteer nonprofit organization, the cost balance is really a problem. They concentrate on their cost because they are member supported. They do not have public computers in the church.

Because of the limits of their resources, they pay more attention not to computing but to the use of Internet. They need a lot of memory, a lot of hard drives, a lot of processors, that is to say, big machines good at running Powerpoint and big bandwidth in order to make Internet access easier and faster. These kinds of things are all planned, but they need money to make them happen.
What interests them about UC2B is the bandwidth, and what it might bring to them. They are interested in possibilities of doing online services, like online study groups.

As of now, they have not considered these types of projects due to bandwidth limitation. Faster bandwidth would be helpful for streaming of video programming. Big broadband would enable them to do Web streaming of higher quality, and allow them to use higher-quality cameras. In this case, people who are not very mobile, whether they are in their own homes or nursing homes, would be able to access the Internet more comfortably and do what they can do online. The level of service is also a matter of interest, both in terms of price and how it might affect their current AT&T service. Members are also eager to know if UC2B would provide training, because there are some people who would benefit from such services.

**Webliography**


27: Holy Cross Catholic Church and School

Jennifer Hebel
Master’s student, GSLIS

1 Executive summary

Holy Cross Catholic Church is a vibrant community that is preparing for its 100th anniversary celebration. The church is home to approximately 970 families, with attendance at Mass varying. They also run a school, which has an average enrollment of 325 students, with a 1/20 student-to-teacher ratio. The school is a grade school only, K–8 with 18 classrooms. While Holy Cross Catholic Church and School uses technology in a variety of ways, the school has a larger and more diversified technology focus than the parish center. All the classrooms have computers—some have more than one—and there is a computer lab with 28 E-Mac computers with Internet access.

2 Maps

Google Maps: “A” marks the location of the church.
Google Maps satellite view of Holy Cross Catholic Church and School. The Church is located at the intersection of Clark and Prairie and the school is located at Elm and White.
Exterior view of side of Holy Cross Catholic Church looking towards Clark Street.
Computer in parish office at Holy Cross Catholic Church. Server is on the far left.
Computer lab at Holy Cross School.
4 Demographics of patrons or clients

The primary demographic of Holy Cross Catholic Church and School is white middle-class. There are some higher- and lower-income families, but the middle-class bracket is the majority of the population. The church has some African-American, Filipino, Latino, and Congolese members. The school has a diverse population as well, with white, African-American, Filipino, Latino, and Congolese students. Fifteen percent of the student population is non-Catholic, with Hindu and Muslim being included among student religious affiliations.

5 History

Construction started on the Church of the Exaltation of the Holy Cross in 1920 and was completed in 1924. Major reconstruction was undertaken in 1983, lasting eight months. As much of the original interior was preserved as possible, with many of the original materials being reworked into new pieces. The marble used was Italian, while the magnificent stained glass windows were from Germany. The bronze crucifix in the sanctuary was commissioned specifically for Holy Cross and was designed by Peter Fagan. Holy Cross parishioner and artist Harry Breen led and designed the renovation. He was a professor at the School of Art and Design at the University of Illinois. He did not take payment for his work, stating, “The Church as a physical presence can help to sustain and nurture the spiritual life of the assembly it houses; it can celebrate; it can
teach; it can pray; it can inspire” (Holy Cross website). The renovation was completely paid for by the time it was completed. The church is currently preparing for its upcoming 100th anniversary and celebrations. Various activities are being planned, including a pilgrimage. The church also supports a daily food pantry through a volunteer organization called St. Vincent De Paul, which distributes food on a daily basis. Father Stephen Willard is the current pastor, with Henry Hart, Edward Mohrbacher, and Robert Ulbrich as deacons. There was once a convent where the school currently stands, but it is no longer in existence.

Holy Cross Church has strong ties with St. Matthew’s Parish and our Lady of the Lake in Mahomet. Fundraising for Holy Cross under the direction of Father Walter McGinn was instrumental in raising funds to construct a school and convent on the site. In 1962 St. Matthew Auxiliary school opened as an extension on Holy Cross, and by 1965 approximately 300 families were part of the parish. St. Matthew’s became an official parish in June of 1954, and the church was completed and dedicated in April 1978.

Our Lady of the Lake grew out of after-Mass coffee conversations when Mahomet Catholics began to request Sunday Mass in Mahomet. Father Bernard Render began celebrating Mass for the Mahomet Catholic community in a school gym in August 1975. In 1978 Mahomet became a mission site of Holy Cross, and was subsidized by the parent church. Our Lady of the Lake was designated as a parish in January 1981.

Holy Cross has a sister parish in St. Isaac Jogues in Rapid City, South Dakota. St. Isaac Jogues is designated as a mission parish, serving approximately 180 families, many of whom are Native American. Fundraising conducted at Holy Cross helps fund the mission, as well as school supplies for children and other community needs. St. Isaac Jogues was established in 1951, and is associated with St. Elizabeth’s Catholic Grade School and St. Thomas More High School, which shares a name with Holy Cross’s local high school.

Holy Cross School has been in existence for 95 years, and works with Champaign Unit 4 schools to supply additional teaching resources. Focusing on faith-based values and high academic accomplishments, the school maintains a high academic and sports rating. Upon graduation, many students continue on to St. Thomas More High School. The school does provide financial assistance for at-need students.

### 6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, Systems, Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parish</td>
<td>Parish</td>
</tr>
<tr>
<td>3 Desktops</td>
<td>Windows XP</td>
</tr>
<tr>
<td>3 laptops</td>
<td>Mac OS</td>
</tr>
<tr>
<td>Network Server</td>
<td>AT&amp;T wireless</td>
</tr>
<tr>
<td>Printers</td>
<td>MacLeod USA</td>
</tr>
<tr>
<td>Digital Projector</td>
<td></td>
</tr>
<tr>
<td>Digital Cameras</td>
<td></td>
</tr>
<tr>
<td>Digital audio recorder</td>
<td>Landline Phones</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>18+ Mac classroom computers</td>
<td>Wireless and Wired connection in all classrooms</td>
</tr>
<tr>
<td>28 E-Macs in computer lab</td>
<td></td>
</tr>
<tr>
<td>SMART Boards with projection equipment</td>
<td></td>
</tr>
<tr>
<td>Digital Cameras</td>
<td></td>
</tr>
<tr>
<td>Digital recording devices</td>
<td></td>
</tr>
<tr>
<td>Projectors</td>
<td></td>
</tr>
<tr>
<td>Telephones</td>
<td></td>
</tr>
<tr>
<td>Printers</td>
<td></td>
</tr>
<tr>
<td>Copy Machines</td>
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<table>
<thead>
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</thead>
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<td>.53</td>
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Parish Center Speed Test

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<tr>
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<th>Upload (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blocked</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speedtest.net</th>
<th>Download (Mbps)</th>
<th>Upload (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.43</td>
<td>1.41</td>
<td></td>
</tr>
</tbody>
</table>

Paragraph: School Speed Test

7 Analysis

As a whole, Holy Cross Catholic Church and School have access to a good deal of technology. There are sufficient computers present at both sites to deal with the current demand, both sites have full Internet capability, there is an online presence for both sites, multimedia is being used, and the school has access to more advanced learning technology via the SMART boards. Some of the computers, especially at the parish office, are starting to age, so more funding will be necessary to replace them, but as a whole the computers are fairly up-to-date, especially in the school’s computer lab.

The parish center has approximately 10 people on staff, all of whom use technology in some form, except for the maintenance and housekeeping staff. The primary use of technology at the parish center is through the computer, mostly to do word processing,
information retrieval, and bookkeeping. The religious education classes (RCIA) will record and post online some classes, but there is not currently more media available outside of that.

The Director of Religious Education at the parish primarily does tech support. He troubleshoots the servers and aids in virus removal. An outside contractor is employed for more complicated issues. There are a few parent volunteers who help out at the school as well.

The Internet speed at the parish center was much faster than the speed at the computer lab, probably due to the need to split the feed between so many different computers. The existing Internet speed is much slower than the proposed broadband speed, and so the site would benefit from the new fiber.

The site was unfamiliar with UC2B prior to our research, but there is an increased interest in the project. The site does not have public computer stations, but would be able to use an increase in bandwidth for in-house projects, such as providing more streaming and online multimedia content as well. The church prefers to have members physically attend Mass, in order to foster a sense of community, but the ability to provide streaming options, such as Mass, would provide a service to the shut-in population.

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[http://ccha.tufl.org/cgi-bin/sessearch.cgi?cnt=10&sort=1&q=%22HOLY%20CROSS%20CATHOLIC%20CHURCH%20CHAMPAIGN%20ILL.%22](http://ccha.tufl.org/cgi-bin/sessearch.cgi?cnt=10&sort=1&q=%22HOLY%20CROSS%20CATHOLIC%20CHURCH%20CHAMPAIGN%20ILL.%22)
28: Mt. Olive Missionary Baptist Church

Ivy Renee Green
Undergraduate, College of Media

1 Executive summary

Mt. Olive Missionary Baptist Church is a fairly large congregation located on Bradley Ave. in Champaign. For the last several years the church has utilized advanced audiovisual equipment in their services, mostly for music and preaching. The new pastor, Keith Thomas, is very IT savvy and the church is currently undergoing many exciting changes, incorporating new technologies in order to enhance the ongoing mission of the church. Most of these changes and updates revolve around multimedia in the sanctuary, a new computer lab, and web services.
Mt. Olive Missionary Baptist Church is located at 808 E. Bradley Avenue, Champaign, Illinois.

Key: red marker = Mt. Olive Missionary Baptist Church
3 Photographs

Mt. Olive Missionary Baptist Church, 808 E. Bradley Avenue, Champaign, Illinois.
Mt. Olive Missionary Baptist Church’s sanctuary. This is where the members worship and have church services. It was completed in 2003 and is fully equipped with a sound system, speakers, amplifiers, video capabilities, and a digital piano.
Mt. Olive uses this audio system to record and maintain the sound systems within the sanctuary. CDs, DVDs, and cassettes are copied here for the members. Also shown are wireless routers for the Internet. The members in the church who have some background in electrical work installed the equipment.
4 Demographics

Mt. Olive Missionary Baptist Church has been described to be diverse. According to 2005–2009 U.S. Census Bureau data, there are 192,135 people living in Champaign, Illinois. Of that population 22,754 people are African-American. While Mt. Olive Church is an African-American church, there are a number of members who aren’t African-American who attend services regularly. Of the non-African American population most are white, Chinese, or Hispanic. Since its founding, the church has grown tremendously. Students from the University of Illinois and Parkland College attend services regularly. There are over 400 members of Mt. Olive Church. On a typical Sunday, there are about 250 people in attendance. Members range in age from very young (infants) to 80 years old. There are more older members than there are in the age group 18–40. Members come from a range of economic backgrounds. The church serves the entire Champaign-Urbana community.

5 History

On March 16, 1916, the Mount Olive Missionary Baptist Church was organized by Reverend D. J. Tyler, assisted by Amelia Tyler, Tolie and Eva Nunn, Morgan and Nora Knox, all of whom were former members of their sister church, the Compton Hill Missionary Baptist Church of St. Louis, Missouri. The original church began with prayer meetings in the home of Tolie and Eva Nunn at 1110 North Fourth Street and spread from house to house; the meetings included neighbors and friends. The prayer band grew in numbers. Recognizing the need for a church, Sister Eva Nunn, with the consent of the prayer group, wrote to Reverend D. J. Tyler, inviting him to come to Champaign and help organize the church. He responded immediately and came to Champaign, called a Council meeting consisting of himself, the Reverend Owen and Reverend Rivers of the Salem Baptist Church, other missionaries, and friends and began to make plans for organizing the Mount Olive Missionary Baptist Church. Their first priority was to acquire land on which to build. They were able to purchase two houses located on a lot at 1111 North Fourth Street from Alexander Lumber Company.

The first pastor was Reverend D. J. Tyler, the first deacons were Brothers Tolie Nunn, Morgan Knox, Johnny Sykes, Aden Williams, Jesse and Claude Britt, and Sylvester Hampton. The members carried chairs from their homes to sit on and donated coal from coal sheds to provide heat. Everyone went to Sunday school and prayer meetings and all joined in to help whenever and wherever needed. The old church at 1111 North Fourth Street, or the church “up in the field” as it was lovingly referred to, grew and prospered under the ten pastors who followed its founder Reverend D. J. Tyler. In 1958, the Reverend J. E. Graves came and, under his leadership and support of the membership was able to buy the land at 808 East Bradley and build the present sanctuary building and purchase and remodel a parsonage. In 1969, Reverend James Offut became the pastor and the church was able to pay off the mortgage and purchase a new parsonage. A few years later Reverend Lundy Savage became the pastor, serving for nearly 40 years and
expanding the ministry to include preaching, teaching, and evangelism. In February 2012, the church officially elected the Reverend Keith Thomas as pastor, shepherding a new stage in the church’s history.

6 Technology inventory

Mt. Olive M.B. Church is using technology to enhance their services. In 2006, the church built a new sanctuary. This is when they started using more computers, digital sound systems, wireless microphones, and digital instruments. In addition to the new sanctuary, a sound/audio room was built. This room houses all the audio, mixing boards, and wireless Internet routers and modems. All the computers are equipped for Internet use, except the young adults’ computer. In addition, the church has plans to install a computer lab in the near future.

Mt. Olive Missionary Baptist Church is equipped with a wireless network provided by AT&T. The church also has phone service, a fax machine, three printers, and four new flat-screen televisions.

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, Systems, Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Room with mixing boards</td>
<td>Wireless network through AT&amp;T</td>
</tr>
<tr>
<td>Wireless routers and modems</td>
<td>Phone service through AT&amp;T</td>
</tr>
<tr>
<td>4 desktop computers</td>
<td></td>
</tr>
<tr>
<td>2 laptop computers</td>
<td></td>
</tr>
<tr>
<td>Tablet used to preach</td>
<td></td>
</tr>
<tr>
<td>Telephones</td>
<td></td>
</tr>
<tr>
<td>Fax Machine</td>
<td></td>
</tr>
<tr>
<td>3 Printers</td>
<td></td>
</tr>
<tr>
<td>4 Flat-screen Televisions</td>
<td></td>
</tr>
</tbody>
</table>
7 Analysis

Mt. Olive Missionary Baptist Church is a fairly large congregation located on Bradley Ave. in Champaign. For the last several years the church has utilized advanced audiovisual equipment in their services, mostly for music and preaching. The new pastor of several months is very IT savvy and the church is currently undergoing many exciting changes, incorporating new technologies in order to enhance the ongoing mission of the church. Most of these changes and updates revolve around multimedia in the sanctuary, a new computer lab, and web services.

Pastor Thomas currently preaches from a tablet, and at any given time several computers and laptops are in use. Both young and old in the congregation are encouraged to incorporate technologies into their worship, and some people bring a digital Bible on eReaders and tablets to consult during services and bible study. There is currently wireless internet capabilities across the entire building, but increasing demands from a larger number of devices will require higher connectivity in the future, potentially supplied by UC2B.

The church is in the process of using multimedia in the sanctuary on a wider scale, both projecting inside the building and streaming services online. This, in combination with online bible studies and potentially even a church podcast, will offer an extension of services to those who cannot make it in to the physical church for reasons of sickness, disability, or location. The church has members that are fanned out across the country for school or work, and connecting to Mount Olive through digital media would be a great way for them to keep in touch with the ministry.

In addition to development of a new website, the church has plans to start a blog in the near future, incorporating ideas from the weekly bible study into an online format that anyone can see. They also would like to build a computer lab for educational purposes and so that members can have access to computers while in the building.

Webliography

www.earlyamericanmuseum.org/aanlsp02.pdf.

New Hope Church of God In Christ

Ivy Renee Green
Undergraduate, College of Media

1 Executive summary

The New Hope Church of God in Christ holds several services per week in addition to hosting New Hope Academy, an afterschool and summer program that helps children with their homework and educational needs. They have quite a bit of hardware technology, including a computer lab for the after school program with 10 desktop computers. However, their internet speed causes some problems. New Hope Church of God In Christ is embracing UC2B in the hope of better serving the church and the community.

2 Maps

New Hope Church of God in Christ shown in its neighborhood.
New Hope is near but not within the ‘yellow zones’ that will receive the UC2B broadband hook-up at no cost. So although houses nearby will not be eligible, the church is, because it is a “community anchor institution.”

3 Photographs

Young church member using a staff computer.

This New Hope Academy computer lab is used for the after-school program. Students use the computers to do homework, projects, and research.
A computer-related event at New Hope Church.

A view of New Hope’s computer facilities.
Two more views of the New Hope computer facilities.

New Hope Church is a small, growing church—with 60 members on the rolls, 12 of whom each head a specific ministry. The average age of the congregation is 37 years old.
5 History

According to New Hope Church’s website, Pastor Nash was called to the ministry in 1976. He was licensed and ordained as a gospel preacher in July 1980 by Rev. Willie C. Manual, and served as his assistant pastor for three years. He became the pastor of Rising Star Missionary Baptist Church in 1983 and in 1986 was led by God to reorganize the church into a Holiness ministry, therefore giving both men and women the opportunity to be used by God in ministry. He was also inspired to rename the church New Hope Church. In 1990 they joined the Church of God In Christ, Inc., under Bishop Bennie E. Goodman, Sr.

New Hope Church is a member of the International Church Of God In Christ, Inc., the fourth largest Protestant religious denomination in the United States of America with an estimated membership of more than 6.5 million. COGIC headquarters is located at Mason Temple in Memphis, Tennessee. From their website:

THE CHURCH OF GOD IN CHRIST is a Holiness Pentecostal Church of the Lord Jesus Christ in which the word of God is preached, ordinances are administered and the doctrine of sanctification or holiness is emphasized, as being essential to the salvation of mankind.

Our Church is commonly known as being Holiness or Pentecostal in nature because of the importance ascribed to the events which occurred on the Day of Pentecost, the 50th day after the Passover, or Easter as being necessary for all believers in Christ Jesus to experience.

On the Day of Pentecost, the first day of the week, the Lord’s Day, Supernatural Manifestations descended in marvelous copiousness and power. The gift of the spirit in the fulfillment of the promise of Jesus to clothe those who would wait in Jerusalem with power from on high, was accompanied by three supernatural extraordinary manifestations.

The sudden appearance of the Holy Ghost appealed first to the ear. The disciples heard a ‘sound’ from heaven which rushed with a mighty force into the house and filled it—even as a storm rushes—but there was no wind. It was the sound that filled the house and not a wind, an invisible cause producing audible effects. Next, the eye was arrested by the appearance of tongues of fire which rested on each of the gathered COMPANY. Finally, there was the impartation of a new strange power to speak in languages they had never learned “as the Spirit gave them Utterance.”

Our Church is also considered to be a member of the great Protestant body though it did not directly evolve from the European or English Reformation but had its origin within the General Association to the Baptist Church. Elder Charles Harrison Mason, who later became the founder and organizer of the Church of God in Christ, was born September 8, 1866, on the Prior Farm near Memphis, Tennessee. His father and mother, Jerry and Eliza Mason, were members of a Missionary Baptist Church, having been converted during the dark crises of American Slavery.” (www.cogic.com)
### 6 Technology Inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, Systems, Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Dell desktops for after-school program</td>
<td>Comcast Cable</td>
</tr>
<tr>
<td>1 Laptop for office use</td>
<td>Microsoft Office</td>
</tr>
<tr>
<td>1 office desktop</td>
<td></td>
</tr>
<tr>
<td>iPad</td>
<td></td>
</tr>
<tr>
<td>Television</td>
<td></td>
</tr>
<tr>
<td>Printer</td>
<td></td>
</tr>
<tr>
<td>Fax machine</td>
<td></td>
</tr>
<tr>
<td>Telephone line</td>
<td></td>
</tr>
</tbody>
</table>

| Internet Connection Speed Test, tested on Pastor’s laptop in office |
|-------------------------|-----------------------|
| Speedmatters.org | 12.241 | 1.607 |
| Speedtest.net | 5.7 | 1.68 |

### 7 Analysis

The New Hope Church of God in Christ holds several services per week in addition to hosting New Hope Academy, an after-school program that helps children with their homework and educational needs. They have quite a bit of hardware technology, including a computer lab for the after school program with 10 desktop computers. However, the internet speed causes some problems. The church currently pays $69 per month for an internet connection through Comcast, but it is not fast enough for the 10 Dell computers in New Hope Academy. Their computer lab is housed on the west side of the church, and also includes a printer. The pastor and his wife have separate offices with technology that includes fax, telephone, televisions, and a desktop computer. The pastor also owns an iPad and a laptop which he uses to teach and preach on Sunday mornings.

New Hope Church is in the process of building an additional computer lab onto the south wing of the building. This lab will better serve senior citizens and community members. The second lab will have different hours from Hope Academy’s computer lab. The church is still making plans for the new lab.

There is a lot of room for growth at New Hope Church. While the church is small in numbers, leaders within the church organization are willing to embrace the possibilities of UC2B. The Church is just outside of two FTTP areas that will receive free fiber connections to UC2B (see above map). The pastor and his wife are both excited about providing better technology and resources to the community and the church. But there are
a few obstacles hindering the church from operating effectively both in the community and the church: (1) current Internet service is not reliable; (2) the limited staff, who are not savvy concerning technology and digital skills; (3) not enough computers, (4) senior members “fear” the use of the Internet, (4) money; and (5) the equipment is old.

According to our research, interviews, and data, there it is clear there is a digital divide in New Hope Church. In van Dijk’s *The Deepening Divide*, the digital divide has been defined as the gap between those who do and those who do not have access to computers and the Internet (p. 2). In the case of New Hope Church, they do not have access to a reliable Internet connection, and would like to hook into UC2B. They are yet not able to perform basic functions online to keep the business of the church in order. Often staff will take church work home to finish because the internet connection is being used by the New Hope Academy.

Pastor Nash’s formulation embracing information technology for the purpose of the church, “The Mission, the Message, the Methodology” formed the basis for a short video on the African American Church in Champaign-Urbana. This 8 minute video also featured New Hope Church of God in Christ, Salem Baptist Church and Bethel A.M.E. Church (https://www.youtube.com/watch?v=1atc2WVP4wY)
30: Prairie Zen Center

Yueh-Mei Lin
Doctoral student, Department of Education Policy, Organization and Leadership

1 Executive summary

The Prairie Zen Center is located in Champaign and holds weekly meditation sittings and periodic workshops and sesshin, a period of intensive meditation over a number of days. Like most other religious institutions, weekly sittings are open to all. The Prairie Zen Center’s use of information technologies is shaped by three primary concerns: simplicity, spirituality centeredness, and nationwide connectivity. Students from Zen groups use the telephone to ask practice questions, a digital recorder is used to record dharma talks, and Skype is used to connect with students in other places, such as Springfield, Chicago, Wisconsin, and California. However, because of the slow speed of their DSL connection, Skype does not work as well as it could. Hence, they welcome UC2B and hope that the broadband can improve their connectivity with students outside Champaign. Also, they may be able to videotape dharma talks and post them online or stream their services and dharma talks for those who cannot participate in person.

2 Maps

The neighborhood of the Prairie Zen Center.
3 Photographs

Welcome to PZC

The Prairie Zen Center is located in Champaign, Illinois. Our resident teacher is Elhu Gemmyo Smith, first Dharma Heir of Charlotte Joko Beck and co-founder of the Ordinary Mind Zen School. Our schedule includes weekly sittings, periodic workshops, and sesshin six times a year.

The logo of the Prairie Zen Center posted on their website, http://www.prairiezen.org/. The picture reveals the essence of Zen philosophy, as the round circle, according to the Zen teacher, implies two things: one is fullness whereas another is emptiness. It signifies the nonduality of human existence.

The front door of the Zen Center as seen from the street.
Simplicity: the only PC computer in Zen Center. Its function is primarily for bookkeeping, transcribing dharma talks, and some file storage.
This is a small laptop which the Zen teacher uses for daily administrative tasks.

Wireless router, speakers, and a digital recorder—this last piece of equipment is used for recording dharma talks.
This Microphone is the major piece of technology that connects to Zen members who live outside Champaign.

4 Demographics of patrons or clients
Two groups come to practice at the center: regular students, and those who occasionally come to take part in a Zen retreat. The first group, according to the administrators, consists of around 50 to 60 members. The second group, based on the mailing list, numbers around 600. People in the first group range in age from 19 to 70 or older; most of them are 40 and older. Many are associated with the University of Illinois, being undergraduate and graduate students, current and retired faculty, and staff, but there are students who are not connected with the university. More than two-thirds of the members are white; some members are Asian or Hispanic Americans. Thanks to Internet communications, some students of the center live nation-wide, including in Springfield and Chicago, Illinois, Michigan, Wisconsin, Oklahoma, and California.

5 History
The Prairie Zen Center was started around 1992 by a professor in the Department of East Asian Language and Culture at UIUC. It members included a group of faculty, university staffs, students, and local people. At that time, they either met at a place in Neil Street or used a room in the Japanese House. Their resident teacher, Elihu Genmyo Smith, was invited to hold meditation retreats, which happened six times per year. Elihu Genmyo
Smith began his Zen training in 1974 at the Zen Studies Society in New York with Soen Nakagawa Roshi and Eido Shimano Roshi. He continued his training at the Zen Center of Los Angeles, where he was ordained a Buddhist priest by Hakuyu Maezumi Roshi in 1979. After completing formal koan study with Maezumi Roshi, in 1984 he continued his training with Charlotte Joko Beck (an American Zen teacher) at Zen Center of San Diego. Genmyo received Dharma transmission (shiho) and authorization to teach from Joko in 1992. He is a cofounder of the Ordinary Mind Zen School and currently lives in Champaign, Illinois where he is the resident teacher of the Prairie Zen Center. ([http://www.prairiezen.org/About/Genmyo.html](http://www.prairiezen.org/About/Genmyo.html))

In 1996, they bought the current home of the center at 515 S. Perspective Street, Champaign, and Mr. Smith was invited to be the resident teacher, which he remains. Currently, the activities of the center consist of a weekday sitting from 6 to 6:50 a.m., Tuesday evening’s open sitting from 7:30 to 9:00 p.m., Thursday’s dharma teaching from 7:30 to 8:00 p.m., and Sunday’s meditation for beginners. In addition, there are six retreats in a year.

The Prairie Zen Center’s use of information technologies is framed primarily around the activities of the center. From 1992 to 1996, the major information technology used was the telephone, because the teacher lived in California and students contacted him and asked him questions by phone. When Mr. Smith moved to live at the current center, the major communication technology in 1997 was still telephone, because students had moved to various places, including Springfield, Chicago, Michigan, California, Wisconsin, and Oklahoma. Now, the Zen Center is affiliated with another three practice Zen groups, Sangamon Zen Group in Springfield, Wetland Zen Group in Homewood, and Evanston Zen group in Evanston, Illinois. They ask questions via the telephone. They started to use a tape recorder to record the Zen teacher’s dharma talks (lectures on Buddhist teaching) a few years ago. Recently, they have broadened their usage of information technologies to include the telephone, computer, microphone, and digital recorder, among others. Two years ago, they also tried to use Skype to connect with other Zen Groups and members while giving teaching but the connectivity was too slow and either it was interrupted or the pictures were frozen. The connection did not perform well and so they stopped using Skype. Hence, they welcome the arrival of UC2B in their area, hoping that with the improvement of broadband connectivity, the connection between the Zen Center and students in other places can become better and faster.

### 6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC desktops</td>
<td>Microsoft Windows XP</td>
</tr>
<tr>
<td>PC laptops</td>
<td>Microsoft Windows 7</td>
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<td>Laserjet printers</td>
<td>Quicken</td>
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<tr>
<td>Scanner</td>
<td>Microsoft Office</td>
</tr>
<tr>
<td>Copier</td>
<td>Blog and Facebook</td>
</tr>
<tr>
<td>Projectors</td>
<td></td>
</tr>
<tr>
<td>Earphone</td>
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</tr>
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</table>
Speakers
Microphones
Wireless capabilities
Ethernet cables
Mouse
Audio recorder
Tape cassettes and recorder

<table>
<thead>
<tr>
<th>Download</th>
<th>Upload</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 mbps</td>
<td>2.65 mbps</td>
</tr>
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**Wireless Speed Test Results**

7 Analysis

The use of information technology in the Prairie Zen Center is guided by three concerns: simplicity, spirituality centeredness, and nationwide connectivity.

First, simplicity: this can be seen from the history of their use of technology. In the early years (1992–1997) before the Prairie Zen Center moved into its current building, the major technology used was the telephone, because at that time, the Zen teacher lived in California, and only came to Champaign to hold retreats. Hence, when students had questions, they would call him. After 1997, the range of technology used by the center has gradually widened to include a cassette recorder, microphone, and a PC. Now the forms of technology used by the center consists of a PC, laptop, Microphone, digital recorder, telephone, wireless, and a website. Comparatively speaking, for a Zen Center which has 600 members on its mailing list and around 50 to 60 regular students, the technologies used are very simple. The rationale behind this simplicity is reflected by their second concern—their usage of technologies is framed by their spiritual activity.

Second, spirituality centeredness: the technologies utilized in the center are primarily to support spiritual activities. These activities include consulting around questions of practice, teacher–student communication, recording dharma talks (lectures of Zen practices), keeping digital recorded files, and maintaining a website on which is posted a weekly schedule and information about annual retreats and other activities of the center. However, this does not mean that the information technologies are not important to the center: in fact, they play a key role in helping the center to connect with members who live outside Champaign.

Third, nationwide connectivity: of the 600 members on the mailing list, only around 60 members regularly come to practice in the Zen Center in Champaign or the center in Chicago and Springfield weekly. Most of them live outside or have moved away from Champaign but still would like to keep in touch with the center. Hence, the Zen Center has students in various places across America. Accordingly, these students need to communicate with the center either via phone or the Internet. The necessity of a better connection between the center and students who live outside Champaign is the biggest challenge that they are facing right now. In recent years, the Zen Center explored a new way to connect with other members outside Champaign, when they had services or
dharma talks but was not successful. They tried to use Skype, but because of the slow speed of the Internet connection, the talk was interrupted and the pictures were frozen. They therefore switched back to using the microphone to communicate with other members when they have a sitting meditation or a session of dharma talk. Hence, they are very happy to hear that UC2B is coming to Champaign and the Prairie Zen Center could be an anchor social institution. My interviewees said that if they had better connectivity, they could do many things—not simply use Skype, but also stream a lecture by the resident Zen teacher or when the members of the center gather for services. Since it is difficult for people who have moved away from Champaign to come back to meet with their teacher and participate in the practice, better broadband connectivity will improve the connection and communication for the Zen community. Hence, they told me that they would be very happy to participate into the UC2B project and become an anchor social institution of UC2B.

**Webliography**


31: Salem Baptist Church

Anna Holland
Master’s student, GSLIS, akholla2@illinois.edu.

1 Executive summary

Salem Baptist Church is excited about the services UC2B will provide. As a longtime leader in the African-American community and Champaign-Urbana area, the church understands the significant impact high-speed Internet will have on advancing their ministry and helping to bridge the digital divide. At present, Salem Baptist operates a small computer lab with nine desktops open up to five days a week. Computer classes are offered for youth, adults, and seniors. The general response to the classes has been one of eager embracement by members and staff alike. There is talk within the church administration about the opportunities the faster Internet speed would allow for in thoughts of unifying office files and conferencing from church to church. Over the years, Salem Baptist has always put the spiritual and physical needs of the community first. With the transition to digital, Salem has not lost their mission to provide for the spiritual and physical well-being of the individual. UC2B creates new possibilities for Salem Baptist to serve the community by continuing their cutting-edge space for learning and growth through the aid of technology.

2 Maps

Areas highlighted in gold are eligible for UC2B’s faster Internet service at a lower cost.
Legend:

- Salem Baptist Church
- Place of Worship
- School
- Shelter
- Police Station
- Fire Station
- Public Library
- University of Illinois
- Residential Area
- Business Street
3 Photographs

Salem Baptist Church from the corner of East Park and 5th Streets.
Three members of the Cyber Committee in the Salem Church computer lab. Left to right: Joe Lewis, Carol Lewis, and Chris Hamb.
Laptop used for Bible studies and presentations.

4 Demographics of patrons or clients

As the second-oldest African American church in the Champaign-Urbana area, Salem Baptist Church has a long history in the community, attracting people from a variety of backgrounds to worship through service. Though little has been recorded numerically in terms of member demographics, Salem Baptist would describe their church members as being fairly well educated. Granted, the provided information is a generalization and no data exists that accurately depicts the livelihoods of all individuals in the church. However, Salem Baptist takes pride in the number of members who hold doctorates and other certificates of higher education. Members include college professors, attorneys, schoolteachers, and assistant deans from the university, as well as many other notable professions. In summary, Salem Baptist leaders say: “We have all levels of education in our church. We just attract, seemingly, more of that [higher education] level of individual” (Bogan, Lewis, & Shelby, 2011). As far as poverty and income levels go, Salem pretty much spans the scale. Well-to-do members are not the majority, but that is not to say everyone else is scraping for a living. Then there also are members, such as retirees, who do not work and no longer earn a steady income. In result, the church serves a variety of populations: young, old, employed, struggling, and so on. It is also important to note the church still largely serves the African-American community, though its doors are open to all souls seeking Christ.
5 History

Overview. Salem Baptist Church is the second-oldest African American church in Champaign-Urbana, and the first Baptist church in the surrounding African American community. When Salem first organized in 1866, the surrounding area was little more than “prairie land, duck ponds and cornfields” (Tinsley, 1998, p. 1). There certainly was no university. Over the years, the great success of Salem has caused it to grow not only in members but also in size despite early trials. The original congregation building burned down the same year it was erected and services temporarily resumed in a rented hall above Swanell Drug Store at Main and Hickory Streets (“History of Salem,” 2011, p. 1). A large number of spiritual converts were received during this period regardless, and the church continued to grow spiritually and numerically. Not until 1902 did plans for the construction of the current building on 500 East Park Street form. The cornerstone was laid in 1908. In those same years, the church changed its name from Second Baptist to its current name (p. 2).

1940s and early 1950s. Following the end of World War II, thousands of soldiers and their families flocked to Champaign-Urbana to take advantage of the G.I. Bill at the University of Illinois. With countless new members, the church purchased its first parsonage in 1948 at 304 North Third Street. The population boom not only more than doubled the African American community, but also brought transformation and money to the church, and by 1950 Salem Baptist had fully paid off the mortgage on the parsonage (Lenstra, 2011).

1950s–1980s. Following on the heels of a population explosion, Salem Baptist underwent a remodeling project during the 1950s: “On May 27, 1957, the church officially voted to build an education annex” (“History of Salem,” 2011, p. 3). Construction finished the following year. During the 1950s and 1960s Salem Baptist raised $2955 under the leadership of Reverend William Howe Donaldson for office and technology-related equipment. With the money, a duplex offering envelope system, a typewriter, a motion picture projector and screen, filing cabinets, an adding machine, and a mimeograph machine were purchased (“History of Salem,” 2011, p. 3). With the addition of new technology, Salem Church discovered new possibilities. The civil rights movement in the 1960s also proved a turning point in technology use, with the ability to rapidly produce fliers and distribute information contributing to the success of the protests. Integrated housing struggles upset the Champaign-Urbana community once again during the mid-1960s and caused Salem to realize the necessity of becoming a city-wide church instead of a neighborhood church. With the decision to expand its doors during the 1970s and 1980s, Salem purchased multiple buses over the years in order to provide transportation to and from the church (Lenstra, 2011).
1990s to the Present. Technology began to play a more definite role in the history of Salem Baptist Church in 1990 when the church purchased a new photocopying machine. From that point on, printing church programs became easier (Lenstra, 2011). Computers came in 2006 or 2007 by means of a partnership with Champaign’s public school system, which provided computers for an after-school program. An updated lab opened in 2008 with the help of Parkland College and the University of Illinois; they assisted in acquiring computers, screens, and removing the old equipment. The computer lab has become instrumental in the ministry of the church. Salem Baptist offers computer classes for youths, adults, and seniors, and currently wants to provide an after-school program for youths in order to provide the resources and technology needed to assist with homework and teach computer literacy skills.

6 Technology inventory

The collective IT knowledge at Salem Baptist is growing and improving with the classes offered in the computer lab. The Cyber Committee has learned new programs to keep up-to-date with the software so as to be able to teach members how to access the information they are interested in learning more about. The senior class on Saturdays is currently the most popular class. Looking up family genealogy and the church’s history on the computer are popular

<table>
<thead>
<tr>
<th>COMPUTER INVENTORY</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Public lab computers</td>
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<tr>
<td>Total computers</td>
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</tr>
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<tr>
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<table>
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<th>COMPUTER SOFTWARE INSTALLED</th>
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<tr>
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</tr>
<tr>
<td>Adobe Dreamweaver</td>
</tr>
<tr>
<td>Dragon Speech Recognition</td>
</tr>
<tr>
<td>Game software</td>
</tr>
<tr>
<td>Java</td>
</tr>
<tr>
<td>Microsoft Office</td>
</tr>
<tr>
<td>Open Office</td>
</tr>
<tr>
<td>Security</td>
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</table>

<table>
<thead>
<tr>
<th>OTHER EQUIPMENT QUANTITY</th>
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</thead>
<tbody>
<tr>
<td>Digital optics security system running on one PC and several cameras</td>
</tr>
<tr>
<td>Docking station for laptop</td>
</tr>
<tr>
<td>Film camera</td>
</tr>
<tr>
<td>Flatbed scanner</td>
</tr>
<tr>
<td>Multifunction scanner (scanner, disk/card reader, printer, etc.)</td>
</tr>
<tr>
<td>Projector</td>
</tr>
<tr>
<td>Telephones</td>
</tr>
<tr>
<td>Webcam</td>
</tr>
</tbody>
</table>
information requests among the senior group. The youth groups prove fairly astute but need help discerning reliable Web sources from unreliable ones.

Salem has three church members and two nonmembers dedicated to IT work; they comprise the Cyber Committee. They run the computer lab, teach classes, and manage security. The hours the lab is open vary depending on use. One of the Cyber Committee’s achievements was setting up an email list to communicate with church members. Maintaining the church website and its entries on Facebook and Shutterfly and providing IT support to the church is done by additional tech-savvy church members.

<table>
<thead>
<tr>
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<tr>
<td>0.87 mbps</td>
<td>0.41 mbps</td>
<td>Windows XP</td>
</tr>
</tbody>
</table>

7 Analysis

Salem Baptist Church has been a leader in the Champaign-Urbana and African-American community for nearly 150 years. Salem Church has felt the need to adapt over the years to new technologies and develop new auxiliaries in order to better serve the community’s needs.

Technology has become a new facet of the church ministry and a new way to spread the message of God. With the incorporation of technology new possibilities and challenges arise. Today, the major challenges facing Salem Baptist include:

- Community evangelism (in the workplace, schools, and even the home)
- Providing youth with the information they need to flourish
- Bringing individuals who need help into the computer lab
- Teaching IT and digital skills
- Running the lab on volunteer time
- Slow Internet download and upload speed

Despite a handful of challenges presently facing the church, the ministry is optimistic about the opportunities that the site’s computer lab presents. Salem Baptist has supported UC2B in its past three years of struggling to get up and running, and they continue to be supportive and excited about the services UC2B will provide. Salem is especially excited about the equally fast upload and download speed that UC2B will provide.

Allowing for real-time access to information and chat will benefit the institution inside and out. From an administrative level, fast Internet would permit quick exchange of e-mail correspondence and documents, posting of events and sermons, video conferencing from church to church, and real-time security notifications.

On a community level, members would benefit by no longer having to wait for information to load. With the combination of fast Internet speed and software such as Dragon Speech, which the church already owns, the computer lab will better be able to
serve the particular needs of different members. Dragon Speech, for instance, is a program that translates spoken words into text. Church members and leaders who cannot type could instead dictate a letter, a sermon or any other words to the computer and get a text document. Gaming and school research are two popular uses for the computers among the youth and fast internet would help those. While gaming may not have the same value as education, Salem works hard to provide a community space with state-of-the-art resources for the purpose of ministry advancement, recreation, and knowledge growth.

As a result, developing a budget for technology maintenance and new equipment has become central to the mission at Salem Church to bridge the digital divide. The church values its partnership with the Graduate School of Library and Information Science at the University of Illinois. Prairienet, the Community Informatics Initiative, the CI Club and the Community Informatics Research Lab at GSLIS have proved instrumental in assisting Salem with hardware and volunteer teachers.

When looking into the future, Salem foresees periodically having to replace outdated equipment and building a budget that allows for the lab’s upkeep. Another goal of the church involves unifying the office administrative databases. Right now, the individual auxiliaries take charge of recording minutes, but the system is not standardized, nor is it kept in a central location. UC2B can assist in this endeavor by speeding up the process. Ideally, Salem would like to have all their files archived electronically. That way, the pastor or the office administration can easily view events happening in the church and in auxiliaries.

These may seem like small goals compared to the business of bringing lives to the saving faith, but the value is not lost, only unrealized. As the “Church of Love, Friendship and Inspiration,” technology at Salem Baptist aims to model the need to embrace technology for the overall betterment of the community (“About Salem,” 2011). Since its start, Salem Church has been forward thinking, enthusiastic, and methodical in adapting new ways to advance the message of God. The high-speed service of UC2B will provide Salem with new possibilities to serve the community. The digital skills at Salem are constantly expanding. As the computer classes and heavy lab use evidence, equipping individuals with marketable and enjoyable computer skills is becoming a component of Salem’s longstanding mission to equip the spiritual soul.

Bibliography


Salem Baptist Church, “History of Salem Baptist Church,” accessed October 4, 2011, http://eblackcu.net/portal/items/show/68

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**Webliography**


32: St. John Lutheran Church

Samantha Millsap
Master’s student, GSLIS

1 Executive summary

This report provides background information and in-depth analysis of the anchor social institution, St. John Lutheran Church, in Champaign, Illinois. It includes maps and photographs that will familiarize the reader with the location, appearance, and character of the church and adjoining school. Also included is a technology inventory and speed report that demonstrate the church’s ability to remain fairly up-to-date, despite financial shortcomings that may exist, as is often the case within religious organizations that rely on donations from members.

2 Maps

St. John is located in the heart of West Champaign.
St. John is located near residential homes, commercial locations, and Centennial High School, and between the intersections of several major streets.
Photographs

Outside view of St. John Lutheran Church.
Signage at main entrance.
Church office computing/technology resources.
4 Demographics of patrons or clients

St. John Lutheran Church has a total membership of 1130. The church does not collect other specific data such as ethnicity, age, or poverty/income level. The majority of the congregation is white and, according to the staff, these members span the spectrum of income levels.

5 History

The history of St. John Lutheran Church is long and comprehensive, dating back to 1855 when a small group of Lutherans in this area joined together. They built their first house of worship at 110 West Columbia in 1858, when the city that we today know as Champaign was called West Urbana (St. John Lutheran Church, p. 1). By 1896 the original church was too small and plans were made to move to a larger facility at 4th and University. This location was dedicated in 1900 (p. 6).

The years 1950—1956 saw the building of a new parsonage (house for the pastor) at a location on Mattis Avenue. It was first occupied by the Rev. Bekemeyer and his family, followed by Rev. Bussert and his family, and finally the Director of Music and Youth, Richard Leslie and family, because it was converted to the Little Lamb Nursery School, which is today the Little Lamb Preschool (p. 17). In 1955 a site for a new church at the same location was dedicated. This year also marked the church’s centennial anniversary. During this period the congregation also voted to incorporate themselves with the
Lutheran Church—Missouri Synod (p. 17). This branch of Lutheranism in the United States dates back to 1847 and today has a membership of 2.3 million people, most of whom live in the Upper Midwest (lcms.org).

On October 18, 1958 the cornerstone of the new church in which the congregation still worships was laid. September 11, 1960 was the day of the Service of Dedication for the brand-new church, which was presided over by Rev. Bekemeyer; the liturgist was Rev. W. Harry Krieger (p. 26). Throughout this period the congregation had been expanding greatly and so service was increased to three times each Sunday (p. 29). Today regular service is held twice each Sunday and on every Wednesday evening, to accommodate the large congregation.

St. John Lutheran School was added to the building in 1988 and now educates children from preschool to grade eight. A gymnasium, locker rooms, music room and stage were added to the school when its multipurpose facility was built in 1995. In 2006, a new playground was also added (stjohnls.com).

Since the completion of the building on Mattis Avenue, improvements and renovations have been accomplished, including the classrooms in the lower level of the building, bell tower reconstruction, remodeling of Fellowship Hall, installation of air conditioning to the hall, and replacement of the tile and carpet in the sanctuary with ceramic tiles (in the summer of 2005).

Rev. Jeff Caithamer was called into the position of Associate Pastor in 2009. Church service is now held three times weekly, to accommodate the size of the congregation, which is over 1100.

6 Technology inventory

<table>
<thead>
<tr>
<th>Technological Devices</th>
<th>at St. John Lutheran Church</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Desktops</strong></td>
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<tr>
<td><strong>Laptops</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>Software</strong></td>
<td>Windows 7</td>
</tr>
<tr>
<td><strong>Telephone System</strong></td>
<td>Connected with the school/incoming/outgoing/voicemail 16+ phones 4 or 5 phone lines</td>
</tr>
<tr>
<td><strong>Copier/Printer/Fax Machine</strong></td>
<td>1/1/1</td>
</tr>
<tr>
<td><strong>Server</strong></td>
<td>1 located across from church office</td>
</tr>
<tr>
<td><strong>Social Networking Site Accounts</strong></td>
<td>Facebook page – not for social interaction  <a href="http://www.facebook.com/profile.php?id=100001267515479">http://www.facebook.com/profile.php?id=100001267515479</a></td>
</tr>
</tbody>
</table>
School Equipment
4 smart boards, a computer lab with about 33 desktops, printers, laptops in each classroom, flat-screen TVs, secured Internet connection

Online forms
E-mail, newsletter, school enrollment

Other
Typewriter, sound system in sanctuary, video and recording equipment, public website

<table>
<thead>
<tr>
<th>Speedmatters.org</th>
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<tbody>
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</table>

**Speed Test Results (Office Computer)**

7 **Analysis**

St. John Lutheran Church and School serves men, women, and children primarily located in the Champaign area, and maintains a connection with the university through the number of members who are affiliated with or employed by it. Thus they have for years benefited from those followers who have been trained and educated at a high level. The location of SJLC is in the western part of greater Champaign and the building includes a large sanctuary, fellowship hall, nursery and Sunday school area, and church offices, as well as indoor and outdoor school facilities. Specifically, this Lutheran church is a congregation of the Lutheran Church—Missouri Synod, which is headquartered in St. Louis, Missouri.

This church, highly committed to its religious mission, principles, and congregation, is intent on utilizing technology and current digital trends as much as possible in order to improve all of its services. After discussing the impending services to be provided by UC2B, it appears that SJLC is interested in the project, but does not necessarily need it because they are already operating smoothly due to the services they have from their committed and knowledgeable membership.

The general consensus amongst those interviewed is that one of the largest concerns today is outreach, specifically attracting new, young members to its large, but generally older membership. St. John is already making use of Facebook as a tool for spreading news and announcements (but not socializing), and is also looking into other means of sharing information, potentially through YouTube. An interesting component of this church’s organization is that it records and makes easily available each sermon, in video and audio format, via download from the church’s website, and also broadcasts the recordings over the radio, continuing to be mindful of those who do not commonly access the Internet.

As for St. John Lutheran School, the faculty and staff seem to be working very hard to educate the students about technology and its multifaceted uses. They try to provide students with an open, friendly and yet instructive atmosphere, which will instill great
comfort with and excitement about technology throughout their lives, despite the lag caused by teachers who themselves may have difficulty accepting transitions into the digital age. Though it continues to be a common phenomenon (here at St. John Lutheran School, and conceivably just about everywhere)—young children taking on the role of instructor, in the classroom, at home, and elsewhere—when digital technology is being used, this is just an example of the many existences of the digital divide. In the school administration’s efforts to bring all teachers up to pace, i.e., enforcing that every educator utilize e-mail to communicate with parents and students and faculty and necessitating that SMART boards be used daily in the classroom, they have begun bridging that gap.

Bibliography


Caithamer, Rev. Jeff. Interview. 28 September, 2011.

Elliott, Rev. Mark. Interview. 28 September, 2011.

Fisher, Norm. Interview. 5 October, 2011.

Leffler, Ralph. Interview. 28 September, 2011.

Webliography


33: St. Luke Christian Methodist Episcopal Church

Claire Strillacci
Master’s student, GSLIS

1 Executive summary

St. Luke Christian Methodist Episcopal Church is an African-American congregation in Champaign. The church’s primary use of digital technology is for sound amplification during services, and they also use a computer and printer to create programs and brochures. However, with only one computer and no Internet access, they could be at risk of being left behind in an increasingly digital age, but the leaders of the church are fighting back. During the summer of 2011, a few computer instructional courses were run in the church’s basement using borrowed laptops, and at least 10 people were in attendance at each section. Armed with well-constructed plans and a serious, thoughtful committee, St. Luke is more than ready to take UC2B’s hand and step into the twenty-first century.

2 Maps

St. Luke CME Church is in a primarily residential area. Though further travel down the road reveals shops at first and then university buildings and housing, the church itself is immediately surrounded the homes of the neighborhood and of some of their parishioners, being cut off from South Fifth Street by a set of train tracks. The church is bookended by public bus stops, making access for those without a car a nonissue, provided they are physically able to utilize the bus. Also nearby is a public library, of benefit of parishioners.
A birds’ eye view reveals the nature of the park as primarily open space. The basketball courts and benches are frequently in use throughout the day, and its users have an unobstructed view of St. Luke, making it easily noticed by passersby. However, in the evening, the combination of several close-set parking lots with the unlighted greenery makes the atmosphere desolate and eerie. When lit up for its nighttime activities, St. Luke shines like a beacon against this backdrop.

3 Photographs

Main Entrance
This is the back office, in which the computer and printer are kept and used.

The computer is from 2004. Notice the difficulty all the different wires are causing in the outlet!
4 Demographics of patrons or clients

Both the patrons and the ministry of St. Luke are primarily African-American, and material about the church can be accessed via www.eblackcu.net, a project designed to help chronicle and illuminate the history and culture of African-American institutions in the Champaign-Urbana area. There is a great deal of diversity in the age of the patrons, and a level of participation that belies the regular hierarchical stratification of most ministries. St. Luke also has an active Youth Ministry, which holds frequent events. The first-ever meeting of the Communication and Information Technology Committee included two representatives from the Young Adult Fellowship, as well as a member who grew up in the church and one who had joined the congregation in 1976.

5 History

St. Luke CME Church in Champaign-Urbana was founded in 1909—but the history of its congregation stretches far before that. In their compiled history, entitled Celebrating the Scroll of Life, it is written that

our heritage stretches much longer than 93 years (1909-2002). It is 132 years as C.M.E. preceded by 84 years as Colored Methodist Episcopal; 215 years as the Methodist Episcopal Church in America; 270 years as Methodist Episcopal, since the founding of the Holy Club; 370 years as African Americans; and from the beginnings of human kind as African children of God. (Cargle, Sr. 2002, p. 5)

The building that was the first home of the congregation was purchased from John C. Coler for $1,000, and was located on Eads Street in Urbana. It first went by the name CME Mission, but soon adopted the title of Saint Luke Tabernacle Colored Methodist Episcopal Church, though that name, too, would change.

In 1914 the congregation moved to 809 South Fifth Street in Champaign, and remains there to this day. This initial construction was overseen by the pastor at the time, Reverend Whitsitt. However, it is recorded that “these early leaders met in a home in Urbana and later carried bricks and other construction material to 809 N. Fifth Street (the church's present location) to help build the church, “indicating that the move was a community effort (Cargle, Sr. 2002, 2p. 7). In 1962, after a balcony, elevated choir loft, and new front entrance were built, the church was rededicated. Unfortunately, six years later a fire devastated much of the architecture. As the structure itself was safe enough, the new church was rebuilt in the remnants of the old one, and once again “church members and neighboring churches helped with the reconstruction” (Cargle, Sr. 2002, p. 13).

As a forward-thinking church whose religious history makes them “among the first ethnic groups of people to lead in the healing of the races and regions after the civil war,” women also make up an important part of their community (Cargle, Sr. 2002, p. 8). Though “[d]uring the first twelve years of Our history, the C.M.E. Church gave no official place for women to work in the affairs of the Church,” women were able to hold the position of stewardess as early as 1894 (Cargle, Sr. 2002, p. 43).

Equally pivotal in the church’s history has been the St. Luke choir. Mentioned in newspapers as early as 1972, the choir has had many names over the years: Youth Choir,
then Young Adult Choir, and finally the New Life Choir. It is reputed to have once had over one hundred members, and provided ample opportunity to the church for travel and exposure. Photographs of both the current and past incarnations of the choir have been uploaded online (a link is listed in the webliography).

St. Luke has a record of every pastor it has had since its inception in 1909, beginning with Rev. Townsend and concluding with today’s Rev. Buchanan. All the above historical information was gathered from a book put out by the church itself, entitled *Celebrating the Scroll of Life*. The monthly newsletter, named *The Christian Griot*, contains a section called “Know Your History,” which often explores African-American heroes and culture and even the heritage of their own congregation’s members. St. Luke clearly has respect for history, and has been proudly and admirably keeping its own for more than a century.

### 6 Technology inventory

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Telephones (w/answering machine)</td>
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</tr>
<tr>
<td>Accessible Internet stations</td>
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</tbody>
</table>

In terms of technology, St. Luke has the bare necessities. Their one computer is a desktop from 2004, which, as one interviewee pointed out, is more than five years past its prime. It is also kept in a locked room, and is not available for public use. Interviews indicated that most of its programs, as well as the copier, are devoted to the creation of church bulletins and newsletters. The secretary allegedly keeps physical, not digital, records of these. Though at some point in the past the church was connected to the Internet, it does not currently have Internet access. This means there is *no* church website. The Young Adult Fellowship has created a Facebook page entitled S-A-I-N-T L-U-K-E CME Young Adult Fellowship (YAF), but members must maintain it on their own time, outside of the church. It functions primarily as a message board.

Most remaining available technology is used for worship services; St. Luke has a sewing machine and a camcorder, presumably for special events like pageants or concerts. There are also corded microphones and wireless microphones, which are commonly used in churches during service.

### 7 Analysis

Overall, there is a serious need for technology at St. Luke. The church just recently gained Internet access and an email address. Without a website it is nearly impossible to learn about the church unless you physically encounter one of its members. There is little hope that members outside the immediate community would be willing to travel to the site itself just to learn simple facts about the congregation, especially considering there
are so many other institutions that can be easily researched from the comfort of one’s own home. It is unlikely to grow or even maintain membership if it remains so underexposed.

Equally, though there is a wheelchair ramp at the back entrance, the architecture is riddled with stairways, making access for physically challenged parishioners difficult. Remote viewing would be highly beneficial, as a structural overhaul is rather unlikely.

Luckily, the administration at St. Luke is aware of the need; what they may lack in technology they make up for in zeal and preparedness for when technology eventually makes its way into their hands. The members of the Communication and Information Technology Committee are well-informed as to the intention of the UC2B project, and have already conceived a list of possible benefits of technological advancement for their congregation. The interviewees demonstrated a remarkable understanding of the needs of their particular community in their projected projects. Many of the suggestions were geared towards the direct betterment of the congregation in this time of economic crisis. One explained her interest in the project, saying, “My thought is, if we offer computer classes to our members, that will make them more marketable, it’ll improve their skills, if they’re looking for jobs, most job applications are online, that they will be able to download applications…having those computer skills…will make them more marketable, no matter what age they are.”

St. Luke also hopes to offer aid to those currently beyond the reach of their congregation. An interviewee remarked, “[W]hen people are more marketable…we improve as individuals, we improve as a group, and so that’s the thought behind that…. [M]ost churches are empty, most of the week, and if we can make our church more a community center, have it open to our members, then the community, we as a community would benefit.”

It seems St. Luke Christian Methodist Episcopal Church is a perfect fit for the UC2B project. The Communication and Information Technology Committee accurately pinpointed their current difficulties, and expressed awareness of troubles they could still face; one committee member voiced concern about “convincing the older members there’s even a need for technology in the church,” but all remain faithful that their thoughtful list will win over the doubters. They have already proven there is demand for technology in their community: over the summer a few computer instructional courses were run in the church’s basement using borrowed laptops provided by the Graduate School of Library and Information Science. At least 10 people were in attendance at every session. It is not hard to imagine just how much good they could do with the power of UC2B’s broadband at their hardworking fingertips.

**Webliography**


34: St. Mary Catholic Church/St. Patrick Catholic Church

John Newcomer
Master’s student, GSLIS

1 Executive Summary

St. Mary Catholic Church is a fairly large and very diverse congregation located at the intersection of Park and Wright Streets in Champaign. St. Mary’s shares some of its communication technology (as well as a pastor) with St. Patrick Catholic Church in Urbana. Both churches use technology mainly for office applications such as word processing for programs and spreadsheets for bookkeeping. While they both also have Internet access and websites, UC2B could provide more opportunities such as live streaming for members who cannot be present at mass.

2 Maps

This Google Map pinpoints the location of St. Mary Catholic Church at 612 East Park Street, Champaign, Illinois.
This map from Bing.com indicates key places in the vicinity of St. Mary Catholic Church (pinpointed in blue).
St. Mary Catholic Church building from East Park Street facing northwest.
The marquee of St. Mary Catholic Church suggests a diverse parish community.
St. Patrick Catholic Church from Main Street facing north.
A computer workstation in the St. Patrick Catholic Church Library located in the Parish Center. The computer was donated by a parishioner.
4. Demographics of Parishioners

St. Patrick Catholic Church in Urbana serves an equally diverse community as that of St. Mary’s in Champaign. The parish includes visible Vietnamese and Congolese groups. Masses at St. Patrick’s are similarly offered in multiple languages (English and Vietnamese). St. Patrick’s staff and volunteers have offered programs specifically designed to assist the information needs of foreign speakers. Drawing upon his native proficiency in French, the webmaster of the church hosts a computer skills course for the Congolese parishioners, many of whom also speak French. The parish is diverse by other measures as well. The parish body includes a noticeable student presence from the University of Illinois at Urbana-Champaign.

5. History

History plays an important role in understanding the technology uses and needs of local communities. St. Mary Catholic Church first emerged alongside the introduction of the Illinois Central Railroad to Champaign County, Illinois in 1852 (St. Mary’s Vertical File). The labor-intensive project attracted approximately 8,000 to 10,000 workers. Most of the workers were Irish Catholics with a small German Catholic population as well. In order to provide religious services for the workers, Fr. Thomas Ryan of the Diocese of Chicago established a brick church in 1854 (St. Mary’s Vertical File). Within two years the church was officially recognized by the diocese. St. Mary Catholic Church was the first Catholic church in the area (St. Patrick’s Parish, 1994, p. 3).

St. Mary’s Parish expanded its ministry through a sustained construction effort. A pastoral center was erected in 1871, followed by a school in 1878, and a convent in 1885 (News-Gazette, October 24, 1891). Within a few years, plans were put forward to construct a new church building. The cornerstone of the new St. Mary Catholic Church was dedicated by the Diocese of Peoria on October 28, 1888 (St. Mary’s Vertical File). While the initial school accommodated 200 students, this figure grew. In 1915, Fr. Richard Flynn directed a St. Mary’s School building campaign to replace the existing facility. Fr. Flynn also helped to create St. Mary’s Emergency Hospital in 1920, which is Mercy Hospital today (St. Mary’s Vertical File).

The early growth of St. Mary Catholic Church was not without its difficulties. By the mid-twentieth century, the church community confronted a growing crisis in Catholic education. Catholic schools in the Diocese of Peoria suffered from a shortage in religious teachers and available funding. Much of the problem stemmed from the inability of parish schools to replace Catholic sisters who served as teachers. Many Catholic schools in the diocese were forced to shut down (O’Rourke, 1970, p. 141). Rather than follow suit, St. Mary Catholic School consolidated with Holy Cross Catholic School in 1968. The decision, in effect, closed St. Mary’s School and served as a turning point in the church’s history. In the absence of parochial education, religious education programs assumed greater significance (O’Rourke, 1970, p. 141). St. Patrick Catholic Church later provided many of these programs.
6. Technology Inventory

These two churches have differing access to technology resources and utilize these resources in different ways. St. Mary Catholic Church maintains two primary communication systems for its parishioners. First, it provides a parish telephone and voicemail network. The phone system at St. Mary’s is unique in that it is shared across three sites: St. Mary Catholic Church, St. Patrick Catholic Church, and a church rectory. This shared communication medium is especially useful for the parishes, as they are led by the same pastor. The phone system allows priests to receive voicemails across offices no matter where they are located. St. Mary’s also provides a webpage. The online site locates the church and provides contact information and a mass schedule. The website is also equipped with such features as videos of homilies, an image gallery, and online bulletin access. Much of the information, however, has not been updated within the past few years.

In terms of on-site technology resources, St. Mary Catholic Church does have Internet access and has Wi-Fi capability, but this service is not utilized. To manage parish data, church staff members rely on a spreadsheet program. The spreadsheet program has many limitations, among them being that it cannot be accessed by staff members off-site. St. Mary’s offers few programs and activities involving technology use at the church. This is perhaps influenced by the particular user needs of the community. Comprised of a less-affluent population, members may lack access to technology resources such as personal computers and home Internet.

While the two parishes share a phone system, this communication channel is maintained from the St. Patrick’s Parish Center. The Parish Center serves as an informational hub for the St. Patrick’s community. The building houses the parish support staff, including the secretary, bookkeeper, and librarian. Staff members are equipped with PC desktop computers while Fr. Hogan has a personal laptop. The parish bookkeeper uses the computers to manage parishioner information on database software. The facility also provides high-speed Internet and Wi-Fi to church members for church programs and activities. The building also houses the church library, which is equipped with a desktop computer and some 3,000 volumes.

In addition to on-site information systems, St. Patrick Catholic Church makes use of an impressive website. The St. Patrick’s homepage offers a plethora of information for parishioners. This includes access to mass schedules, a staff directory, online bulletins, an interactive parish calendar, and links to social support networks such as unemployment and senior groups. As noted previously, the website promotes the St. Patrick’s building campaign, begun in 2001. A video narrative of the project can be viewed online. Parishioners also have the ability to donate to the campaign online.

<table>
<thead>
<tr>
<th>Technology</th>
<th>St. Mary Catholic Church</th>
<th>St. Patrick Catholic Church</th>
</tr>
</thead>
<tbody>
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<td>Telephone Access</td>
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<td>x</td>
</tr>
<tr>
<td>Public Computers</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>
7. Analysis

The present study of St. Mary Catholic Church in Champaign and St. Patrick Catholic Church in Urbana reveal the enormous potential for digital technologies to impact local communities. The inclusion of St. Patrick’s provides a greater understanding of the interconnectedness of various social institutions. The study of the two parishes also offers a unique perspective for comparing existing technology use between the two locations.

The bookkeeper and head of the website committee at the church explained the many ways in which technology would help the parish community. First, greater technology would assist parish staff in completing their work. Greater digital access also engages members of the church in new ways. Bible study and youth groups have come to rely on the Wi-Fi services for their programs. Finally, technology offers a means for St. Patrick’s to expand its religious ministry—a crucial part of its mission. The parish has a sister church in Bethlehem overseas. Open profession of the faith in Bethlehem can be difficult for Catholics. Having the ability to connect with the church via Web conferencing would provide a greater sense of connection between the two churches and increase cultural understanding.

There are also possible benefits in the parish library. In the past, the librarian has struggled with issues of accessibility. While the church library houses a sizable collection of books, religious materials, and bulletins, parishioners have only limited means of searching the collection. The library relies on the local catalog software of a single computer. The lack of an online network restricts the parishioner’s access to search the library collection. Allowing the church library’s catalog to be made available online would allow parishioners to search the collection from home, and also provide other users a means of exploring the collection. The parish librarian envisions a future consortium of church libraries in which information technology would enable greater networking among separate libraries and allow for interlibrary loans. This would be especially useful since churches often operate on limited budgets.

St. Patrick’s webmaster echoed many of the potential benefits that greater technology resources could bring to his parish. He discussed the potential for high-speed Internet to allow for new forms of video streaming. While the St. Patrick’s website currently offers audio and video media, improved Internet access would enable staff members to host online conferences. If each of the parishioners and staff had broadband Internet, the church could host online conferences as a means of communicating. Already, technology classes for Congolese parishioners reveal the potential for computer and Internet use to bring community members together.

One concern in the discussion of future technology use is the practicality of such systems in physical communities, particularly those with limited resources. The comparison of technology use at St. Mary’s and St. Patrick’s reflects a digital divide or disparity in information resources among different communities. For those with limited financial resources, cost burdens present a barrier for tapping into digital networks. For some elderly users, new digital technology presents an unfamiliar and often unwelcome information platform.
While issues of equity and accessibility present real concerns, the present study suggests that these obstacles can be overcome. The successful implementation of technology at St. Patrick’s serves as a model for future technology use among the anchor social institutions identified in the UC2B project. The computer classes for Congolese parishioners demonstrate how technology use can transcend nationality and bring people together.

**Bibliography**


“St. Mary’s Roman Catholic Church History.” St. Mary Catholic Church Vertical File. Champaign County Historical Archives, Urbana, Illinois.


**Webliography**


35: St. Matthew Catholic Church

Colleen McClowry
Master’s student, GSLIS

1. Executive Summary

St. Matthew Parish aims “to educate and form our children and all members of our parish to know, love, and serve God and community.” Since the church was built and classes were first held in 1962, St. Matthew has flourished and become a K-8 school with high standards. The parish aims to cultivate a strong sense of community while nourishing spiritual practice. Technology has and will continue to play a large part in this mission, primarily for everyday purposes like communication and the attainment of educational objectives with regard to the curriculum. However, St. Matthew is in need of a much more efficient and cost-effective approach to high-speed technology; the UC2B project is timely for this significant need.

2 Maps

"Google Maps - St. Matthew’s Parish and local surroundings in Champaign, IL"
3 Photographs

St. Matthew School
St. Matthew School Computer lab and library

Mobile cart with Mac laptops and laserjet printer; managed by Judy Sebens, St. Matthew's Technology Coordinator
Mobile cart with Mac laptops, laserjet printer, digital camera, and iPad;

St. Matthew, October 1977 (photo courtesy of Urbana Free Library)
4. Demographics

There are 418 students enrolled at St. Matthew this year and about 1600–1800 parishioners who regularly attend Mass and belong to the church. There are about 45–50 additional staff at St. Matthew, including teachers, office and janitorial staff, and religious figures.

Most of the parishioners and students at St. Matthew live in Champaign, although many come from Urbana and surrounding towns such as Mahomet and Savoy. According to leaders in the church, St. Matthew Parish is quite diverse in terms of ethnicity. There is a large Filipino and Vietnamese community and a small Hispanic community, as well as many other minorities, most of which are African-American and Asian. Debbie attributes this ethnic diversity to the University of Illinois, and considers it a wonderful thing. St. Matthew strives to be a multicultural community. Most of the registered parishioners fall into the middle-class income bracket ($25,000–$100,000 salary a year). There are individuals and families on the high and low end of this economic scale, but given that St. Matthew is a private school with a yearly tuition and expectations of donating to the church, it may be assumed that the majority of families enrolling their students there are not below the poverty line. In terms of regular service attendance, about 60% of these individuals are 40 years old or older. The elderly (65+ years) constitute the majority of those in regular attendance at church services. Younger families and k–8 students from St. Matthew are more involved in the school than in the church.

5. History

Originally part of Holy Cross Church, St. Matthew Parish came into existence in 1960 when Father John Walter McGinn supervised a fundraiser to build a school and convent on Mrs. Bridget O’Connor’s ten-acre family farm located in southwest Champaign. Father James Martin was appointed the first pastor, and the sisters of St. Francis staffed the church. The sisters of St. Francis have since left the parish, and a number of head pastors have served over the past decades. The current pastor of St. Matthew is
Monsignor Mark J. Merdian. He has been in this role since 2003 and serves as the sixth pastor of the parish.

In 1964, St. Matthew School was formed with eight grades and by June 1985, St. Matthew had established itself as a separate parish from Holy Cross Church. In the beginning St. Matthew School had an enrollment of 238 students. In 1966, an addition to the school expanded the facility to 16 classrooms, a multipurpose room, a gymnasium, a teachers’ lounge, and school office. A Parish Rectory was also built that year. In 1985, the school expanded with a new library and additional classroom space. In 1995, the Sisters of St. Francis of the Martyr St. George came to the parish, established a convent and began teaching at the school. In November 2001, a Parish Building Committee was selected to plan for parish/school facilities, including a new parish center and school addition. In July 2002, an architect was selected and plans for a new Parish Center and Performing Arts/Athletic Facility were completed.

In September 2003, St. Matthew Parish’s 25th Anniversary began to raise funds needed for the new Parish Center, Performing Arts/Athletic Facility and Diocesan Capital Campaign, all of which have since been successfully completed. The school has grown to provide outstanding religious-based education from kindergarten through eighth grade. After many years of planning and fundraising, the parish has grown to be a thriving faith community, made up of more than 1,600 families. Currently, the school has more than 415 students.

In terms of technology, in 1990 the school had eight Apple IIGS computers. These were used very little (if at all) by students, but were experimented with by the limited staff. Eventually the number of IIGS computers increased to 13 and students split time between the library and the computers. With help from fundraising, the school set up a desktop computer lab in the mid-1990s that added 24 more PowerMac computers and a few PCs. Since that time, the school and the church have incorporated more and more laptops and computers. They have added printers, scanners, and educational software, such as an online grading database and various computer-instructed resources for their curriculum. They have a website with a wealth of information, such as a directory, teacher web pages, and various events and updates from both the school and the church. The website is currently in a state of transition to using WordPress layout features. In the past two years, St. Matthew has added Promethean boards and iPads to support instruction, and has plans for every classroom to be equipped with such tools. As of last year, St. Matthew has utilized the social networking site Facebook to promote various events of interest. There continues to be plans for technology use at St. Matthew. Overall, the community promotes technology usage in their education and their community events, and has plans to keep up with the rapid changes in technology.

### 6 Technology Inventory

<table>
<thead>
<tr>
<th>technology</th>
<th>St. Matthew Church</th>
<th>St. Matthew School</th>
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</tr>
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<td>----------------------------------</td>
<td>-----------</td>
<td>----------</td>
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<tr>
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<td></td>
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<tr>
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<td></td>
</tr>
<tr>
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<td>13</td>
</tr>
<tr>
<td>Education software</td>
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<td></td>
</tr>
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<td>All in one Printer/scanner/copier</td>
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<tr>
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<tr>
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<td>Projectors</td>
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<td>Microphones</td>
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<td>Teleconferencing equipment</td>
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</tr>
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</tr>
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<td>yes</td>
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<td>yes</td>
<td>20</td>
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<tr>
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<td>5</td>
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**CHURCH SPEED TESTS**

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<th>Upload (Mbps)</th>
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<td>4.339</td>
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**SCHOOL SPEED TESTS**

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<td>1.410</td>
<td>1.428</td>
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7. Analysis

According to the mission statement on the church’s website, St. Matthew Parish aims “to educate and form our children and all members of our parish to know, love, and serve God and community.” Since the church was built, and classes were first held in 1962, St. Matthew has flourished and become a K-8 school with high standards. The parish aims to cultivate a strong sense of community while nourishing spiritual practice. Technology has and will continue to play a large part in this mission.

Technology usage currently reveals itself in myriad ways at St. Matthew. All three individuals interviewed mentioned examples of the ways technology plays a role in their everyday life, and cited goals for its continued relevance. Primary usage is for everyday purposes: communication between staff and with the community and the attainment of educational objectives with regard to the curriculum. Strong emphasis has been placed on the importance of promoting and updating the community through the parish website, teaching students various technologies, instructing students in novel ways (like using Promethean boards), and connecting the faculty, staff, and parents through means of digital communication (primarily the Area4 e-mail service).

Examined closely, technology usage exists beyond the everyday needs of the school and church. The website, created over 10 years ago, provides a number of resources for those involved in or considering the Catholic community in some measure. Live streaming of homilies and links to various Catholic organizations, such as the “Catholic Encyclopedia” and “The United States Conference of Catholic Bishops” broadcast St. Matthew Parish not just to local communities, but to individuals, religious and otherwise, across the world. The church’s use of social media is another facet that promotes the church on a much greater scale. The parish’s Facebook page is updated nearly every day with events and ideas that may be of interest to those in the Catholic community. One example of this comes directly from the head pastor at St. Matthew Church. While on sabbatical in Italy, he keeps the parish informed concerning his work and findings via Facebook. Thus, in utilizing technology this way, he effectively provided insight into how the parish uses technology while connecting this to the large Catholic community.

A large part of the vision and future goals of St. Matthew involves technology. Whether it’s in redesigning the website to be more user-friendly and accessible, integrating Promethean boards to support the instruction of students, or developing ways to market and deliver services of the parish on a much broader scale, the need for high-speed wireless technologies is crucial for St. Matthew Parish.

Like many nonprofit organizations, St. Matthew Parish struggles with funding their endeavors. Being a religious institution, they have to rely solely on community support. They have received a few grants for things such as Promethean boards and iPads, but the majority of the money they apportion for technology comes directly from fundraising efforts and tuition payments. A portion of the tuition each year is allotted to updating and managing the technology of the school. The church’s yearly budget is used for the smaller portion of technology management needed in their separate facility. It is worth noting that historically, St. Matthew has had many successful fundraising efforts to
purchase computers and other equipment. Still, as the individuals I interviewed were quick to point out, funding any relatively small private institution is a challenge.

When thinking about the long-term benefits of UC2B at St. Matthew Parish, the church and school do not hesitate to stress its importance. They have come a long way in terms of adding technology resources and continue to add more each year. With the emergence of so many new technologies and society’s evolution toward e-communications and functions, St. Matthew is in need of a much more efficient and cost-effective approach to high-speed technology. Ultimately, St. Matthew is aiming to improve their educational standards and communicate more effectively with their parish; staying relevant and up-to-date with technologies will effectively help them to do so.

**Bibliography**


**Webliography**


36: Stone Creek Church

Pawel Szponar
Undergraduate

1 Executive summary

Stone Creek Church is a very large and diverse congregation in Urbana, with over 1,000 members attending on a weekly basis. They use information technologies in innovative ways both for the daily tasks of the staff as well as to reach out to their members. Some examples include free Wi-Fi inside the church, creating and sending e-bulletins, and using iPads for program registration. In addition, weekly sermons are not only streamed online, but virtual attendees may sign in to interact with the congregation through a chat box. Though this church was not included in the original UC2B grant, they are very much interested in connecting to the community fiber to continue to develop and improve their digital ministry.

2 Maps

Map showing the location of the church.
Map locating the church relative to other businesses in the area.

3 Photographs

Screenshot of the church online sermon initiative.
Media processing room.

Stone Creek Church.
4 Demographics of patrons or clients

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>SCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American/Alaskan</td>
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<td>0.76%</td>
<td>0.25%</td>
<td>0.34%</td>
<td>2.03%</td>
</tr>
<tr>
<td>Black</td>
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<td>16.99%</td>
<td>9.47%</td>
<td>9.97%</td>
<td>44.89%</td>
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<td>3.97%</td>
</tr>
<tr>
<td>White</td>
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<td>18.09%</td>
<td>7.86%</td>
<td>7.69%</td>
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</tr>
<tr>
<td>Asian</td>
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<td>1.27%</td>
<td>0.68%</td>
<td>0.68%</td>
<td>4.31%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.51%</td>
<td>0.85%</td>
<td>0.76%</td>
<td>0.51%</td>
<td>2.62%</td>
</tr>
</tbody>
</table>

100.00%
Number of Nations Represented:

- Africa: 14
- Asia/Pacific: 11
- Europe: 5
- North America: 2
- Latin America: 7

*Materials provided by the church.*

5 History

1966 – John Eldrod starts the church (Grace Assembly of God). He meets with 2 or 3 couples and 8 college students at the Moose Lodge and then at the Burnham House in Champaign. In November, Dick Foth becomes the pastor.

1967 – The church continues to meet at the U of I YMCA. In July they break ground at the current site on Race Street as a Home Missions Project of the IL District Assemblies of God. In November they hold the first service in the original sanctuary with 36 in attendance. The name is changed to Urbana Assembly of God.

1970 – By April the church is autonomous: fully self-supporting, self-propagating, and self-governing.

1972 – The present auditorium is completed in December.

1975 – The gym and the lower level are added to the building.

1978 – Jim Hall becomes the pastor of Urbana Assembly.
1984 – The church becomes a district-supervised church with IL District Leadership as its governing body.

1988 – Gary Grogan becomes the Pastor on April 10th. Average attendance: 50 people.

1991 – The church helps to launch Crossroads Campus Church on the U of I campus.

1995 – The church becomes autonomous with fully functioning elders and deacons.

1996 – There are special renewal services in the summer with hundreds making fresh commitments to faith and many having special encounters with the Holy Spirit. Over 100 are baptized in water at the end of the summer!

2000 – The church continues to expand with renovations made to the lobby and auditorium and Phase 1 is completed the following spring. Average attendance: 670 people.

2004 – The Phase 2 Café Project is completed in August and is used for youth/Sunday services.

2005 – Discovering Life Together is launched as a method of discipleship and membership. In one year alone 118 commit themselves to membership!


2007 – Urbana Assembly becomes Stone Creek Church on September 9th, expanding to 4 services and conducting the 40 Days of Purpose Spiritual Growth Campaign. They have their largest cell group attendance, connecting 800 people in small groups. Several missions teams travel locally and abroad, with 200+ receiving a mission’s experience. The Food Pantry ministry begins as a means of reaching the community. Average annual attendance: 1279 people.

2008 – Stone Creek Church serves 400–2000 people per month through the Food Pantry. In recognition of the Grogans’ 20th anniversary as Lead Pastors, there is a celebration with previous pastors and former attenders, recognizing 40 years of ministry as a church. There are 1774 people in attendance during Easter Week.

6 Technology inventory

Website
Twitter
8 Laptops for pastors
20 Desktops for staff
Facebook
iPad
iPhone credit card device
Online sermons
Verizon Wi-Fi hub
Wi-Fi
Skype
Online Planning Center
7 Analysis

It is clear that the Stone Creek Church is one of the pillars of the Urbana-Champaign community. Through its focus on diversity and acceptance, the church is presenting a role model of how we all should live. This is impressive when taking into consideration how modern the church’s approach is in terms of getting its message across. From a technological standpoint, it is clear that the church is keeping up with times as can be observed by its extensive usage of the Internet to spread the word about its values and allow people who can’t always physically visit the church to be a part of it.

The church understands ideas such as sustainability and retention rates, and thus creates easy-to-manage websites and other helpful media outlets to ensure that no matter who is going to be the next person in charge of those things, everything will go smoothly and without any problems. Recording sermons is one of the most important aspects of serving the community and by utilizing its website, the church is able to upload sermons online and allow people to view them and archive them anytime. The church’s use of technology creates a comfortable atmosphere for people to participate and allows for an unprecedented ease of access to the church’s message. This is extremely important in today’s world, and even more so since the church is an incredibly multicultural and multigenerational institution and thus is responsible for creating connections between peoples and cultures.

Through its various programs such as the Stone Creek Kids, Sudden Impact, and CU Internationals, the church is making a real impact on the community in both Urbana and Champaign. During the interview, it became apparent that the people in charge of the church are really excited about the technology they have at their disposal and they are quick to recognize the advantages that the UC2B can bring for them. Through various initiatives, such as allowing for free Wi-Fi inside the church, as well as creating and sending out e-bulletins and using iPads for program registration, the Stone Creek Church is an exceptional example of how a religious institution can successfully tap into the technological resources and make the best of them. Their sheer size and the ability to serve so many people annually makes them somewhat of a leader in terms of Internet technology in the area.

Webliography

Stone Creek Church. 2011. Stone Creek Church. 11/12/11
<https://www.stonecreekwired.com>
1 Executive summary

GIS is used by many organizations around the world to capture, manage, analyze, and visualize data to aid information management and decision making. Local institutions in Champaign County recognized the need to share, standardize, and align their spatial data, and formed the Champaign County GIS Consortium (CCGISC) for this purpose in 2002. Seven organizations serve as member agencies, including local municipalities and the University of Illinois, while several other institutions participate as data clients, using GIS data for applications. The Consortium also sells data and maps to organizations and individuals. CCGISC will play a key role on the 1 Gb Urbana Champaign Big Broadband (UC2B) network, because GIS data is useful in many applications for a wide variety of organizations and it tends to be large and difficult to share through other means.

2 Maps
GIS Consortium offices located in the Brookens Administrative Center (map made on GIS Webmap Public Interface).

GIS Consortium offices located at Brookens Administrative Center in Urbana (map made on GIS Webmap Public Interface).

3 Photographs

GIS Consortium offices located at Brookens Administrative Center in Urbana.
4 Demographics of Champaign County

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
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<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
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<td>Foreign-born persons, 2006–2010</td>
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<tr>
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Source: U.S. Census Bureau State & County QuickFacts. Data is for 2010 unless otherwise specified.
5 History

The Champaign County GIS Consortium was created in 2002 through an intergovernmental agreement between seven agencies, including: Champaign County, the cities of Champaign and Urbana, the villages of Rantoul, Mahomet, and Savoy, and the University of Illinois. Champaign County was designated as the lead member of the Consortium. Through a Memorandum of Understanding, the County passed administrative responsibility to the Champaign County Regional Planning Commission (CCRPC). The servers are managed by County IT staff and are incorporated into the county’s wide area network (WAN), proving fast connections between county buildings and the City of Urbana. Since 2002, the Consortium has steadily increased the amount of data that it maintains and makes available to the public and member agencies. In 2010, data was made accessible to the public through an interactive online map service.

6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
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<td></td>
</tr>
</tbody>
</table>

7 Analysis

A GIS (Geographical Information System) is a system for capturing, storing, analyzing, managing, and presenting geographic data and provides a number of benefits to local government agencies including public works and planning departments, elections, law enforcement, and property assessment applications. GIS is of particular use to municipalities who maintain large amounts of spatial data for planning and analysis purposes.

Many of the member agencies maintain their own GIS records, but it was realized that coordination of regional datasets would provide cost savings, productivity and decision-making benefits. Because of these benefits, several local governments came together to form the Champaign County GIS Consortium, with membership open to any agency. In addition to the seven current members, CCGISC has four principal data clients:
Champaign-Urbana Mass Transit District (CUMTD), Public Health District, Urbana-Champaign Sanitary District (UCSD), and the Economic Development Corporation. The Consortium has six full-time staff and is governed by a Policy Committee and a Technical Committee. The former makes decisions about budget, work plans, and general policies and is made up of one representative from each of the member agencies. The Technical Committee also consists of representatives from the seven member agencies, and provides technical assistance and guidance.

The main function of the Consortium is to maintain and update regional datasets. Core data layers include information such as political and tax-district boundaries, property or parcel data, topographic data, assessment data, and scaled aerial photographs (orthophotography). The Consortium also maintains a GIS and does mapping for Piatt County, Champaign County’s neighbor to the west and part of the Champaign-Urbana metropolitan area.

Two GIS technicians work primarily on property or assessment mapping for Champaign County. The remaining staff updates all other core data layers and work on outside contracts like assisting the Village of Mahomet and Piatt County with their GIS needs.

In an effort to provide as much benefit to the member agencies, CCGISC works to partner with other county-wide programs. Currently CCGISC and METCAD are in discussions to form a partnership that will help improve the GIS street centerlines and address information provided to first responders. Accurate street centerlines which includes address ranges, and address point data enables 911 dispatch software to map emergency calls more precisely and effectively.

Other applications for Consortium data include defining soil type acreage on agricultural lands to assess the value of farmland, mapping bus arrival/departure times at a particular stop for CUMTD and maintaining sewer infrastructure maps for UCSD. The spatial information needs and reporting habits of the member agencies, data clients, and partners are diverse, which makes the creation of data layers and services challenging, but a single source ensures accurate county-wide data that can be shared, manipulated and overlaid in productive and innovative ways.

The Consortium also maintains a GIS webmap public interface which has been online for the past two years. Anyone may access and manipulate the map by adding and removing layers, searching tax parcels by Parcel ID Number (PIN) or Address, identifying parcels and zoning classifications, marking up the map using drawing and text tools, and measuring distance, area, and perimeter. (http://www.ccrpc.org/gis/maps.php accessed 3/25/12)

The Consortium will realize data sharing benefits from UC2B. GIS datasets are large and require a high-speed network to effectively transfer data. CCGISC currently has a fiber-optic-cable connection to the County and the City of Urbana other agencies receive data transfers through disk storage devices. CCGISC is constantly updating its data and the sooner updates can be retrieved the greater the member benefit. With the 1 Gbps local connection speed of UC2B, agencies will be able to access the most recent data at any time increasing functionality and data consistency. The Consortium and all of its member agencies recognize the benefits of UC2B and CCGISC is preparing a technology improvement plan for the anticipated increase of traffic on their server.
38: Champaign Park District

Qiyuan Liu
Master’s Student, GSLIS

1 Executive summary

The Champaign Park District maintains 14 parks and facilities throughout the city in order to fulfill its mission of “provid[ing] quality parks and recreation for all ages in our community.” Technology at the sites varies, from a park with no building or Internet access to the Bresnan Meeting Center, which has wireless internet. Staff use IT for daily tasks, and the district has a successful website and Facebook page to share information with and connect to the community. With UC2B, in addition to the benefit staff will receive from a faster office Internet speed, the Champaign Park District is interested in providing free WiFi to the public in all of its parks, both indoor and outdoor.

2 Maps

The many facilities of the Champaign Park District, including the Bresnan Meeting Center, the administrative offices (“A” on the map), and the Leonhard Recreation Center (“C” on the map).
This map on the website (http://www.champaignparkdistrict.com/parks_facilities.htm) shows the distribution of parks, facilities, and trails, including Hessel Waterplay, Laborers Memorial, Lindsay Tennis Complex, Olympic Tribute, Prayer For Rain, and Skatepark. Facilities, parks, and trails are marked as different icons on this map, and visitors can access each item by using the drop-down list to get more information.
The Bresnan Meeting Center is the administrative office of the Champaign Park District.
Bresnan Meeting Center, which is the administrative office of Champaign Park District. As part of their daily work, staff people perform daily office tasks using computers, phones, printers, and software including Microsoft Office, etc.

This is a blank daily shift report. Because they have so many remote sites that lack Internet access, they have to turn in a lot of files in hard-copy format, such as shift reports, to their databases.
The center houses a full-size gymnasium, air-conditioned activity space, locker rooms and offices, and offers recreational and educational programs for all ages.
Multimedia devices used by staff/volunteers in the Leonhard Recreation Center.
### 4 Demographics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Total (number)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>85,055</td>
<td>The district also serves the University of Illinois population and the City of Urbana through a reciprocal agreement with the Urbana Park District.</td>
</tr>
<tr>
<td>Assessed Valuation</td>
<td>$1,550,079,751</td>
<td>The equalized assessed valuation for real estate for 2010.</td>
</tr>
<tr>
<td>Tax Rate</td>
<td>.6537 per $100</td>
<td>The property tax rate for 2011 is .6537 per $100 of assessed value.</td>
</tr>
<tr>
<td>Current Budget</td>
<td>$11,368,000</td>
<td>The operating budget for fiscal year 2011–2012 is $11,368,000. The fiscal year begins May 1 and April 30.</td>
</tr>
<tr>
<td>Staff</td>
<td>65 full-time/9 part-time</td>
<td>The park district has an appointed executive director responsible for administration. The district employs 65 full-time staff, 9 part-time regular staff, and over 400 part-time, seasonal, and temporary workers.</td>
</tr>
<tr>
<td>Board</td>
<td>5</td>
<td>The Champaign Park District is governed by five elected residents of Champaign. The Champaign Park District Board of Commissioners meets twice a month to conduct the business affairs of the district. The Regular Board meetings are held on the 2nd Wednesday of the month at 7 p.m. and Study Session meetings are held on the 4th Wednesday of the month at 5 p.m. All meetings are held at the Bresnan Meeting Center, 706 Kenwood Road, Champaign, Illinois, unless otherwise posted. From time to time special meetings of the board may be called to discuss special or emergency issues. Residents are invited to attend and to make suggestions or comments to improve the programs or facilities offered.</td>
</tr>
</tbody>
</table>

### 5 History

Champaign’s parks have been a main part of the city’s fabric nearly as long as the city has been in existence, with land for Champaign’s first park having been made available in 1854. This property was originally laid out as a public square and possibly as the site for the county court house. In 1859 the 12.7-acre property became the first park in Champaign County and was named White Park in honor of the man who had donated the land. Known as the “Commons”, the two-square-block space began to be used by settlers as a cow pasture in 1861, when the city council adopted a motion “to permit calves to be turned into the City Park at $0.35 per month.”
Construction workers pose beside the bandstand and restrooms in White Park (now West Side Park), 1904–1912.

The Champaign Park District first organized as a Township Park District in 1911. It had limited taxing power and depended on donations of land to establish the park system. The majority of Champaign’s current parks were acquired through donations and in the mid-1920s parks that were owned by the City of Champaign were transferred to the park district. Since then all public parks have been held by the district. The first tax levy was made in 1912 and collected in 1913. Of note, the Wabash and Big Four Railroads interposed tax objections at the June term in 1913.

In 1951 a new community center was opened and would serve as the launching pad for Champaign’s first structured recreational programs. Located on North Market Street, the building was the former site for the Church of the Brethren. Activities in those first years included adult square dancing, social clubs, drama club for grade-school children and neighborhood night programs.

By the middle 1950s it was evident that due to the exploding growth of the community and the limited taxing powers of the Township Park District, the current structure was inadequate to meet the needs of residents in the community. Therefore, in 1957 the district was reorganized as a General Park District by a referendum of voters. The Champaign Park District has since been a local unit of government with its own legal and financial responsibilities and is governed by five local residents who serve six-year terms.
One of the first projects for the new board was the acquisition of nearly 80 acres of land that would later become Centennial Park. This park was planned cooperatively with the Champaign School District, which owned 40 acres of property adjacent to the land. The result would become a unique integration of facilities on both properties. In 1985 the Champaign and Urbana Park District joined forces to create what is now known as the Champaign-Urbana Special Recreation Program. The program currently serves nearly 400 special needs residents every year, providing them with quality recreational opportunities with the assistance of specially trained staff.

Some of the facilities of the Champaign Park District are of historical significance. The Springer Cultural Center, located in the heart of downtown Champaign, was originally constructed as a post office in 1904 and was listed on the National Register of Historic Places in 1975. Another historical facility located in downtown Champaign and owned by the Champaign Park District is the Virginia Theatre, which has been part of this community’s history and quality of life since 1921. Built in the tradition of great vaudeville movie palaces of the 20s and early 30s and now in the National Register of Historic Places, the Virginia is a beautiful theater with a rich link to our past.

In the 1980s the Champaign Park District had only about five computers. People stood in line to buy tickets at the box office. All the computers were used for accounting purposes. Other computers were gradually added, as well as the first recreation registration program. After that, personal computers and desktops were provided for all full-time staff. An internal website was constructed in the late 1990s, but a public website was not considered at that time.

Many of their files were paper based, as they had a different registration system and accounting system. At that time, some notifications of facility status (open or closed, due to the weather) went out to customers via phone calls.

### 6 Technology inventory

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers (Desktops, Laptops)</td>
<td>120</td>
<td>All Windows based.</td>
</tr>
<tr>
<td>Public computers</td>
<td>10</td>
<td>Distributed in two sites through a grant program of the University of Illinois.</td>
</tr>
<tr>
<td>Server windows based</td>
<td>4/5</td>
<td>Different functions</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.champaignparkdistrict.com">http://www.champaignparkdistrict.com</a> 1</td>
<td>completely done by the district (PHP, HTML)</td>
</tr>
<tr>
<td>Social network sites</td>
<td>Facebook page 1</td>
<td><a href="http://www.facebook.com/pages/Champaign-Park-District/71565162976">http://www.facebook.com/pages/Champaign-Park-District/71565162976</a></td>
</tr>
<tr>
<td>Twitter</td>
<td>1</td>
<td><a href="http://twitter.com/#!/champark">http://twitter.com/#!/champark</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Applicable</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connections</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Wireless hotspots (for administration use)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Wireless hotspots (for public)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Telephone system</td>
<td>Yes</td>
<td>Toshiba System</td>
</tr>
</tbody>
</table>

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### Management Systems/Applications

<table>
<thead>
<tr>
<th></th>
<th>E-mail system</th>
<th>Yes</th>
<th>Microsoft Exchange/Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance management system</td>
<td>Yes</td>
<td>They purchased systems from other companies for online tickets sales, and registration for recreation programs</td>
<td></td>
</tr>
<tr>
<td>Recreation management system</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Text Messaging</td>
<td>Yes</td>
<td>Only for staff, not customers. They have e-mail texting, through which they can e-mail to a phone number for free.</td>
<td></td>
</tr>
<tr>
<td>Standard Microsoft applications</td>
<td>Yes</td>
<td>Standard Microsoft applications</td>
<td></td>
</tr>
</tbody>
</table>

| Databases | Yes | MySQL (applied to the website) |

<table>
<thead>
<tr>
<th>Electronic resources</th>
<th>Videos</th>
<th>Yes</th>
<th>Based on the website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audios</td>
<td>Yes</td>
<td>Based on the website</td>
<td></td>
</tr>
<tr>
<td>Brochures</td>
<td>Yes</td>
<td>Based on the website and paper files</td>
<td></td>
</tr>
<tr>
<td>Webpages</td>
<td>Yes</td>
<td>Based on the website</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speed Test Results (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Means</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Speedmatters.org</td>
</tr>
<tr>
<td>Speedtest.net</td>
</tr>
</tbody>
</table>

### 7 Analysis

The main goal of the Champaign Park District is to provide parks and recreation opportunities for the community, and the main challenge is being able to provide Internet services such as Wi-Fi for public use. The Champaign Park District has two technology staff people who work on software and training.

In terms of facilities issues, their main problem is lacking certain facilities for programs and the ability to process information, which changes constantly. They also have public computers available in two sites, which were set up by a group of students from the University of Illinois on a grant. They are interested in making Wi-Fi available in the parks, and thus are very interested in partnering with UC2B.

Currently the Champaign Park District has more than 120 computers, all Windows based, which handle daily tasks, and they have 10 public computers in two buildings. They have four or five servers and they put together their website, based on PHP and HTML, entirely by themselves. Patrons can find a great deal of information about the district on the website. They also have a Facebook page and a Twitter account to help them provide services. They have their own e-mail system, finance management system, text messaging system, and standard Microsoft applications.

For the e-mail system, they have Microsoft Outlook and Outlook Express, which can be seen as an online version of the phone through which they can e-mail to a phone number. This allows the district to update information about the status of facilities affected by the
weather or for other reasons quickly. They send out weekly e-mails regarding reminders of sports programs, for example, to certain groups of people (usually coaches and players) during the major sports seasons.

Their telephone system is made by Toshiba, and some of their services, such as online tickets sales, have been implemented with the help of a third party. For many of their remote sites that lack Internet access, they have to submit a huge amount of hard-copy files to their databases.

Because local government is limited by how much revenue it takes in, the district’s first priority is make the use of their facilities more convenient for people. They also need more bandwidth in order to handle more people using more computers. People like watching videos on the website, which greatly impacts their network traffic and thus decreases their network performance. It is currently difficult to find a balance because they also need to do business and file transferring, which require relatively high Internet speed; thus, the Champaign Park District is looking forward to the faster connection through UC2B.

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Champaign Park District. (2011). *CPD Funformation Summer 2011*[Brochure]. Champaign, IL: Champaign Park District

Webliography


39: City of Champaign

Claire Strillacci
Master’s student, GSLIS, strilla2@illinois.edu

1 Executive summary
Champaign’s City Building is the home of the town’s governmental offices. The technological resources of the City Building are designed to expect and fulfill the public’s demands; it has a highly sophisticated website where a browser can do anything, be it pay for a parking ticket or apply for a job. The hope is that more of their content, such as video footage of meetings, will be readily accessible to the public with the advent of UC2B in more homes. Rather than focus only on how UC2B would help them, as civil servants, the employees instead brainstorm how the project might be used to benefit the citizens of Champaign.

2 Maps

Champaign City Building
The City Building’s nearness to the Illinois Terminal bus and train station makes it so that any citizen with a bus pass or a handful of change can have direct access to their local government. It fosters a sense of transparency and availability that speaks volumes about the level of performance and commitment to which the city employees hold themselves.

3 Photographs

The City Building’s façade.
The foyer of the building includes couches and a desk where a person might call an assistant to their aid if needed. Flyers bedeck its exterior; maps of the building's offices similarly adorn the walls within.

The building's main computer systems. Their size, complexity, and location in a highly air-conditioned room speak to the importance of technology in the day-to-day business of the City Building's employees.
This empty shelf once contained units like those filling the adjacent shelves; the functions and information once stored there have recently been moved online, conserving valuable space and energy.

4 Demographics of patrons or clients

The employees of the City Building serve the public of Champaign, which census information places at about 67,518 inhabitants, 34,206 of which are men; 73.2% of the population is white, 15.6% is African American, and 4% is Hispanic (Champaign IL Census Records).

The 450 employees show a similar, though not exact, distribution in their own ranks. Though it is still more likely to find a man in a department leadership position, female employees are significantly represented elsewhere in the building. As is a common symptom in governmental work, many of the employees are 40 years old or upwards, but it is reported that some departments, such as Planning, are home to a younger demographic.

5 History

West Urbana was incorporated in 1857, at which point records of regular meetings by the “Village Board” begin. These first meetings are said to have taken place at a building which, built two years prior, “was the first public school in West Urbana and stood on the lot located at the southwest corner of Hill and Randolph Streets” (McCollum). A year later records indicate at least one meeting was held at the store of West Urbana’s first
postmaster, Baddeley, but the location was clearly not meant to be permanent. Histories report that “over the following decade, board meetings were held in the offices of either various board members, the city attorney, or the police magistrate” (McCollum). While the Village Board was struggling to get their feet under them (and a roof over their head) 1861 found West Urbana having been granted the right to become the city of Champaign, as it is called today.

Eight years later the Village Board signed a lease with R. M. Eppstein for “Council Rooms,” which would do them fine for nearly 10 additional years. In 1888, the suggestions of Alderman Weeks, who “urged the necessity of the erection of a City Building,” spurred on the initiative to build Champaign’s first official City Building (McCollum). Several plots of land were suggested, with today’s site being offered at no cost by David Bailey, under the conditions that “the City would erect thereon a City Building not costing less than $5,000, to be erected within five years” (McCollum). When put to a vote, this site was the obvious winner. Another proviso stipulated that there be “a suitable room be provided in the new City Building for the use of the Public Library” (McCollum).

With a site in mind, local man Seeley Brown was chosen as the architect, and it fell to their financial committee to “[devise] ways and means to replenish the depleted City Treasury” after the building (estimated to have cost $12,000) had been built. Edward Bailey, Esq, whose father had donated the land, purchased $20,000 worth of bonds to fund it, and by 1889 building on the City Building had begun, engendering disputes over the location of the cornerstone, prison cages, and a particular drain, among other important architectural needs.

On December 3rd, 1889 the council met in the City Building for the first time, in rooms that the local paper described as being “large and elegant…lighted brilliantly, and [with] the rich furniture showed off to excellent advantage” (McCollum). Unfortunately, these new, rich rooms were not built to last, and in 1931 a new building was proposed on the site of the first, one which would “house the same functions-City offices as well as the Police and Fire Departments” (McCollum). Though the process would be expensive, the public voted in favor of the rebuild.

The new architect, George Ramey, would eventually create a building which was described as “a building which would set an example for governmental buildings all over the world,” though issues over wages, weather, and cost slowed its initial progress for a bit (McCollum). The building was completed in 1937, but it could not be furnished, and therefore unusable. In true democratic spirit, “a number of public-spirited citizens, acting independently, began a collection which furnished the first floor lounge as well as the offices of the chief and the assistant chief” until appropriate accommodations could be purchased (McCollum).

The building has since seen the removal of one small tower, the exodus of the fire and police departments, and many other slight cosmetic transformations, but it remains at heart a building designed, used, and loved by the citizens of Champaign, and equally rich in history.
6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, Systems, and Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>25000 nodes:</td>
<td>GroupWare for e-mail, calendaring, word processing, and spreadsheet applications.</td>
</tr>
<tr>
<td>Printers</td>
<td>Geographic Information System (GIS)</td>
</tr>
<tr>
<td>Projectors</td>
<td>Arms</td>
</tr>
<tr>
<td>Laptops (which may be checked out)</td>
<td>Crimeview</td>
</tr>
</tbody>
</table>

The City Building does some work in the cloud, and anticipates more opportunities to do so with the added reliability of a UC2B connection. Equally avant-garde is the building’s use of its Geographic Information System (GIS), which was described by one employee as a “business intelligence tool.” When data is merged into the GIS, the output is often integrated as diagrams or maps. This visual remodeling of spatial data has allowed patterns in incidents or reports or locations to become more easily recognizable. The more promptly such patterns are noticed, the more quickly and efficiently solutions or resolutions can be put into effect. In cases of crime watching or public ordinances, both of which fall under the City Building’s purview, detection and understanding of such patterns can be critical, and can help anticipate the city’s needs. Similar data interpretation is being done with shared local data from systems like Arms and Crimeview, which officials outside of Champaign can both inform and have access to.

The technological resources of the City Building are designed to expect and fulfill the public’s demands; it has a highly sophisticated website where a browser can do anything, be it pay for a parking ticket or apply for a job. The hope is that more of their content, such as video footage of meetings, will be readily accessible to the public with the advent of UC2B in more homes.

7 Analysis

Most of the UC2B anchor social institutions are—rightfully so—looking at the ways they can use UC2B to help themselves. However, as public servants, the employees of Champaign’s City Building are primarily concerned with how UC2B might be valuable to citizens, and how to get people to use it.

Perhaps more concerned with UC2B’s success or failure than any one other institution on its own, interviewees shared many of the concerns of UC2B’s most strident opponents. Each mentioned the necessity of financial sustainability and concern over how to engender continued use of the resources by the public. One remarked, “with the grant, obviously to be successful, that means having a good level of subscription. We can meet the grant requirements by putting the stuff in the ground, but if nobody’s using it that’s not doing anybody any good.” To keep the project fiscally viable, it is important to show people the benefits UC2B offers Champaign.

Luckily, UC2B can be doing people a lot of good, and the City Building employees are well versed in its varied forms, both simple and complex. One related an anecdote of frustration at the inadequacy of football-game streaming at the current Internet speeds—a pain no doubt shared by thousands of sports fans in the city, and a pain which would be
eased by the arrival of Big Broadband. Another recommended the positive ramifications such a project might have on the environment, as greater Internet reliability might attract greener companies to the area. Equally important to mention was UC2B’s affordability. One interviewee said,

[A]s someone who’s just changing Internet subscribers, I can say there’s nothing at the price we’re offering that has the speed we’re offering. Maybe a one-year type of thing, and at not much less than what we’re charging. Fifteen bucks. If you’ve never been with Comcast before, you get fifteen bucks and that lasts 12 months and then you’re paying 30, 40, for anything.”

Such situations are quite recognizable to any citizen in any city—it just so happens that Champaign is a city with solutions as well as problems.

The simple elucidations of the citywide benefits made it difficult to imagine low subscription rates as an actual possibility. Apart from offering services that many companies would have to pay a great deal of money to build from scratch elsewhere, and thus making Champaign a very appealing place for industry, UC2B can also play an important role in keeping the current industry in Champaign. Technology can make or break a company in the business world, so staying at the head of the pack for speed and cost-effectiveness is pivotal. In today’s financial climate, it’s a race some companies are losing. UC2B’s usefulness for companies may seem so obvious it gets passed over, but its benefits simply cannot be overstated. The employee recalled a company that established itself in Champaign before UC2B:

The earlier example of Amdocs, you know, Amdocs had to build their own redundancy, their own fiber connections, because they weren’t able to gain reliable connections…. Some of these [companies] get to a point where you’re at risk of losing them from the community, so not only is it a matter of what can we create in the future, it’s a matter of keeping them. Four hundred and some employees, I think, at Amdocs?

That’s a figure that’s hard to argue with.

In order for UC2B to effect any good in Champaign, it has to establish some staying power. The officials at the City Building have a clear vision of benefits of UC2B, beyond just what it could do for their own office’s communication speeds and access to the cloud. In sharing their vision, they could help convince others to join their cause—and they just might erase the subscription stumbling block in the process.

**Webliography**


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40: City of Champaign Township

Ashley E. Booth
Master’s student, GSLIS

1 Executive summary
The City of Champaign Township is in charge of property tax assessment and general assistance. The township is governed by an elected Supervisor and Board of Trustees, consisting of City Council members. Although assessing is a major part of what the township does, general assistance is also an important aspect of the work they do as 27.2% of the township residents are living below the poverty line.

The general assistance-transitional assistance fund is essentially a place of last resort for people who do not qualify for Supplemental Security Income or TANF and have already applied for food stamps, a medical card, and exhausted all their unemployment or sick leave. Many of the recipients of money from the fund have applied for Social Security or disability but have not yet begun receiving these benefits. Currently, about 500 people have come to the office requesting assistance and about 250 people were approved and given assistance. Since the township is run on tax dollars and it must work within the strict parameters of the law, the township officials are not looking to expand their services but rather to provide as many grants as they can to qualifying recipients.

The office has worked to become more fiscally responsible and is now able to offer additional programs, such as Christmas presents to recipients and community members with little means, an emergency fund, and bags of basic toiletries for anyone needing them. Last summer the township was also able to provide more than a hundred box fans to senior citizens through other community programs.

Although the City of Champaign Township offices’ technology use is basic and they do not see UC2B changing their organization much, they feel it is important to support a program that could greatly benefit the township and their patrons.
2 Maps

The neighborhood of the City of Champaign Township Supervisor’s and Assessor’s offices.

City of Champaign Township (darker gray area) (map courtesy of the City of Champaign website).
3 Photographs

The outside of the City of Champaign Township’s Supervisor’s office.
The outside of the City of Champaign Township’s Assessor’s office.

This is where applicants and members of the community are greeted at the City of Champaign Township’s Supervisor’s office.
An example of a staff computing area in the City of Champaign Township Supervisor’s and Assessor’s offices.

4 Demographics of patrons or clients

According to the 2010 U.S. Census, 81,055 people live in Champaign; 67.8% were White, 15.62% were African-American, 10.6% were Asian, 6.3% were Hispanic/Latino, 0.3% were Native American, 0.1% were Pacific Islander, 2.7% were other, and 3% were two or more races. The chart below outlines the census demographics.
The census also recorded 34,434 housing units. The median income for a household was $32,795 and the median income for a family was $52,628. Most importantly, the census found that 27.2% of people were living in poverty. From our interviews we learned that approximately 500 people have come to the City of Champaign Township supervisor’s office requesting assistance and are put in the system. Out of those 500, about 250 people are actually approved and given assistance.

5 History

Champaign was founded in 1855 as “West Urbana,” and became Champaign in 1860. The City of Champaign Township was formed in 1916.

In 2000, The News-Gazette reported that in the last fiscal year the township provided a total of $33,000 in general assistance and was critical of the township for providing so little assistance. In 2006, the newly elected City of Champaign Township Supervisor, Linda Abernathy, reported that the township was providing assistance to 100 people a month, up from 20 a month in 2005 under the previous supervisor. By early 2007, the township’s cash reserves were dwindling, and the township dropped about 80 able-bodied recipients. Another 50 disabled recipients had their grants cut to $100 a month. In 2009, the current supervisor Pamela Borowski was elected into office. According to our interviews she quickly worked to trim the budget, and in 2010 the monthly stipend went from $212 to $225. Currently the stipend is $245 a month.

6 Technology inventory

The City of Champaign Township Supervisor’s office has four computers, three printers, and one copy machine. The assessor’s office next door has 4–5 computers and 2 printers. The offices utilize a variety of software, including Virtual GA (for maintaining client information), GEMS program (for billing), and maintain a website.
The following table outlines the current Internet speed for the organization.

<table>
<thead>
<tr>
<th>Website</th>
<th>Speed Down (Mbps)</th>
<th>Speed Up (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speedmatters.org</td>
<td>1.284</td>
<td>0.315</td>
</tr>
<tr>
<td>Speedtest.net</td>
<td>1.30</td>
<td>0.31</td>
</tr>
</tbody>
</table>

7 Analysis

According to the township’s website, The City of Champaign Township is one of the oldest local government organizations and has property tax assessment and general assistance statutory responsibilities. The township is governed by an elected Supervisor and Board of Trustees, consisting of City Council members. The supervisor’s office employs the supervisor; a case worker; and an office manager; and currently, there are four people working in the assessor’s office.

While most people think of the township as simply the assessor’s office, general assistance is a large part of what the township does. According to their website, “Under the Illinois Public Aid Code, any individual who satisfies the eligibility requirements is entitled to receive aid through the Township General Assistance-Transitional Assistance fund. Specifically, the code states that “the Supervisor of General Assistance shall receive and pay out monies raised by taxes or allocated by the State for public aid purposes and shall provide public aid to all persons eligible.” See also 305 ILCS 5/6-1 (“financial aid in meeting basic maintenance requirements shall be given under this Article to or in behalf of persons who meet the eligibility conditions”). Essentially what this means is that the township is often the place of last resort for people who do not qualify for Supplemental Security Income or TANF (Temporary Assistance For Needy Families), administered by the Social Security Administration and the Illinois Department of Human Services, respectively. The township provides assistance to people who have nowhere else to turn. They must have applied for food stamps, a medical card, and exhausted all their unemployment/sick leave. Often the people who need assistance are people who have applied for Social Security or disability but are waiting for those benefits to kick in.

Everyone who applies for assistance must fill out an application, have a background check, and meet with the township’s caseworker. Recipients must fulfill certain statutory guidelines for assistance, which means the township cannot help everyone who requests assistance. However, the office tries to help guide everyone who needs help to as many resources as possible even if the township cannot help them. Some recipients have physical problems that require Medicaid medication and/or hospitalization, so the township will try and help them as well.

In the last two and a half years, the township has managed their budget well and is now trying to do extra things. In the summer of 2011, the township was able to supply more than 125 box fans to senior citizens through the Senior Resource Services and Douglas Annex programs. Around Christmas, the township asks for donations to provide Christmas gifts to their clients and anyone else requesting assistance. The office also works with local hotels to provide basic toiletries to people in need of soap, shampoo, lotion, etc. The office does occasionally provide emergency grants on a case-by-case basis.
basis. Since the office is run on tax dollars they are not looking to expand services. Their primary concern is to do as much as possible with the limited resources they have.

The City of Champaign Township office’s technology use is pretty basic. Most of their computer use involves utilizing Microsoft Word and Excel, although they do connect with the city for billing and the caseworker utilizes a program to help manage the recipients. The assessor’s office has much the same usage. Although the office does not see UC2B helping them much beyond simply making things go faster, they feel it is important to support a program that could really benefit the township and their patrons.

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**Webliography**


41: City of Urbana

Abigail Sackmann
Master’s student, GSLIS

1 Executive summary

The City of Urbana has a robust, coherent, and effective IT program currently and is poised to maximize the benefits brought by UC2B. The city currently has fiber connecting many of its buildings, and UC2B will extend existing rings as well as forge speedy connections to other local institutions. This extension will support much of the future vision for technology use, both within city offices and for the public. Examples include swift data sharing and graphical reporting, enhanced backups, price sharing for hardware and software, and a new project for community media involving video storage and streaming.

2 Maps

City of Urbana properties: schools (blue), library (purple), parks (marked by name), and city buildings (yellow).
City of Urbana Main Offices.

3 Photographs

City of Urbana Main Offices.
4 Demographics of City of Urbana (2010 Census Figures)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>41,250</td>
</tr>
<tr>
<td>White</td>
<td>60.4%</td>
</tr>
<tr>
<td>Black</td>
<td>16.3%</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>0.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>17.8%</td>
</tr>
<tr>
<td>Persons reporting two or more races</td>
<td>3.1%</td>
</tr>
<tr>
<td>Persons of Hispanic or Latino origin</td>
<td>5.2%</td>
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<tr>
<td>Foreign-born persons</td>
<td>18.3%</td>
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<td>Language other than English spoken at home</td>
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<td>High school graduates, percent of persons age 25+</td>
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<td>Bachelor’s degree or higher, percent of persons age 25+</td>
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<tr>
<td>Median household income</td>
<td>$34,951</td>
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<tr>
<td>Persons below poverty level</td>
<td>29.8%</td>
</tr>
</tbody>
</table>

5 History

Urbana was chartered by the State of Illinois in 1855 and its first mayor was elected in June of that year. The building of the Central Illinois Railroad, with a station two miles west of the city center, contributed to the growth of the town and set the framework for the dual cities that exists today.

City government has been on the cutting edge of technology use for decades. In 1980 the offices had an IBM System/3 computer for payroll and general ledger accounting. This was replaced a few years later with a System/34, the first multitasking, multiuser computer which provided several departments with their own terminals by means of which they could input and receive data. These computers were still used mainly for payroll and general ledger, but wider access streamlined the processes, the first step in a long history of technological advances contributing to improved efficiency and effectiveness.

In addition to hardware advances, the city’s IT department took the initiative to write much of their own software, a practice that continues today. One of the first programs written was a package for keeping police records in the mid-1980s, the success of which caused the Champaign and UIUC police departments to adopt the program in the mid-90s.

The next big turning point in the city’s use of technology was in the early 1990s, when PCs were put in many offices for daily use beyond payroll and general ledger. Each building had its own Local Area Network (LAN), but there was no cross-site network yet between the main city building and the public works site. A few years later a T-1 line connected the two sites.
In 2002, the city began to buy bandwidth from the Illinois Century Network (ICN), a state telecommunications network that provides services to public institutions. This relationship provided the city with consistent access to broadband at a low price. In the same year the Champaign County GIS consortium was formed, fostering intergovernmental cooperation and causing a big step forward in terms of data collection and analysis.

The City of Urbana started laying optical fiber in 2005, running lines to schools and office buildings. The connection was also extended to Champaign County and METCAD, the consolidated 911 dispatch center that fields calls from most of the county. This fiber connection simplified and sped up all connections, facilitating a much-faster flow of information. Connecting to UC2B fiber is a logical next step for the municipality.
6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, Systems, Communication</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>250 desktop computers, white boxed</td>
<td>Microsoft Windows Office environment</td>
<td>250 total</td>
</tr>
<tr>
<td>IBM iSeries server for general ledger and payroll</td>
<td>Exchange servers</td>
<td>7 IT staff including manager, network administrator, programmer, document technician, web programmer, and support.</td>
</tr>
<tr>
<td>Scanners and copiers</td>
<td>Area-specific software, e.g., AutoCAD and ArcGIS</td>
<td>Program to reimburse employees when they buy a PC for their homes</td>
</tr>
<tr>
<td></td>
<td>Self-authored software, e.g., parking ticket self-service and police records</td>
<td></td>
</tr>
<tr>
<td></td>
<td>External website</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Robust internal website with software tutorials</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wireless and wired broadband</td>
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</tr>
</tbody>
</table>
7 Analysis

Note: Though this report focuses on the past, present, and future of only two Urbana City buildings, the main offices on Vine Street and the public works building, separate reports are available on the city’s other departments, including the school district, police department, and fire department.

The City of Urbana has a robust information technology program and a strong employee skill set. All computers are white boxed (meaning designed and built for their particular needs), IT staff write much of the specialty software used by departments, and the city is continually moving forward with technology in order to maximize the effectiveness of their programs, services, and governance. They have a program to reimburse employees for the cost of a PC they can use at home, and an internal website with tutorials, frequently asked questions about software and networks, and step-by-step guides to keep tech use functioning smoothly.

The city has a large stake in UC2B, and is one of three main partners both in obtaining the grant and in the implementation of the project. Many city sites have existing fiber as a result of the build-out that began in 2005; UC2B will add to this network by completing the existing fiber rings with mutually beneficial rights of use (through IRU agreements) for fiber from both projects.

The biggest obstacle currently for the municipality is bandwidth—not access, but cost. For a government organization that is relatively small, the kind of high speeds that would make computing and communication the most efficient are often not cost-effective. A similar challenge is present with expensive hardware and software. The connectivity provided by UC2B could potentially mitigate some of these issues not just for the city but for other organizations as well, through partnerships reminiscent of buying clubs. An example of a successful intergovernmental partnership is the police-reporting software mentioned in the History section above. In addition, all of the police records for Champaign, UIUC, and Urbana are stored on Urbana servers, which helps to streamline communication and access. With UC2B and the proposed 1Gbps local connection, remote access to the database can be faster, while accommodating the possibility for photographs and video to enhance the system.

Indeed, partnerships with other governments and institutions in the area is potentially the most innovative and rewarding outcome of the project. Currently the connection between Champaign and Urbana governments is relatively slow. As the IT representative at the city said, “Just as residents move seamlessly between Urbana and Champaign, it is to our mutual benefit to create a seamless partnership.” One example of current intergovernmental collaboration that will benefit greatly from the UC2B project is the Champaign County GIS Consortium. Members include the cities of Champaign and Urbana, villages of Savoy, Rantoul, and Mahomet, and the University of Illinois. Principal Data Clients include the Mass Transit District, the Public Health District, Sanitary District, and the Economic Development Corp. The main purpose is to collaborate on data collection and analysis for both increased access to data and cost sharing, making this partnership an excellent example of what is possible through UC2B. Current connection speeds are often too slow for these large and graphical datasets; the 1Gbps local connection will be of significant value here. Access to GIS data sets and
maps will not just be of benefit to local governments, however—the potential for public and institutional access and contribution is also very exciting.

Another project that will benefit from lightning-speed local connectivity is Urbana Public Television’s recent grant through the Open Media Project. The City of Urbana was one of six cities nationwide to receive this grant (along with Denver, CO; Davis, CA; Austin, TX; Portland OR, and Boston, MA), facilitating access to an amazing amount of virtual storage and a community of open-source software developers in order to create a community-driven media program. The result could be an amazing digital video archive of locally produced video, from school plays to documentaries to oral histories, organized and interfaced with open-source applications. As of this writing, the city is working hard to make this a reality in the short term, possibly even by the summer of 2012.

In addition to these partnerships and connections, access to fast and inexpensive bandwidth can help with each of the three main areas of technological advancement for the city: virtualization, improved backup, and planning for disaster recovery. For example, with more access points connected reliably to city servers, backups can be diversified and redundant, helping to mitigate the effects of any catastrophic data loss.

The City of Urbana is truly on the cutting edge with regard to IT, both within city government and through partnerships with other institutions. Beyond continuing to be an effective local government, it is poised to lead the way for the success of the 1Gbps local connection, showcasing the potential for effective bolstering of both intergovernmental collaboration and services for the public.
42: Cunningham Township

Jane Sandberg
Master’s student, GSLIS

1 Executive Summary

Cunningham Township, a township coterminous with the City of Urbana, was founded in 1928. Administratively, Cunningham Township consists of two offices, both of which have historically been very active in ensuring equity among their residents. The administrative office of the Cunningham Township, led by the Township Supervisor, has regularly supported more clients through General Assistance and other low-income programs than have other local townships. The assessor’s office, meanwhile, has striven to maintain equitable assessment of property values within the city.

Both offices have developed useful ways to incorporate technology in their operations. The supervisor’s office maintains a number of documents and databases on its own server; while the assessor's office uses computer programs to calculate appraisals, relies on e-mail for a large percentage of its communication, and offers a public access computer for members of the public to look up appraisal records. Though none of these uses are particularly groundbreaking, technology does play a large role in the day-to-day functioning of the offices.

Though both offices would be helped by faster connectivity, strict public information laws and a lack of extra staff make it unlikely that the township could take full advantage of broadband services provided by the UC2B project.
The township offices receive technological support from two different sources. The assessor’s office is supported by the City of Urbana's IT Department, while the supervisor’s office is supported by Micro Systems in Champaign.
The layout of the Green Street offices.

3 Photographs

The public access computer in the Cunningham Township assessor’s office: it was originally a staff computer, but is now used by members of the public who wish to look up records.
A staff computer in the Cunningham Township assessor’s office.

The Cunningham Township offices: the supervisor’s office is on the left side of the building, and the assessor’s is on the right.
The township’s web presence consists of the agendas, minutes, and financial reports from its meetings, included in the City of Urbana’s website.

### 4 Demographics for City of Urbana

<table>
<thead>
<tr>
<th>2010 Census Data</th>
<th>Urbana, Illinois</th>
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</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>41,250</td>
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<tr>
<td>Ethnicity</td>
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</tr>
<tr>
<td>White Alone</td>
<td>60.4%</td>
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<tr>
<td>Black Alone</td>
<td>16.3%</td>
</tr>
<tr>
<td>Asian Alone</td>
<td>17.8%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>2.2%</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>$42,655 **</td>
</tr>
<tr>
<td>% of Families Below Poverty</td>
<td>13.3% **</td>
</tr>
</tbody>
</table>

### 5 History

A township is an organized political subdivision of a county. Illinois counties began operating under the township model after the 1848 Illinois Constitution gave voters in each county the opportunity to adopt township government. Illinois townships are charged with three major duties: general assistance (GA) for the indigent, the assessment of real property for the basis of local taxation, and the maintenance of all roads and bridges outside federal, state, and other local jurisdiction. In addition, an 1849 law created a county board of supervisors, composed of township supervisors in a given county, which is the legislative body for the county. (Illinois Regional Archives Depository) Though the legislative function has since been repealed due to conflict-of-interest concerns, townships still have a vital role to play in Illinois. As of 2005, 85 of the 102 Illinois counties operated under the township form of government, making a total count of 1,433 townships. (Township Officials of Illinois)
On December 5th, 1928, the Urbana Township was split in two. The newly established Cunningham Township—named for the family of Judge J. O. Cunningham, an early Urbana family—encompassed the City of Urbana, while the remainder was kept as part of Urbana Township. (Fisher, 1963) The Cunningham Township administration soon began playing an active role in providing social services. In 1935, the township’s annual “pauper relief” appropriation was an impressive $65,150, $7,000 more than the larger Champaign Township’s total annual appropriation. (“Cunningham Township”) By fiscal year 1976, the two township’s GA expenditures were roughly equivalent: Cunningham Township had 56% of the population of Champaign Township, but was spending 91.5% of its counterpart’s GA allocation.

In the same year, Cunningham’s assessor’s office spent over twice as much as Champaign’s. Much of this expenditure was due to the appointment of several new deputy assessors and an increased effort to reappraise corporations’ properties. This push was less than welcome, causing 175 firms to complain to the county board of review, which is charged with maintaining uniformity in assessments. A battle ensued between the Republican board of review and the Democratic Cunningham assessor.

To this day, both taxes and social services expenditures for Cunningham Township are higher than for its counterparts, Champaign Township (outside the city limits of the City of Champaign), City of Champaign Township, and Urbana Township (outside the city limits of Urbana). For example, as of 2000, Cunningham Township spent roughly five times as much on GA as did Champaign Township, though Champaign's more extensive staff resources caused its GA administrative costs to exceed Cunningham’s 3-to-1.

Throughout its history, Cunningham Township has devoted itself to compassionate social service programs and fair property assessments. Though the township and its structure are not readily apparent to most Urbana residents, Cunningham Township continues to work towards greater equity in the City of Urbana.

6 Technology Inventory

Supervisor’s office

<table>
<thead>
<tr>
<th>Staff computers</th>
<th>5 (4 regularly in use)</th>
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</thead>
<tbody>
<tr>
<td>Server</td>
<td>On-site</td>
</tr>
<tr>
<td>Tech Support</td>
<td>Micro Systems</td>
</tr>
<tr>
<td>Speedmatters.org</td>
<td>1.449 down / 1.390 up</td>
</tr>
<tr>
<td>Speedtest.net</td>
<td>1.46 down / 1.44 up</td>
</tr>
</tbody>
</table>

Assessor’s office

| Staff computers      | 4                      |
| Public computers     | 1                      |
| Server               | City of Urbana         |
| Tech Support         | City of Urbana         |
Cunningham Township is comprised of two separate offices with two different missions and two different ways of using technology. The supervisor’s office is responsible for the administration of the township, and also issues General Assistance welfare benefits and establishes other programs to assist low-income Urbana residents. The assessor’s office is responsible for the fair assessment of taxable property within the township to ensure an equitable tax burden. The supervisor’s office has had its own server for several years, and has received technological support from Micro Systems in Champaign for roughly 15 years. The assessor’s office, meanwhile, relies on the City of Urbana’s IT department for server space and support. The township formerly had a website on Prairienet, but this was discontinued when Prairienet stopped offering free hosting. Today, the township’s Web presence consists of the meeting minutes and agendas hosted on the City of Urbana’s website. The township feels that their Web presence is adequate, especially as public information laws would require that any existing website be updated regularly, a prohibitively large burden on an already busy staff. Township meetings are also currently broadcast on Urbana Public Television.

The assessor’s office is currently working on two technological projects. First of all, the office is transitioning from a state-supplied computer-assisted appraisal program to new property-assessment-management software. The new software will interface with GIS while producing tax rates based on building data. The office is also digitizing its building drawings, a project which is 75% complete.

The assessor’s office has a public-access computer that can be used for looking up assessor data. While members of the public are more likely to call the office for questions about appraisals, the public computer is still occasionally used. This computer formerly served as a staff computer.

Both offices use e-mail as a primary means of internal communication. Externally, the supervisor’s office relies much more heavily on telephones to communicate with its low-income clients. The assessor’s office uses both tools to communicate, with usage divided along generational lines. The office’s 2,000 elderly clients tend to use the phone, while other homeowners, appraisers, and realtors use e-mail more frequently.

Though none of the ways in which either office uses technology are particularly groundbreaking, technology does play a large role in the day-to-day functioning of Cunningham Township. Though both offices would be helped by faster connectivity,
strict public information laws and the lack of extra staff make it unlikely that the
township could take full advantage of broadband services provided by the UC2B project.

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m.
Illinois Regional Archives Depository, "Administrative History: County Board."
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1 Executive summary

The Urbana & Champaign Sanitary District is concerned with making sure that the sewage from the residents of the area is properly transported and treated in order to prevent the spread of diseases in the community and in areas downstream. It has several pump stations throughout the two cities and two main treatment centers. The Urbana & Champaign Sanitary District is a large partner in the UC2B project, having provided $120,000 for a secure connection to the network in order to improve communications between plants and also ensure reliable data transfer through its many automation systems.

2 Maps

The location of the Urbana & Champaign Sanitary District (“A”).
The location of the Urbana & Champaign Sanitary District in relation to other business in the area.

3 Photographs

Server room and staff computing.
Front desk reception area.

Night view of the outside of the facility.
4 Demographics of patrons or clients

As a wastewater treatment facility, the Urbana & Champaign Sanitary District provides wastewater treatment for the Cities of Urbana and Champaign and the Village of Savoy, along with the University of Illinois and the surrounding adjacent developed areas. It is a single-purpose governmental structure that cleans wastewater, and thus it isn’t relevant for its operation to know the demographics of its patrons.

5 History

The Urbana & Champaign Sanitary District was organized in May 1921 to relieve the overloaded sanitary sewers and prevent pollution of local resident basements, the Boneyard Creek, and the Saline Branch of the Salt Fork Creek. It was created by a petition of the voters. It’s an outstanding example of successful city-to-city cooperation.

6 Technology inventory

Website
SCADA, Supervisory Control and Data Acquisitions software for monitoring and controlling processes
Munis (billing software)
Automated maintenance and inventory tracking software
30 desktops for staff
2 treatment plants run by automation system
23 remote sewage pump stations

<table>
<thead>
<tr>
<th>Website</th>
<th>Download (Mbps)</th>
<th>Upload (Mbps)</th>
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<td>Speedtest.net</td>
<td>9.39</td>
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</table>
7 Analysis

The Urbana & Champaign Sanitary District is concerned with making sure that the sewage from the residents of the area is properly transported and treated in order to prevent the spread of diseases in the community and in areas downstream. As such, there are no volunteers within the institution, no public computing rooms and no social networking sites to visit. The staff at the site use highly specialized software that is designed for data manipulation, retrieval, and collection and the people who work with this data are trained to use that software.

Much of the discussion about UC2B centers around how it will impact the people of the community and the local businesses and culture, but in this behind-the-scenes organization it will play an equally valuable role. The treatment plant is run with the help of SCADA, an automation system which gathers data from at least 30 different process controllers and presenting it to operators who may then make informed decisions about how to operate the plant. When this data moves faster and more reliably, the sewage treatment center works much more efficiently. High-speed Internet will also streamline an automated maintenance and inventory process and enable the operators of the sanitary district to obtain more relevant information about their 23 off-site facilities which pump sewage to the two treatment plants.

On the one hand, one might think that this isn’t an anchor social institution as it is so extremely focused on a single aspect of the community, but the truth is that it is essential to our health and well-being. Without a proper way of managing and removing our sewage, the community would not be able to exist in a healthy environment and this makes the sanitary district a very important institution to the area.

Webliography

44: Urbana Post Office

Lauren M. Graham
Master’s student, GSLIS

1 Executive summary
The Urbana Post Office, which serves zip codes 61801, 61802, and 61803, has three locations: one main office, and two satellite locations. The Urbana Post Office as a whole is an institution with strong ties to the Champaign-Urbana community. Its current main location is a bit too isolated and new to be a strong anchor social institution in and of itself, but in combination with its satellite locations in downtown Urbana and at the university, its involvement in UC2B could benefit both the community and the local post office system.

2 Maps
The main office (“A”) is located at 3100 E. Tatman Court, Urbana.
One satellite station ("A") is located at 202 Broadway Avenue in Urbana.

The other satellite station ("A") is located on the University of Illinois campus, in Altgeld Hall (UIUC Building #26), 700 S. Wright Street in Urbana.
3 Photographs

Exterior of Main Office of the Urbana Post Office, looking northeast.
Post Office main entrance, looking north (entrance facing southwest).
Downtown Urbana Station, looking east

University Station, Altgeld Hall, interior. (via http://www.flickr.com/photos/ zaruka/5982326332/)
4 Demographics of patrons or clients

The Urbana Post Office serves the 41,250 residents of Urbana, as well as the seasonal student community. This includes both the micro-urban center of town and the rural areas surrounding the main community. Based on the 2010 census, this post office serves approximately 17,000 households within its service area, and total possible delivery points are 22,848.

The Urbana Post Office serves the University of Illinois east of Wright Street. Note that the presence of the university in the post office’s service region may slightly skew the overall demographics. One employee of the post office estimated that around 75% of their active customers are students at the university; another estimated that their distribution load approximately doubles during school sessions.

<table>
<thead>
<tr>
<th>Population</th>
<th>Urbana</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>41,250</td>
</tr>
<tr>
<td>Black</td>
<td>60.4%</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>16.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>0.3%</td>
</tr>
<tr>
<td>Persons reporting two or more races</td>
<td>17.8%</td>
</tr>
<tr>
<td>Persons of Hispanic or Latino origin</td>
<td>3.1%</td>
</tr>
<tr>
<td>Foreign-born persons</td>
<td>5.2%</td>
</tr>
<tr>
<td>Language other than English spoken at home</td>
<td>18.3%</td>
</tr>
<tr>
<td>High school graduates, percent of persons age 25+</td>
<td>24.3%</td>
</tr>
<tr>
<td>Bachelor's degree or higher, percent of persons age 25+</td>
<td>93.2%</td>
</tr>
<tr>
<td>Median household income</td>
<td>$34,951</td>
</tr>
<tr>
<td>Persons below poverty level</td>
<td>29.8%</td>
</tr>
</tbody>
</table>

5 History

The Urbana Post Office was incorporated in 1836, with the original building standing at the corner of Race Street and Main Street, a lot near The Courier newspaper office. This building survived the 1871 Urbana fire and the post office remained at this location through the turn of the century. This location served the entire area of the current combined metro area of Urbana-Champaign, until Champaign incorporated its own post office (then known as West Urbana) at the downtown train depot in 1854.

In 1906, a new building was constructed in downtown Urbana, and from 1907 to 1914 the post office was located at 106 N. Race Street, now the Rose Bowl Tavern. In 1914, another structure was built and the Urbana Post Office moved into its location at Elm Street and Broadway Avenue, where it still maintains a branch. Additions to this structure were made in 1935 and 1958, and a massive ADA renovation was completed in 1982.
By the 1990s, the Postal Service was looking to move the main functions of the Urbana Post Office to a new location, and in 1996 selected a new site in east Urbana. In 2000, the location at Tatman Court opened, and remains the main Urbana office to this day. The current location serves all Urbana zip codes (61801, 61802, and 61803), while maintaining satellite offices in downtown Urbana and on the university campus.

When the Urbana Post Office’s main activities were moved to Tatman Court in 2000, the office in downtown Urbana remained open as a station. In 2001, the Postal Service put the downtown Urbana building up for sale, with the requirement that the purchaser would leave space open for rent by the Postal Service to maintain P.O. boxes and windows in the location. The Independent Media Center bought the building, and now shares the space with the post office, Books to Prisoners, and a legal services office. Located adjacent to the downtown Urbana bus terminals, the downtown station serves residents of the main part of Urbana, as well as some of the student population.

The Urbana Post Office also maintains a station in Altgeld Hall, first erected as the Library Building in 1897. Originally the responsibility of the librarian, this location was for the distribution of student mail at what was then a small agricultural university. By the mid-20th century, the main library had moved out of Altgeld, and responsibility for the post office was transferred to the Postal Service. The office had also moved to its current location at the southwest corner of the building, which had previously served as a loading dock for the library. Located on the main quadrangle of the University of Illinois campus, the University Station primarily serves the student population at the university.

Currently, the University Station is under threat of closure by the U.S. Postal Service. Determinations for continued service at this location should be made in the next few months. The main Urbana Post Office, however, has no immediate plans of closure or relocation of services, though it may have to take on extra distribution and customer service operations, should one of its satellite locations close.

### 6 Technology inventory

<table>
<thead>
<tr>
<th>Technology</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual computers</td>
<td>7</td>
</tr>
<tr>
<td>Internet</td>
<td>Satellite</td>
</tr>
<tr>
<td>Phone system</td>
<td>Traditional landline</td>
</tr>
</tbody>
</table>

Software used includes: Microsoft Office applications, productivity data applications, parcel-tracking applications, and finance applications.

### 7 Analysis

The Urbana Post Office as a whole is an institution with strong ties to the Champaign-Urbana community. Its current main location is a bit too isolated and new to be a strong anchor social institution in and of itself, but in combination with its satellite locations in downtown Urbana and at the university, its involvement in UC2B could benefit both the community and the local post office system.
The main Urbana Post Office is located quite far from current UC2B construction, and it may not be feasible for that particular office to be linked to the project, both in terms of the infrastructure and the location’s integration into the core community. However, both satellite locations, in downtown Urbana and on the university campus, have strong potential for future UC2B use. The Downtown Urbana Station, the location with the most extensive history in the community, is collocated with the Independent Media Center, a popular public space within Urbana’s downtown. The Independent Media Center also has ties with GSLIS, and therefore has strong potential for a public computing or ICT education space. An installation here could benefit two organizations in one go. In this case, conversation with the IMC would be necessary, as they are the main tenants/owners of the building. The University Station is located within a university building—Altgeld Hall—and while quite small in size, serves a large portion of the student community. Due to its location on campus, installation of fiber here would be more feasible, but its focus would be on service to the internal post office and the customers. Again, conversation with the owner of the premises—in this case, the University of Illinois Urbana-Champaign—would be necessary.

The Urbana Post Office also serves to benefit indirectly from UC2B within the community, mostly in terms of increased information literacy as a result of the project. Both staff members I spoke to indicated a lack of symmetric understanding of information between the post office and its customers—the work of UC2B, to the extent to which it will increase a level of information and technological literacy among Urbana residents, could help obviate these misunderstandings between the postal workers and customers. Faster Internet speed between locations within the system also holds the potential for more accurate real-time information regarding package shipment and delivery, especially with integration with UPS/FedEx systems, a major current problem.

Overall, the local post office system could benefit from the installation of fiber, if feasible within applicable federal regulations; with installation lies the potential for faster internal/external communication and better service to customers, two issues that the post office is currently facing. The future of the post office’s participation in UC2B, however, relies largely on the determination of its stations’ futures by the USPS. A decision about the continuation of services at these locations should come down within the next year, and their involvement with the UC2B Big Broadband project should be revisited once such a determination is made.

Bibliography


**Webliography**


45: Urbana Township

Elizabeth Osisek
Master’s student, GSLIS

1 Executive Summary

Urbana Township covers an area of about 25 square miles, mostly in rural areas outside of the City of Urbana. The main purpose of the township is the maintenance of roads, bridges, and right-of-ways, and the Township also provides General Assistance funds for individuals who are not categorically eligible for federal or state programs. The members of the staff at Urbana Township do not use technology extensively, as their work often requires them to be in the field rather than at a desk. The secretary, who works with the computer the most, uses technology mainly to manage the employee payroll and Social Security data. While the staff use e-mail for correspondence, their primary means of communication is via cell phone, and no other facets of their daily work require the use of a computer or an Internet connection. However, though the staff may not benefit greatly from the broadband connection that UC2B will provide, many of the citizens of Urbana who elect the township officials could benefit greatly from UC2B. A significant number of Urbana’s residents are from low-income households that may not be able to afford a broadband connection at the current price. The cheaper and faster broadband provided by UC2B could give these people Internet access in their homes that they were previously unable to purchase.

2 Maps

Map showing the location of Urbana Township office building, 2312 East Perkins Road, Urbana
Map of Urbana Township (from Champaign County GIS Webmap)
Township Supervisor Jeffory S. Johnstone stands outside the Urbana Township, 2312 Perkins Road, Urbana.
A meeting room in the Urbana Township building.
Desk of Township Supervisor Jeffory S. Johnstone.
Township Supervisor Jeffory S. Johnstone sits at the secretary’s desk.

4 Demographics

<table>
<thead>
<tr>
<th>Ethnic Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/Caucasian</td>
</tr>
<tr>
<td>Black</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
</tr>
<tr>
<td>Native Hawaiian and Pacific Islander</td>
</tr>
<tr>
<td>Multi-racial</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
</tr>
<tr>
<td>White non-Hispanic</td>
</tr>
</tbody>
</table>

Information based on 2010 census
<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Percent of Population 25+</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school graduate</td>
<td>93.0%</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>55.4%</td>
</tr>
</tbody>
</table>

Information based on 2010 census.

Median household income, 2005–2009: $33,302
Percent of population in poverty, 2005-2009: 30.4%

The above information was all taken from the 2010 United States Census, and can be found online at <www.census.gov>. It should be noted that, as a university town, the percentage of people with a bachelor’s degree or higher in Urbana will be raised by the number of university faculty living there. Therefore, while the percentage of people with higher levels of education living in Urbana appears to be high, this data does not reflect the large number of people who do not have bachelor’s degrees or even high school diplomas.

5 History

Urbana Township was established on November 8th, 1859 (“Urbana Township”). Since then the township has dealt with numerous highway and engineering projects, including the construction and maintenance of roads, bridges, and drainage systems.

For example, in 2005, the township worked in cooperation with the Saint Joseph Drainage District, the Urbana Park District, the Scottswood School District, the City of Urbana, and the County Regional Planning Commission to create a new drainage plan for Scottswood, a subdivision in east Urbana (“Intergovernmental”). The six government entities together proposed a $2 million project, $870,000 of which was funded by federal Community Development Assistance Program grants in September, 2005. This money was in addition to the $395,430 that the Urbana Township was awarded in grants the previous month (Clements). Called the Scottswood Area Stormwater Improvement Project, it called for improvements in the existing but inadequate Scottswood stormwater sewer system and “the construction of a six-acre wetland in the new Weaver Park just west of the subdivision” (“Intergovernmental”).

Today the township continues to focus largely on the maintenance of roads, bridges, and drainage systems for Urbana Township. The Roads Commissioner will be working with the individuals laying the fiber for UC2B along some of the roads under his jurisdiction (Prather).

As an organization that prides itself on providing “efficient grass-roots government,” the township currently does not use technology very much. The Township Supervisor in 2000, Don Flessner, summarized this mentality: “We don’t have multiple layers of bureaucracy. If I get a nuisance complaint, I go out myself and look at it” (Monoson). The current Supervisor and Roads Commissioner expressed a similar mentality—they spend more time doing work in the field than they do in the office. An organization run in this manner does not have a great perceived need for technological innovations such as the broadband service that UC2B will provide.
6 Technology Inventory

Desktops: 2
- One in Township Supervisor’s office
- One in Assessor/Secretary’s office
Printers: 2
E-mail – Township e-mail address
Microsoft Word
Tech support – no formal tech support; a university student once solved a minor problem
Telephone system – AT&T
Website – none (names of elected officials listed on the Champaign County Clerk’s Website, http://www.champaigncountyclerk.com/government_bodies/government_bodies_officials_results.php?LevyBodyIDTWP=266

7 Analysis

The Urbana Township is not likely to benefit significantly from the broadband service that UC2B will provide. Daily operations of the township do not require the use of the Internet. Aside from occasional e-mail correspondence, the township’s two computers are used almost exclusively by a single secretary who organizes payroll, tax forms, and Social Security forms (Johnstone, Prather). The Township Supervisor and Road Commissioner gave the impression that the township’s current software and broadband speeds were sufficient for the secretary’s needs.

While the township’s staff is not likely to benefit significantly from the broadband service that UC2B will provide, the people of the Urbana Township could benefit greatly from it. Over 30% of Urbana’s population was below the poverty line from 2005 to 2009 (Urbana), and the median household income from 2005 to 2009 was just $33,302 (Urbana). This means that a large part of Urbana’s population is likely unable to afford current broadband services. UC2B could provide these people with a quick and affordable Internet connection, which could give them access to a wealth of information. For example, many job applications are only available online. The underserved populations of Urbana who currently do not have an Internet connection cannot apply for these jobs from their homes, and may be barred from certain employment opportunities as a result. The broadband service provided by UC2B could help ease or even eliminate these challenges.

Bibliography


Foster, Greg. Personal Interview. 30 November 2011.


Johnstone, Jeffory. Personal Interview. 16 November 2011.


Prather, Jim. Personal Interview. 16 November 2011.

Webliography


46: USGS Illinois Water Science Center

Ashley E. Booth
Master’s student, GSLIS

1 Executive summary

The Illinois Water Science Center is a branch of the United States Geological Survey (USGS) that focuses on collecting and providing information about water resources including surface water, groundwater, water quality, and water issues. One of the primary goals of the center is to collect data using the 180 gage stations that collect stream-flow and water quality data. The organization is based in Champaign and has satellite locations in Dekalb and Mt. Vernon. A major priority for the center is to serve data up as quickly as possible, especially in times of crisis.

The center provides data and information to users including federal agencies, such as the U.S. Army Corps of Engineers; state agencies, such as the Illinois Environmental Protection Agency; and local users and the public. The organization’s use of technology is extensive and complex. Since their objective is to provide water data to help protect people, the environment, and structures, and half of their program in Illinois is just data collection, they have a significant amount of real-time water data streaming in and out of the center.

The Illinois Water Science Center is optimistic that UC2B could provide them the opportunity to improve their services, provide data more quickly, and help their employees to do more with less; but a decision to participate in the fiber network will be based on cost and performance.
2 Maps

The neighborhood in which the USGS Illinois Water Science Center is located.

The other institutions nearby the USGS Illinois Water Science Center.
3 Photographs

The outside of the USGS Illinois Water Science Center building.
The reception area of the USGS Illinois Water Science Center.
The USGS Illinois Water Science Center public data website displayed on a meeting room screen.
4 Demographics of patrons or clients

According to our interview, the primary audience for the USGS Illinois Water Science Center is the people of Illinois. According to the 2010 U.S. Census, there are 12,830,632 people living in Illinois. Of those people, 71.5% are White, 14.5% are Black, 15.8% are Hispanic or Latino, 4.6% are Asian, 0.3% are American Indian and Alaska Natives, and 2.3% report two or more races. The chart below outlines these census demographics.

The center’s data also serves the entire U.S. population of 308,745,538 people.

5 History

A complete history of the United States Geological Survey (USGS) can be found on their website at http://pubs.usgs.gov/circ/c1050/index.htm. The information below was gleaned from this site. The USGS was created on March 3rd, 1879 with 38 employees. Clarence King was the first director of the agency; his first job was to classify the more than 1.2 billion acres of land to which the federal government had title. At that point only 200 million of those acres had been surveyed. In addition, the country’s “mineral wealth, mining and metallurgical techniques, and production statistics were meager,” and so King highlighted mining geology and to a lesser extent general geology. However, by 1882, “topographic mapping became the largest part of the Geological Survey program.”

In 1894 the agency expanded to begin the study of water and when the Forest Management Act was passed in 1897, USGS began managing the surveying of forest
reserves. By 1904 the agency had created topographical maps of 26% of the country and published geologic folios that had helped encourage the development of water power (among other things). When Federal Water Power Act was passed in 1920, the Survey became responsible for streamflow records and for assessing projects proposed on public lands. In the early 1920s, it was determined that more than 60% of the country was still unmapped, and most of what had been mapped needed to be resurveyed. By 1929, the agency had grown to 998 employees, had mapped 44% of the country, and 2,238 gaging stations were measuring streamflow. By 1954 the Survey had 7,000 employees, technology for mapping was improving drastically, 6,400 gaging stations were measuring streamflow, and the organization was running approximately 500 studies of groundwater. The Survey was also measuring (among other things) water quality and flood frequency.

In 1964 USGS established an Office of Water Coordination which combine the Surface Water, Ground Water and Quality of Water Branches to speak to a new responsibility from the Department of the Interior for the organization: “design and operation of the national network for collection of water data so that water information needed for effective development and management of water resources would be collected in a timely, effective, and economical fashion, and would be readily accessible at a single focal point.” By 1971, the Survey had 9,200 employees, mapping was happening in all 50 states, 11,000 gaging stations were measuring streamflow, 4,000 stations were measuring water quality, and hundreds of groundwater investigations were underway.

In 1984, the Water Resources Division published the first “National Water Summary, “describing hydrologic events and water conditions for the water year, providing a State-by-State overview of specific water-related issues, and identifying ground-water contamination and acid rain as two pressing water-resources issues.”

The Illinois Water Science Center (WSC) is one of 48 Water Science Centers in the USGS Water Resources Discipline. According to our interview, the center in Illinois was established in the 1930s to support the state mapping that was happening at the time.

### 6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, Systems, and Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 servers</td>
<td>VoIP telephone system</td>
</tr>
<tr>
<td>60–75 computers (includes desktops and laptops)</td>
<td>database software</td>
</tr>
<tr>
<td>about 25 scanners/printers</td>
<td>mapping software</td>
</tr>
<tr>
<td>several plotters</td>
<td>GIS software</td>
</tr>
<tr>
<td></td>
<td>office software</td>
</tr>
<tr>
<td></td>
<td>publishing software</td>
</tr>
<tr>
<td></td>
<td>management software</td>
</tr>
<tr>
<td></td>
<td>IT management tools</td>
</tr>
<tr>
<td></td>
<td>financial management software</td>
</tr>
<tr>
<td></td>
<td>analysis software</td>
</tr>
<tr>
<td></td>
<td>statistical software</td>
</tr>
</tbody>
</table>
The following table outlines the current Internet speed for the organization.

<table>
<thead>
<tr>
<th>Website</th>
<th>Speed Down (Mbps)</th>
<th>Speed Up (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speedmatters.org</td>
<td>1.463</td>
<td>1.666</td>
</tr>
<tr>
<td>Speedtest.net</td>
<td>2.27</td>
<td>2.20</td>
</tr>
</tbody>
</table>

7 Analysis

According to the National U.S. Geological Survey’s (USGS) website, the organization is “the Nation’s largest water, earth, and biological science and civilian mapping agency.” The organization “provides impartial information on the health of our ecosystems and environment, the natural hazards that threaten us, the natural resources we rely on, the impacts of climate and land-use change, and the core science systems that help us provide timely, relevant, and useable information.”

The Illinois Water Science Center is associated with the branch of the USGS that focuses on collecting and providing information about water resources, including surface water, groundwater, water quality, and water issues. One of the primary goals of the center is to collect data using the 180 gage stations that collect streamflow and water quality data. Most of these stations transmit their data electronically to the center. The center also performs interpretive studies, evaluations, research, and information dissemination. The organization is based in Champaign and has satellite locations in Dekalb and Mt. Vernon.

The Illinois Water Science Center employs about 60 people: 45 in Champaign, 10 in Dekalb, and about 4 in Mount Vernon; one is a part-time graduate student. About a third of the employees are scientists, a third are technicians, and a third are IT/HR/managers. There are two full-time IT staff who can also utilize the national help desk as needed.

According to our interview, the center provides information to a variety of users, including federal agencies, such as the U.S. Army Corps of Engineers, who utilize the data to maintain navigable waterways; and state agencies, such as the Illinois Environmental Protection Agency, who use the data to determine who to evacuate during flooding or ensure water treatment plants, chemical plants, and power plants are in compliance with regulations. On a more local level, the Boneyard has been redesigned based upon data the center collected. In addition the public use the data as well. For example, fishermen and kayakers use the data to find out whether the conditions are good for their respective activities.

The center’s use of technology is extensive and complex. Less than two years ago the center had a second T-1 line put in and they are currently running above capacity. In addition, they have scientists performing research and employees utilizing e-mail, all of which uses bandwidth. A major priority for the center is to serve data as quickly as possible, especially in times of crisis, so real-time modeling is an important component of the organization as well. This illustrates how drastically the organization’s use of technology has changed over time. In our interview we learned that in the mid-1980s the water level of rivers was measured by a machine that would punch paper every 15 minutes, and every 6–8 weeks a technician would retrieve the paper. Even a few years ago, to get a cross-sectional profile of a river would require someone getting into a specific river; now, the center utilizes acoustic instruments to perform this work.
When discussing the potential for UC2B on the organization, the Illinois Water Science Center was optimistic. Not only would increased speed and bandwidth provide a great benefit to the organization’s work, but they would like to see the possibility of video conferencing among the three offices. The center welcomes any opportunity to improve their services, provide data more quickly, and allow their employees to do more with less, and if UC2B can provide more inexpensive and reliable Internet they will be glad to join the network.

**Bibliography**


47: Village of Savoy

Abigail Sackmann
Master’s student, GSLIS

1 Executive summary

The Village of Savoy is located just southwest of Champaign-Urbana, and is the third municipality to be included in UC2B. Operations are spread between four buildings including the Municipal Center, Fire Department, Public Works, and the Recreation Center. The village has experienced a large population growth rate, 62.6%, over the past decade and continues to grow, making infrastructure building one of the main issues for the area. Village officials look forward to the connectivity speeds that UC2B will bring mainly for intradepartment communication, faster backups to the main server, and connection to other institutions in Champaign County, such as the Regional Planning Commission.
Approximate boundaries of the Village of Savoy.
Four Village of Savoy buildings.
3 Photographs

Municipal Building.

Recreation Center.
### 4 Demographics of Village of Savoy

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, 2010</td>
<td>7,280</td>
</tr>
<tr>
<td>Population change, 2000–2010</td>
<td>62.6%</td>
</tr>
<tr>
<td>Population, 2000</td>
<td>4,476</td>
</tr>
<tr>
<td>White, 2010 (a)</td>
<td>77.4%</td>
</tr>
<tr>
<td>Black, 2010</td>
<td>6.8%</td>
</tr>
<tr>
<td>American Indian and Alaska Native, 2010</td>
<td>0.1%</td>
</tr>
<tr>
<td>Asian, 2010</td>
<td>12.6%</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander, 2010</td>
<td>0.0%</td>
</tr>
<tr>
<td>Persons reporting two or more races, 2010</td>
<td>2.4%</td>
</tr>
<tr>
<td>Persons of Hispanic or Latino origin, 2010</td>
<td>2.7%</td>
</tr>
<tr>
<td>White persons not Hispanic, 2010</td>
<td>75.7%</td>
</tr>
<tr>
<td>Foreign-born persons, 2006–2010</td>
<td>18.6%</td>
</tr>
<tr>
<td>Language other than English spoken at home</td>
<td>21.7%</td>
</tr>
<tr>
<td>High school graduates, age 25+</td>
<td>97.7%</td>
</tr>
<tr>
<td>Bachelor’s degree or higher, age 25+</td>
<td>65.4%</td>
</tr>
<tr>
<td>Median household income, 2006–2010</td>
<td>$50,172</td>
</tr>
<tr>
<td>Persons below poverty level, 2006–2010</td>
<td>10.1%</td>
</tr>
</tbody>
</table>
5 History

Though there is a longer history of residents living in the Savoy area, which is said to be named after an Italian princess who visited the U.S. in 1861, the village was officially formed in 1956. In this year the Champaign Fire Company terminated its service to areas outside city limits. Seeing the need for fundraising to finance their own fire district, Savoy residents petitioned for the village to be incorporated. The motion passed by one vote on April 7, 1956, with the first annual budget being $600. Over the next several years much infrastructure was built, including a water main from Champaign, sanitary sewers, and a building to house the developing fleet of fire vehicles. (Village of Savoy, 2004)

In terms of information technology, the village began using computers in the 1990s. In 2001, they updated from dial-up modems to cable modems through a program with Insight Media, which provided cable access for municipalities for free. In 2004, city offices moved to the new municipal building, where computers were used by nearly all employees and were networked in a LAN. In 2006 they updated their financial system and software.

6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software and systems</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 desktops</td>
<td>Windows XP</td>
<td>30 full-time</td>
</tr>
<tr>
<td>VM Ware Server</td>
<td>Office 2000</td>
<td>1 IT support consultant</td>
</tr>
<tr>
<td>Linux File Server</td>
<td>AutoCAD</td>
<td></td>
</tr>
<tr>
<td>GPS unit</td>
<td>ArcReader</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Website</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial system</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speedmatters.org download</th>
<th>Speedmatters.org upload</th>
</tr>
</thead>
<tbody>
<tr>
<td>12639 Kbps</td>
<td>4882 Kbps</td>
</tr>
</tbody>
</table>

7 Analysis

The Village of Savoy has seen a surge in population of 62.6% in the past decade, and continues to grow at a rapid pace. The municipality has 30 full-time employees along with 100 part-time staff at various times throughout the year, and six departments including Administration, Zoning, Public Works, Parks, Savoy Business Development Center (SBDC), and the Recreation Center. Administration, Zoning, Parks, and the SBDC operate out of the Municipal Building, and Public Works and the Recreation Center are housed off-site (see map of building locations above).

Given the good position in which the village finds itself in terms of population growth, the two key issues facing the municipality are keeping up with infrastructure needs and providing local economic development opportunities for inhabitants of Savoy, especially given the close proximity to Champaign and Urbana. Because taxes and revenues tend to
lag behind population growth, the village looks forward to increasing funds to continue to
address these key issues in the years to come. They currently have a technology program
that meets their needs, but both the IT consultant and the administration are aware of the
constantly changing technological needs of this type of governmental entity.

Currently the village has 30 desktops scattered amongst its buildings, with a VMware
server running several virtual machines including a central file server. All of the desktops
run Windows XP with Microsoft Office 2000, which along with an Internet browser is
sufficient software for the majority of staff needs. They are considering a couple of
changes in the future, including experimenting with a model where most day-to-day work
would be done on a centralized image, and moving to more free and open-source
software. This could include moving to a Linux operating system and using LibreOffice
to replace Microsoft products, though the biggest concern is staff comfort with a new
system. They are currently in the exploratory phase, but according to the IT specialist,
this switch could make sense financially for the large majority of employees who use
simple applications like e-mail, the Internet, and office software. In addition to reducing
costs, free and open-source software has the benefit of being accessible to anyone with a
computer: “Especially in public government, it makes sense to look at whether it is better
to put all of your documents in a proprietary format, or put them in a document that
everyone can have access to.” (Tech Specialist Interview, 2012)

However, some more powerful and specialized software cannot be easily replaced with
open-source alternatives. There has been a thrust lately to develop more in-house; for
example, the Public Works Department recently started using AutoCAD software to draw
up their own plans. The planning department has also begun to make maps with GIS
instead of purchasing them through the GIS Consortium, which will be enhanced with
ArcGIS Desktop software to be purchased soon.

The first cable Internet connection was installed in 2001 through a franchise agreement
with Insight Communications, who provided cable to municipalities for free. Comcast
took over the company a few years ago and required an upgrade to business modems, but
the service is still relatively inexpensive. Most other government organizations in
Champaign County are connected to the Illinois Century Network (ICN), a network
backbone that “provides high speed access to data, video, and audio communications to
schools, libraries, colleges, universities, museums, local and state government, hospitals,
and health care centers.” (Illinois.net/about, accessed 4/1/12) However, to join the
network Savoy would need to contract with a cable company such as AT&T or Comcast
to install a hard line to the ICN backbone, which is cost prohibitive for the municipality.

Current Internet speeds through Comcast are relatively high, though not high enough for
efficient data transfer to the centrally located server, which causes delays especially for
the Public Works Director: “Right now, if I want to back up any large files I have to
bring my laptop here and plug it into the network because it would literally be days if I
tried to do it from my office. Once we get hooked up to UC2B, those fiber optics will be
really speedy and help out. It should be just like my office is located in this building.”
(Public Works Interview, 2012)

The Village of Savoy is excited about UC2B in terms of office productivity, as well as
the opportunities it will bring to the area: “We can be on the same level with the East
Coast and West Coast with getting interest in the community, bringing in technology companies that are good paying jobs, reliable, and consistent. That’s the kind of thing that everybody is looking for, and that’s the opportunity we will have now."

Bibliography/Webliography

Education

48: Champaign County Head Start

Jane Sandberg
Master's student, GSLIS

1 Executive summary

The Head Start Program is a federal program providing “educational, health, nutritional, social and other services” to low-income children and their families. Head Start has served Champaign-Urbana continuously since 1965, and currently provides services to 476 local families. A particular strength of Champaign Urbana Head Start (CCHS) is its strong Early Head Start Program, which serves infants, toddlers, and pregnant mothers.

CCHS is an avid user of technology, using web-based services to improve communication, curricula, and record keeping. Though they have integrated new technologies to a higher degree than most Head Start programs, they are still challenged by slow connection speeds. The key CCHS leaders interviewed for this study have high hopes for the improved communication and information sharing potential to be provided by UC2B.
CCHS values Information and Communication Technologies (ICT) for their ability to make ties between the Brookens Administrative Center (easternmost marker on this map) and the four Head Start centers (Savoy, southernmost marker; Champaign, northernmost marker; Urbana, center; Rantoul, not shown).
The Savoy Head Start Center, formerly a small elementary school, is geographically isolated from other Head Start locations. CCHS has had challenges in establishing an excellent internet connection at the site.

3 Photographs

The Brookens Administrative Center in southeast Urbana, the administrative headquarters of the Champaign County Regional Planning Commission and Champaign County Head Start.
The Champaign Head Start Center, part of the Champaign Early Childhood Center. The building also contains Unit 4's Early Childhood Program and the Central Affiliation for Special Education's (CASE) Audiology program.

A teacher's desktop computer at the Urbana Head Start center.
4 Demographics of patrons or clients

5 History

The Head Start Program is a federal program providing “educational, health, nutritional, social and other services” to low-income children and their families. (Office of Head Start, 2010) Head Start was formed on the recommendation of a 1965 panel convened by Sargent Shriver, the “architect” of Lyndon Johnson’s “War on Poverty.” Johnson, himself a former teacher, viewed Head Start as a key component of his domestic policy, seeing that education as essential to breaking the cycle of poverty. (Head Start History) After his presidency, he was known to make frequent visits to his local Head Start center in Stonewall, Texas. (Mills 1998)

Head Start came to Champaign-Urbana in 1964, when Merle Karnes and Margaret Stillwell submitted a grant for a Head Start program. The program began the next year, with Stillwell as director. In 1968, the Economic Opportunity Council (EOC), a local nonprofit, became the grantee for Champaign County Head Start (CCHS). (History)

Beginning with the 1969 inclusion of a Rantoul location under its grant, CCHS began to grow geographically. In 1971, the sponsorship changed to the Wesley United Methodist Church in Urbana. In fall of 1977, no local agency stepped forward to assume sponsorship of the program, so the grantee designation again changed, this time to East Central Illinois Community Action in Danville. (Monson 1998) March Buchanan served as director until the fall of 1994, and under her leadership, enrollment grew steadily from 200 to 418.

1994 also saw a push for a county-administered Head Start, and the Champaign County Regional Planning Commission (RPC) became the program's sponsor. The collaboration
between CCHS and RPC got off to a good start, with a review by the federal government noting a smooth transition between grantees. However, tensions soon arose, especially when a $100,000 contract with the Urban League of Champaign County was suddenly canceled, leading to allegations of mismanagement. Another point of contention was the lack of African-American administrators in the program, despite its predominantly African-American work force and service base.

Despite these challenges, Head Start continued to expand its services. In 1997, the county received the first Early Head Start grant in 1997 under the direction of Al Griggs. In 1998, the program received funding that allowed CCHS to provide full-day services year-round. (Monson 1998b) In the same year, the current director, Kathleen Liffick, was hired. In 2001, CCHS received a grant for an additional 17 children to collaborate with the Urbana Early Childhood program, raising enrollment to 435.

Recent attention has been paid to expanding CCHS's Early Head Start program, since infant and toddler care is a clear need in Champaign-Urbana's low-income communities. State standards and supply costs make these programs very expensive to run. In 2010, the program received $810,000 from federal stimulus money to expand its Early Head Start services, taking about 50 families off its 150 family long waiting list.

Today, funding remains a chief concern. Even after $2.1 billion in additional funds for Head Start nationwide were included in the 2009 American Recovery and Reinvestment Act, demand far outweighs supply as hundreds of families remain on CCHS's waiting lists. (Wolf 2009) However, with a new grant focusing on its science curriculum and its continued efforts with its Early Head Start program, CCHS continues to be able to fill an obvious need in this community. (Heckel 2011)

### 6 Technology inventory

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<td>E-mail for all staff members hosted by Champaign County Regional Planning Commission</td>
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<td>21 new staff laptops (1 per classroom)</td>
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<table>
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<td>ChildPlus Software</td>
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<tr>
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<td>Teaching Strategies, Inc.</td>
<td>Used by programs in all 50 states: over 800,000 children are</td>
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<tr>
<td>System</td>
<td>Time and Attendance</td>
<td>Kronos Incorporated (Hellman &amp; Friedman)</td>
<td>“Thousands of installations in organizations of all sizes — including over half the Fortune 1000”</td>
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<td>--------------------------</td>
<td>---------------------</td>
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### Head Start Connection Speeds

Source: Speedmatters.org

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#### Brookens Administrative Center Speed Test Result

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#### Urbana Head Start Center Speed Test Results

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### 7 Analysis

Champaign County Head Start was very accommodating and willing to participate in this case study. Interviews with key staff members painted a picture of a well-organized structure and 132 staff members with a sincere devotion to helping low-income kids. Head Start is headquartered in the Brookens Administrative Center in southeast Urbana, and runs Head Start centers in Champaign, Urbana, and Savoy. A fourth site, in Rantoul, was not within the scope of this study.

All interviewees stressed the importance of swift Internet connections, which they saw as important in sharing information and maintaining organizational structure. E-mail, which was given to all staff members roughly three years ago, has drastically improved communication between Brookens and the individual centers. CCHS's student
The information system (ChildPlus) and student assessment system (GOLD) have facilitated record keeping and activity planning. Interviewees also cited the positive influence of computer-literate teachers on children in the program, an effect corroborated by academic literature. (Chen et al. 2006) The program recently purchased laptop computers to replace teacher's desktops, allowing teachers to interact with children while entering data and meal counts. CCHS prides itself on having integrated technology into its operations to a higher degree than the majority of Head Start programs.

However, a good connection is not always easy to get. We learned that getting an excellent connection to the Savoy location has always been a difficult goal. A test of the Urbana Head Start Center's connection speeds revealed a connection speed roughly a tenth of that at Brookens, and download speeds below the FCC's minimum broadband speed. The slower connection exacerbates GOLD's connection difficulties, making simple procedures such as uploading a student's picture take up to 30 minutes. Slow connection speeds detract tangibly from teachers’ planning time, and discourage innovative uses of technology.

CCHS understands the benefits of information and communications technologies (ICT) in providing a supportive, structured environment for its staff and healthy role models for children. The program is excited about the changes UC2B will bring to Champaign-Urbana's ICT landscape. CCHS's internet service provider, Champaign Telephone Company (CTC), will own four strands of fiber on each of the seven UC2B fiber rings, drastically improving connection speeds. (“Network”) CCHS is also interested in the prospect of using ICT to facilitate communication with its families, many of whom currently do not have regular access to e-mail.

**Bibliography**


**Webliography**

49: Champaign Unit 4 School District

Mary Looby
Master’s student, GSLIS

1 Executive summary

Champaign Unit 4 School District serves almost 9,000 students and their families in the city of Champaign, Illinois. The ways in which Champaign Unit 4 School District has adapted and used new technologies over the past 20 years has changed drastically. The district has gone from using punch cards and having a hodgepodge mix of computers to using a common platform and introducing the newest types of teaching technologies such as SMART Boards. The district is also planning for the future by building and renovating schools, adding new curriculum, and having the goal of wireless access in every district building within the next two years. Administrators and stakeholders alike of the district seem very enthusiastic about the possibilities for better and faster access and service provided by UC2B. They were especially interested in the possibility of taping or recording PTA meetings, school board meetings, lesson plans from teachers, etc. and then broadcasting them via the Internet to parents and students who are not able to attend the live meetings.

2 Maps

The Mellon Administrative Office (“A”) of Champaign Unit 4 Schools is located at 703 S. New Street in Champaign. The district has 18 school buildings spread across Champaign.
3 Photographs

The Mellon Administrative building at 703 S. New Street soon after being built in 1961.

The “Kindergarten Collaboration” area in Garden Hills Elementary School set up as a technology or computer center (photo courtesy of Liz Brunson Photography).
4 Demographics of patrons or clients

As of 2010 Champaign Unit 4 School District serves 9,472 students in 11 elementary schools, three middle schools, two traditional high schools, and an alternative high school. The racial breakdown of the district is more diverse than the state averages. Specifically, Champaign Unit 4 is 44.3% White, 38.1% Black, 7.3% Hispanic, 9.9% Asian/Pacific Islander, and 0.3% Native American. Nearly half (49.8%) of the students are considered low-income, meaning that their “families receive public aid, live in institutions for neglected or delinquent children; are supported in foster homes with public funds; or are eligible to receive free or reduced-price lunches.” The district is also more diverse than the state averages in regards to its teaching staff and faculty, as 83.3% are White, 8.1% are Black, 2.2% are Hispanic, and 2.7% are Asian/Pacific Islander. The average length of teaching experience is 11.8 years and more than 50% of the teachers have a master’s degree or higher. The teacher to student ratio is around 1:21 for each grade. The district spends $10,971 per pupil and over 50% of the budget goes towards instruction. ([http://www.champaignschools.org/reportcards/2010/District2010.pdf](http://www.champaignschools.org/reportcards/2010/District2010.pdf))

Champaign Unit 4 School District strives to support the educational and developmental needs of its students and it shows in the improving test scores and graduation rates of the district’s students. In fact, the district plans to add three newly built or renovated elementary school buildings in the next two years to better support young students and to prepare for the future. Overall, 76.5% of students passed every section of all state tests in 2009–2010. Champaign Unit 4 School District also takes pride in its environment and strives to provide quality education, experiences, and opportunities for every student. The district schools have been recognized for this continued effort: Franklin Middle School was recognized as being “A Breakthrough School by the National Association of Secondary School Principals,” and in 2010 Barkstall Elementary was a recipient of the “Academic Excellence Award” from the Illinois State Board of Education. ([http://www.champaignschools.org/files/Unit_4_Performance_Statistics.pdf](http://www.champaignschools.org/files/Unit_4_Performance_Statistics.pdf))

In 2008 the district created a request for proposal for a demographic study to predict enrollment and population changes over the next 10 years. The study forecasted that the district, Champaign, and the state of Illinois will experience small increases in population size. The greatest increase for the Champaign area will be seen in all non-White racial or ethnic groups. The school district plans to ready for the future by renovating and opening new schools and updating the technology and infrastructure of all schools. ([http://www.champaignschools.org/ChampaignUnit4DemographicStudy.pdf](http://www.champaignschools.org/ChampaignUnit4DemographicStudy.pdf))

5 History

1855 Illinois state law establishes public school systems and divides Champaign into two districts.

1890 Champaign Districts 1 and 2 are combined into Union District 6; Champaign High School on the West side of the city is used for all students.

1892 Central High School is built and by 1898 five more schools are built for the district.
1901 Name is changed to Champaign District 71. Curriculum includes “art, music and domestic science, reading, spelling, English, physiology, hygiene, physical training, observation work, geography, arithmetic, history, public speaking.” In high school Latin, German, and science are emphasized.

1908 Curriculum is changed to the more traditional language, science, business, and English courses.

1901 – 1935 Eight new school buildings are built to make room for the increasing number of students enrolling in the school district; six new elementary schools, a new high school, and a junior high school are built during this time period.

1948 The state restructures the school district by adding 12 one-room Districts to No. 71 and creating Community District No. 4.

1951 – 1967 To keep up with the post-World War II population boom in the area, the school district builds 10 new schools.

1968 The school district is reorganized to create a more racially balanced enrollment in each of the district’s elementary schools, based on the Equal Education Opportunities Committee.

1971 The population of Champaign begins to decrease and a couple of schools need to be closed due to the lack of enrollment.

1977 – 1978 The district changes the grade levels in each school to match the k-5, 6-8, and 9-12 models that are still used today.

2010 The district restructures the boundaries of the two high schools in order to have a similar number of students at both schools.

2011 – 2012 District Four plans to have three construction projects completed during this time. Garden Hills Elementary School will be converted to a Magnet School with an emphasis on the arts. Booker T. Washington Elementary School will have a STEM (Science, Technology, Engineering, and Math) magnet elementary school program. Carrie Busey Elementary is being moved to the Savoy area and will hold the Deaf and Hard of Hearing program for the district. (http://www.champaignschools.org/News/0910/Champaign%20School%20History%2011-13-09.pdf)

6 Technology inventory

To better support the staff and students the district has gone to a common platform and now is 97% PC with about 5400 computers across the district. Certain specialty classes, such as design or art at both high schools, do have Macs.

There is fiber between buildings that provides 98.6% availability of access throughout the year, which equates to only about seven down days. The district takes advantage of this connection to offer an AP European History class long-distance. The class is taught at one high school in a physical classroom and broadcasted live to the other high school.

The district recently switched to VoIP for their telephone system because it reduces overhead costs and provides a unified communications network. Illini Cloud –
Bloomington is used as a backup to the network or server and so that will be used as the failover once UC2B is complete. Currently the district uses a T1 system as its failover. Recently, the district built a state-of-the-art data center with its own humidity and air conditioning and complete capability to expand for the next 15 years. This center will enable the district to double its capacity in that time. The district’s servers use a 10-gig backbone that allows for data transitioning and data movement between servers. Currently Champaign Unit 4 is using a variety of technologies such as SharePoint, SQL databases, communication servers, and video servers. In fact, it has all the technologies that would be found at any enterprise-level organization, as well as the support staff to run and maintain all of this technology, and right now the district employs 12 IT professionals.

As far as providing technology equipment to students goes, two elementary schools are beginning a one-to-one laptop program through a grant for all of their 3rd, 4th, and 5th graders. Every middle school has at least two computer labs. Central High School has 11 computer labs and Centennial High School has 5: those include machines in the school libraries.

<table>
<thead>
<tr>
<th>Types of Technology</th>
<th>Percentages</th>
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<tbody>
<tr>
<td>Digital projectors</td>
<td>38% of classrooms</td>
</tr>
<tr>
<td>Interactive white boards/ SMART Boards</td>
<td>8% of classrooms</td>
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<tr>
<td>Computer labs</td>
<td>36% of elementary schools lack a computer lab</td>
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<td>Computer aide</td>
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<td>Technology Integration Specialist</td>
<td>100% of middle schools</td>
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<tr>
<td>Lessons taught with technology – middle</td>
<td>95% of instruction</td>
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<tr>
<td>Lessons taught with technology – high school</td>
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7 Analysis

Technological advancements are huge factors in the way we communicate, learn, teach, and educate our society. However, as has been in the news recently the U.S. is losing ground in broadband service, ranking 15th out of 72 countries in 2010. The Cisco rankings look at “the proportion of households and businesses with access to broadband, combined with internet connection speeds.” (Browning, 2010)

The lack of penetration in all communities across America can be seen in the Urbana-Champaign area. The lack of access in all neighborhoods in the community is what the UC2B initiative plans to address and potentially fix. The project is installing the infrastructure for fiber-optic cables to ensure high-speed broadband access in 11 underserved neighborhoods. Within these areas, about 140 host institutions have been identified to serve as anchor social institutions for the project, one of which is Champaign Unit 4 School District.
The ways in which Champaign Unit 4 School District has adapted and used new technologies over the past 20 years has changed drastically. The district has gone from using punch cards and having a hodgepodge mix of computers to using a common platform and introducing the newest types of teaching technologies such as SMART Boards. The district is also planning for the future by building and renovating schools, adding new curriculum, and having the goal of wireless access in every district building within the next two years. Administrators and stakeholders alike of the district seem very enthusiastic about the possibilities for better and faster access and service provided by UC2B. They were especially interested in the possibility of taping or recording PTA meetings, school board meetings, lesson plans from teachers, etc. and then broadcasting them via the Internet to parents and students who are not able to attend the live meetings. It is also going to be important for the district to be up-to-date, technology wise, by 2015 because the State of Illinois will begin implementing digital state testing in that year. The schools will have to provide a large amount of computers for the students and the connection will have to be secure, fast, and reliable. UC2B could provide the type of access and connectivity that the schools need; however, the administrators did point out that by the time the project is complete, the school district will probably already have that connectivity. What UC2B would really affect is the at-home technology and Internet use of the district’s students.

Furthermore, an issue that UC2B brings up for the district is the concept of the digital divide. According to an administrator of Champaign Unit 4 School District, there are three main factors that create the digital divide: lack of hardware, lack of software, and lack of education or training. UC2B will address the issue of hardware by supplying the access and bandwidth, but the issues of software and training will have to be tackled by the district. Administrators discussed the opportunity for collaboration with other community organizations as an option to address the issues of software and training. For example, setting up labs and workshops in other community institutions, such as churches, could potentially reach a new group of people who are intimidated by the idea of school or technology.

UC2B will help to provide equitable access at home for all students. In the next two years Champaign Unit 4 anticipates having a completely wireless district: every school and building will have wireless Internet access. The district also envisions community partnerships with other organizations to be an important part of the UC2B project and to the availability of computers and the Internet outside of the home and school settings. Ongoing professional and curriculum development is also a key factor in establishing technology in the Champaign Unit 4 School District.

UC2B could really help support the district’s overall technology plans by supporting the curriculum and providing access for students in their homes. The long-term planning and cost will be determining factors in the sustainability and maintenance of UC2B, but Champaign Unit 4 School District recognizes the possibilities and advantages in supporting the establishment of fast, reliable broadband access in the Urbana-Champaign community.
Bibliography


Webliography


50: Champaign Consortium/Parkland Job Training Center

Emilie Vrbancic
Master’s student, GSLIS

1 Executive summary

Founded in 1974, the Champaign Consortium provides job training and job search assistance for Champaign, Iroquois, Ford, and Piatt counties. The mission of the Champaign Consortium “is to help economically disadvantaged individuals and others who face serious barriers to employment to become productively employed.” The organization is supported by the Workforce Investment Act and works closely with local officials, business owners, and community members to ensure that the provided services are tailored to clients’ needs. Programs like the Resource Room, Job Clubs, and the existence of the Digital Divide Computer Lab (through Parkland Community College) are essential in helping to provide job and technology skills.

Major technology issues for the Champaign Consortium revolve around funding and staying up with changing technologies. Champaign Consortium is ready for and enthusiastic about receiving UC2B service. Job training and technology skills are essential for the clients Champaign Consortium serves. With the migration of job applications and postings and unemployment forms to the Web, organizations like Champaign Consortium and the Digital Divide Computer Lab are fundamental to providing technology skills for the unemployed.
Champaign Consortium and Surrounding Social Institutions.
3 Photographs

The Digital Divide Computer Lab.
Computer for client use in the Resource Room.
Champaign Consortium Server Room.
4 Demographics of patrons or clients

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Resource Room Statistics January 2011–June 2011. Source: Illinois WorkNet Center (copies included in paper documents). *Internet Usage and Unemployment Filing Information are totaled as different statistics—however, now that all unemployment information is filled out online, people must use computers.

5 History

The Champaign Consortium is an Illinois Employment & Training Center (Illinois WorkNet Center) and works closely with the Parkland Workforce Development services. Founded in 1974, the Champaign Consortium provides job training and job search assistance for Champaign, Iroquois, Ford, and Piatt counties. The mission of the Champaign Consortium “is to help economically disadvantaged individuals and others who face serious barriers to employment to become productively employed.” The organization is supported by the Workforce Investment Act and works closely with local officials, business owners, and community members to ensure that the provided services are tailored to clients’ needs.

The Workforce Investment Act (WIA) is a federally funded program that combines job training organizations into a system where individuals can find or train for a new career. The WIA provides three levels of assistance: core services, intensive services, and training services. Clients first receive core services. If they are unable to find employment they then receive intensive services and so on. The WIA also allocates resources for the dislocated worker program and the youth program.

The Illinois Employment & Training Center (Illinois WorkNet Center) in Champaign provides those searching for jobs or looking for job training access to their Resource Room. The Resource Room is equipped with computers, printers, and a comprehensive library of employment resources, as well as the following tools and services:

- access to a statewide job database
- free Internet and call center for job-search activities
- the latest in assistive technology for persons with disabilities
- a computer lab which offers instruction on basic computer literacy and business applications; and
• private interview offices and conference rooms for local businesses to use at no charge.

Illinois WorkNet Center also offers a program called Job Clubs. These provide small-group discussion and training meetings that motivate interested individuals to assume personal responsibility for finding and retaining employment. Often, private-sector human resource representatives speak with groups on a variety of topics.

The Parkland Workforce Development Center provides a computer lab at the Mattis location that offers basic, intermediate, and advanced computer classes. The computer lab is operated through State of Illinois digital divide grants. Classes are first come, first serve and students learn skills related to web-based applications and embedded applications, as well as gain knowledge of basic operating systems and resume skills.

6 Technology inventory

Champaign Consortium

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktops</td>
<td>18</td>
</tr>
<tr>
<td>Laptops</td>
<td>3</td>
</tr>
<tr>
<td>Projectors (ceiling)</td>
<td>2</td>
</tr>
<tr>
<td>Network printers</td>
<td>5 (4 black and white; 1 color)</td>
</tr>
<tr>
<td>Scanner</td>
<td>1</td>
</tr>
<tr>
<td>Software</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MS Office Suite</td>
</tr>
<tr>
<td></td>
<td>Adobe Pro</td>
</tr>
<tr>
<td></td>
<td>Winway Resume Program</td>
</tr>
<tr>
<td></td>
<td>Web-based Application (through IL state government)</td>
</tr>
</tbody>
</table>

| Social Media          |                         |
|                       | Facebook                |
|                       | Twitter                 |

7 Analysis

The Champaign Consortium (CC) is an instrumental institution for Champaign County. Operations in recent years have centered on the Internet and computer use because it is now mandatory that unemployment forms be submitted via the Web. This change, although most likely more convenient for the federal government, has put more pressure on social institutions, such as the CC who offer job training and development services. People who are unemployed are already at a disadvantage and some are at more of a disadvantage due to poor or underdeveloped technology skills.

Funding and Technology: A major issue for the CC is funding. Federal dollars are hard to come by and state and federal departments must be creative in finding funds. This requires applying for more grants for special projects and being vigilant about knowing the needs of staff and clients. CC’s Executive Director noted in the interview that funding and technology are very interrelated. Keeping up with changing technology, especially when one of the major services the organization provides is centered on computer use, takes a good amount of funds. One of the limitations currently is the lack calls a “technology plan.”
Another issue is that the CC building, although shared by government agencies, is not a hot spot. Currently, there is only limited wireless in the building and is password protected. Both the executive director and the network system administrator agree that it would be beneficial for them to switch to wireless, but security is still a concern. Also, the executive director was concerned with people misusing social media. However, CC does use social media, such as Facebook, to keep in contact with its’ clients.

Another issue is the current T-1 line the CC is running on. The network system administrator has been adding more computers on the network recently, which has slowed the connection. It is important to maintain high-speed Internet, so they are very enthusiastic about receiving the UC2B service. They plan on setting up their wireless network soon and are looking forward to the increased amount of bandwidth.

The Resource Room: As stated above, job training and unemployment requirements have all moved to Web applications. Searching for jobs is done primarily on the Internet and paper applications and forms are almost completely obsolete. This not only puts strain on organizations that are involved in job training programs, it also requires people become accustomed to using computers. The lack of technology skills of the people utilizing CC’s services is very apparent to the employees. Clients possess a range of skills and unfortunately, some don’t even know what a mouse is. Applying for jobs requires not only online applications, but also having an e-mail account, knowing how to write up a resume, and adding attachments to e-mails. For those who use a computer on a regular basis, these seem like ordinary, basic tasks. But for those who don’t own a computer or use a computer for work, these can seem like insurmountable obstacles. This is especially true for those unemployed (or displaced workers) who need to get back into the workforce but are now at a disadvantage because their previous job did not require digital skills (for example, someone who had worked in manufacturing for 30 years).

The Resource Room is a place where people come to fill out unemployment forms, perform job searches, and write resumes. As can be seen from the statistics provided in part 4, the Resource Room is used very frequently. The problem with the Resource Room, though, is that it doesn’t offer the clients who use it too much one on one instruction. For those who want (or need) extra instruction, they are referred to the computer lab across the main lobby.

The Digital Divide Computer Lab: The Computer Lab, under Parkland Community College administration, is a very valuable supplement to job skills programs. For people looking for a more comprehensive computer education, these classes are wonderful. Computer classes are offered at beginning, intermediate, and advanced levels and are completely free. The classes are taught as modules, not in a traditional class progression. This way, if someone misses a class, s/he isn’t completely lost; s/he can just learn something new that day. The instructor believes that the Internet is “a fast moving train, and you must stay on.” Providing people with the Internet is great, but they need the skills and know-how to actually use it. The executive director of CC voiced the same idea. Skills are necessary to people’s use of technology. It’s an amazing feat that UC2B is going to provide so many people with broadband, but if they don’t have the skills to utilize it, then another divide has been created.
Organizations like CC and places like the Digital Divide Computer Lab are essential in fighting the digital divide in Champaign County. Through the interviews it became clear how essential technology skills are and how important having committed organizations and people to provide those skills are.

Webliography


DCEO Digital Divide; Parkland College Digital Divide Class website. http://parklanddigitaldivide.info/


51: Countryside School

Cao Haixia
PhD student, Peking University, and visiting student, GSLIS

1 Executive summary

Countryside School is an independent K-8 school that offers a broad, hands-on curriculum. They “promote high academic achievement and emphasize balanced growth - intellectually, physically, emotionally, and socially – for every student.”

Countryside School has an advanced computer network to support teaching and administration, and uses a wide array of technology resources in teaching, from digital video to iPads. They are looking forward to a broadband connection to UC2B in order to provide faster network speeds at a lower cost.

2 Maps

Countryside School and its neighborhood.
3 Photographs

The outside of Countryside School.
The IT person’s computer.
Countryside School: the students’ computers
Computers in the classroom.

Countryside School’s server.
4 Demographics of patrons or clients

There about 11 full-time teachers and 6 special teachers, including language teachers, an art teacher, and a music teacher. All of them have the basic computer skills, as they are able create documents on the computer, send/receive e-mail, and look for information on the Web, and so on. Countryside is a small school and has around 150 students currently.

5 History

Foundation. According to the Countryside School website, Countryside School was founded in 1992 by a group of local families who felt that Champaign-Urbana needed an independent, not-for-profit, nonsectarian elementary and middle school with an enriched, projects-based curriculum strong in math and science. After renting classrooms during its early years, Countryside purchased 14 acres of land in west Champaign, constructed its main building in 1996, and expanded its classroom wing in 2005. Its facilities currently serve 148 students. They have many computers in the school.

Technology. When the school was founded, they were utilizing four computers including three in classrooms and one administrative for word processing and book keeping. In 1994 the school expanded to include middle school students and curriculum, and in turn purchased more computers for these classrooms. When they first got an internet connection it was very slow dialup, 56 Kbps, and it was sometimes frustrating for the students and teachers. For example, they did a program with the University of Illinois called Chickscope, where the classrooms could view online the inside of a developing chicken egg, but the images took so long to load that it was often a frustrating experience.
for the students. At this time the dial-up modem was moved from classroom to classroom to share the connection.

6 Technology inventory

According to an interview, the main problem in Countryside School is that the Internet speed is too slow. They currently have a T-1 connection through the state of Illinois that provides symmetrical (download and upload) speeds of 1.5 Mbps, which when shared between the many computers in the school can cause frustratingly slow load times. They need faster speeds to be able to download images and videos for teaching. They now have many computers. All administrative staff members have their own computer and they have many computers in every classroom for the students to use. There are 27 laptops and 17 desktop for the students. There are also three teachers using iPads. It is very interesting that all the computers in the school are Macs. With regard to the future technology use, the school plans to buy more iPads for the students. And they also want more high-speed Internet service to improve teaching in the near future.

The following table outlines the technology inventory of Countryside School.

<table>
<thead>
<tr>
<th>Website</th>
<th>Speed Down (Mbps)</th>
<th>Speed Up (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT person’s office</td>
<td>1.431</td>
<td>1.453</td>
</tr>
<tr>
<td>speedmatters.org</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT person’s office</td>
<td>1.41</td>
<td>1.43</td>
</tr>
<tr>
<td>speedtest.org</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business office</td>
<td>1.234</td>
<td>1.440</td>
</tr>
<tr>
<td>speedmatters.org</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business office</td>
<td>1.46</td>
<td>1.33</td>
</tr>
<tr>
<td>speedtest.org</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7 Analysis

Mission and Philosophy. Countryside School’s mission is to combine joy in learning with excellence in education. Central to this is the belief that students thrive in a school where intellectual stimulation is high and where individual attention is given in a warm, friendly, and nurturing environment. They offer a program of strong academics combined with a focused development of study skills. Through a program that emphasizes hands-on, applications-based learning, the school seeks to involve each student in an active process of discovery, invention, problem solving, and mastery. The curriculum is designed for students working at or above grade level in all subjects.

Technology Use. Countryside School is an education institution, so the use of computers and technology tools is very important. They have many computers in the offices and classrooms, but the main issue is that the Internet speed is not very fast. This affects the quality of teaching, especially the downloading of pictures, video materials, and web-based applications from the Internet. So they very much welcome and support the UC2B project. Because most of the teachers have high levels of computer skills, they just have one person in charge of the computer system and the teachers do not need computer training. They have taught the younger students how to use computers in the school.
Computers for auxiliary teaching in the school. Nowadays, computers and multimedia play an important role in the teaching of students. For example, Countryside School offers summer camps which include video-making and editing, and students’ work is posted online so that it can be viewed by their families and friends. Computer applications are very common in every school, but unfortunately not every school has high-speed Internet. And, of course, some schools do not even have computers; there is a strong digital divide in our schools. Countryside is an excellent example of what can be done with technology in the classroom, and UC2B can make their service even better.

The vision of technology in the future at Countryside School. Countryside School has many great laptops and desktops for the students and teachers to use. The teachers are young and have a high level of computer skill; they don’t need more training. When it comes to the future of technology at the school the IT person repeatedly emphasized the need for faster Internet service.

Webliography
52: Judah Christian School

Emily Williams
Master’s Student, GSLIS

1 Executive summary
Judah Christian School provides a uniquely Christian education to nearly 600 students from preschool through 12th grade. They seek to incorporate the message of the Bible into the classroom and the daily lives of their students. This includes providing the students with the best possible education to prepare them for life after graduation. In order for this to be accomplished, students need to have access to and familiarity with technology, which will almost certainly be a part of their daily lives following Judah. The school has a fairly robust computer network both for education and administration, and a very fast Internet connection compared to similar private schools. However, as an organization dependent on donations for any large technological improvement, they could benefit from less expensive Internet costs.

2 Maps

Judah Christian School, located on North Prospect Ave., just south of I-74.
A closer view of the neighborhood in which Judah Christian School is located.

3 Photographs

The outside of Judah Christian School.
Staff desk and computing station in the library.
Student computer stations in the library.
4 Demographics of patrons or clients

In terms of demographics, the students at Judah Christian School are predominantly white, but there are some who are Hispanic or Latino, Asian, Black or African-American, or are from two or more ethnicities (see table below). The past 10–12 years have seen an increase in the Asian student population, especially those from Korea.

Table for Ethnic Demographics (Pre-k through 12th grade)
Enrollment for the 2011–2012 School Year

<table>
<thead>
<tr>
<th>Ethnic Designation</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic or Latino</td>
<td>28</td>
</tr>
<tr>
<td>Asian</td>
<td>56</td>
</tr>
<tr>
<td>Black or African-American</td>
<td>36</td>
</tr>
<tr>
<td>White</td>
<td>405</td>
</tr>
<tr>
<td>Two or More Ethnicities</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>545</strong></td>
</tr>
</tbody>
</table>
5 History

Judah Christian School was established in 1983, springing from a concern of area parents about the lack of Christian education available for high school students in the Champaign-Urbana area. In the fall of that year Judah opened its doors, beginning with a program for grades 7–10 with the intention of adding a grade each year until it was a 7th–12th grade program. The first two years were spent in the Webber Street Church of Christ facility in Urbana. In its third year, Judah moved to its present location at 908 N. Prospect Avenue, having bought the building that had previously housed the Champaign Elementary School, Lottie Switzer.

As Judah continued to grow, an elementary program was added in May of 1986, making Judah a k–12 school. Additionally, in the fall of 1991, a preschool was added, completing the educational structure of Judah. Class sizes continued to grow and in 1996 an additional wing was added to the building for the junior high and high school programs. Classrooms and offices were added to the wing for several years following and in 1999, the school added its final wing, which housed a brand-new gymnasium for the school.

Starting about six years ago, Judah began looking into options to move the school so it could continue to grow. After exploring several options, a donor gave a 68-acre plot of land, located in Urbana north of I-74, to Judah. There was enough room to build a new school and the necessary athletic fields all on the same campus. However, the City of Urbana denied Judah the proper licensing to make this possible and the search was once again back to square one. A capital campaign has continued in order to raise the funds necessary to build a new school and athletic fields once a site is identified. In April 2011, Judah purchased 48 acres of land just north of the intersection of Kirby and Rising roads on the west side of Champaign, where they plan to relocate the school in phases over the next 10–15 years.

6 Technology inventory

Being a small, private school, the biggest challenge for Judah when it comes to purchasing new pieces of technology is the financial burden. Not everything can be purchased, so certain upgrades have to receive priority. Judah has come a long way, as far as technology is concerned, since the school opened. Some of the biggest strides in regards to technology coincide with donations from parents. This includes a period in which new HP computers were provided every year for several years in a row and another donor paid to have the entire school wired. Events such as these are a great service to the school but cannot be expected on a regular basis.

Sites for Information: Judah Christian School has a well-organized website that has improved drastically over the last 5–10 years. Information about various aspects of the school can be found there including Admissions, Athletics, Arts, Alumni, Academics, and Contact Information. Judah also recently upgraded to a new school management software system called RenWeb, which has been praised as a large improvement over previous software.

Future needs for technology: while Judah has indeed taken great strides, with regard to available technology, at the school over the last 10 or more years, financial limitations mean they are behind the technology curve compared to other schools in the area. New
computers and updated software are consistently needed as technology grows and changes. Ideally, Judah would like to add more SMART boards to the classrooms to broaden the resources available for teachers to use in the classroom. As more textbooks move online, the purchase of online textbooks may be in the school’s future. Presently, the cost, need, and benefit of adding Wi-Fi throughout the building is being discussed. And as the school grows, additional IT staff may need to be added as the current staff are maxing out their hours.

<table>
<thead>
<tr>
<th>Technology Piece</th>
<th>Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Stations</td>
<td>105</td>
</tr>
<tr>
<td>Servers</td>
<td>7</td>
</tr>
<tr>
<td>Printers</td>
<td>65</td>
</tr>
<tr>
<td>Fax Machines</td>
<td>2–3</td>
</tr>
<tr>
<td>Scanners</td>
<td>2–3</td>
</tr>
<tr>
<td>Landline Telephones</td>
<td>1 per classroom and office</td>
</tr>
<tr>
<td>Copiers</td>
<td>2</td>
</tr>
<tr>
<td>SMART Boards</td>
<td>2</td>
</tr>
<tr>
<td>Localized Secured Wireless</td>
<td></td>
</tr>
<tr>
<td>Security System for Door</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test</th>
<th>Down (Mbps)</th>
<th>Up (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speedmatters.org (Admin)</td>
<td>17.410</td>
<td>4.247</td>
</tr>
<tr>
<td>Speedtest.net (Admin)</td>
<td>51.74</td>
<td>6.57</td>
</tr>
<tr>
<td>Speedmatters.org (Lib)</td>
<td>17.285</td>
<td>3.800</td>
</tr>
<tr>
<td>Speedtest.net (Lib)</td>
<td>46.04</td>
<td>3.20</td>
</tr>
</tbody>
</table>

7 Analysis

Judah Christian School provides a uniquely Christian education to nearly 600 students from preschool through 12th grade. They seek to incorporate the message of the Bible into the classroom and the daily lives of their students. This includes providing the students with the best possible education to prepare them for life after graduation. In order for this to be accomplished, students need to have access to and familiarity with technology, which will almost certainly be a part of their daily lives following Judah.

Being a private institution, Judah must rely on funding from tuition costs, fundraising, and donations. This often means the administration is faced with tough choices when deciding where the money needs to be spent first. While various aspects of the school’s technology is quite up-to-date and highly beneficial to students and staff, financial limitations mean that other technological improvements must be put on hold until donations are made or need forces them to move into a position of priority.
The administration at Judah seems to have a surface knowledge of UC2B and the fact that it has been an ongoing project for several years. There has not been a lot of thought as to how UC2B may benefit Judah, perhaps because there has not been an indication that it will actually come to the school anytime soon. Perhaps the greatest way UC2B may benefit Judah relates to their decision and research to install Wi-Fi throughout the building. If UC2B meant that it would be possible financially, then the benefits could start to outweigh the costs. Another benefit would be the symmetrical bandwidth which could allow for the future possibility of online classes, a partnership with Parkland concerning classes, or even offering classes to the community. A reduced monthly cost would also open up the IT budget to purchase more equipment.

Contact with Judah was fairly easy even though it was made at a busy time right before the school’s Thanksgiving break. Most e-mails were responded to quickly and a phone call to the administrator was answered with the direct result of setting up an interview and contact information for further interviews. The staff who have been at Judah for 15 years or more are able to talk about how far Judah has come since they started, but also realize the need for continual improvement and increased opportunities.

Webliography


53: Next Generation School

Qiyuan Liu
Master’s student, GSLIS

1 Executive summary

Next Generation School is an independent private school offering superior educational opportunities for students as young as six weeks old through eighth grade. Their campus is located in southwest Champaign. The school utilizes information technologies both in and out of the classroom to pursue their goal of providing an excellent education. With many computers all vying for Internet access, often at the same peak times, a more robust connection would surely enable more reliable access.

2 Maps

All three buildings/departments of the Next Generation School are marked in this map. A short distance from The University of Illinois campus, their location affords them the opportunity of many enriching experiences for their students.
Next Generation’s campus, located in southwest Champaign, consists of three buildings. The Early Education building, 1201 West Windsor, serves children ages six weeks through three years. The All-Star building, 2533 Galen Drive, is home to their four-year-old students, and the Primary and Middle School building is located at 2521 Galen Drive. The three buildings are connected by a large play field and playground. This map shows the distribution of nearby parks, facilities, and trails.

3 Photographs

The Primary and Middle School building of Next Generation School, located at 2521 Galen Drive.
The school’s three buildings are connected by this large play field and playground.
Staff computing resources in the Primary and Middle School.
These facilities are responsible for daily work such as meeting room reservations, printing, faxing, scanning, copying, and delivery service.
4 Demographics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Total (number)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The staff (49–65)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Part-time</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Summer full-time</td>
<td>10–15</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>They have about 34 full-time, 15 part-time staff, and 10–15 summer full-time staff, in addition to 20 full-time and 55 part-time staff in the Early Ed program. Knowledge of information technology is not a big issue for hiring, but some basic necessary digital skills are required. Most of the staff can access the Internet and use Excel. The summer full-time staff work 40 hours a week, and most of them are students. Most of the staff are certified teachers. There are some technical requirements for the education courses.</td>
</tr>
<tr>
<td>Teachers (28)</td>
<td>Primary School</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Middle School</td>
<td>6</td>
</tr>
<tr>
<td>Specialty</td>
<td>Teachers 9</td>
<td></td>
</tr>
<tr>
<td>Classrooms (32)</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>They have total 32 classrooms. There are 14 classrooms in the Primary and Middle School building, 5 in the All-Star Program (Pre-School) building, and in the Early Education building there are 13.</td>
</tr>
</tbody>
</table>

* These materials are obtained from the interviewees and their website.

5 History

Next Generation School was established in 2004 by Ms. Barb Sullivan. Many years ago, she set about to create a school that would change the lives of its students; she has done this, and at the same time her students have also had a deep and profound effect on her. Sullivan is honored to call Next Generation School her life’s work. (Website)

When the school opened in 2004, there were only about 5–6 computers in the whole school, because there were only 16 students at that time. There were no websites or blog at that time. The turning point was 4 years ago, when they bought 32 laptop computers, all Macs. According to the IT person, that was the biggest purchase that they made. Since that point they have bought a lab of 21 computers and another of 15 when they were moving into the new building and expanding their middle school.

6 Technology Inventory

<table>
<thead>
<tr>
<th>Inventory of the Next Generation School’s technology resources</th>
<th>Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desktops</td>
<td>42</td>
<td>Most are used by the administration.</td>
</tr>
<tr>
<td>Laptops</td>
<td>67</td>
<td>Includes 21 personal laptops. All students are using Mac laptops.</td>
</tr>
</tbody>
</table>

461
According to the introduction on Next Generation School’s website, the school is dedicated to educating the whole child—ensuring their academic growth as well as fostering their social and emotional development. By providing a multitude of learning experiences in core academics, in addition to physical education and the fine and performing arts, students grow into accomplished and confident individuals. This richness of experience sets the stage for a lifetime of learning and leadership. Working in partnership with parents is a vital component to helping children achieve their fullest potential. At every level parents are invited to be active participants in their child’s education.

At present, the general issue they are facing right now is that people often lose internet access on a regular basis, because they have too many computers sharing the single line.
There are 60–100 computers in the Primary and Middle School building that are online all the time.

They have 42 desktops in these two buildings, most of which are for administrative use, and 67 laptops, most of which are in carts that can be moved around the school and which are for students’ use. There are an additional 12 personal laptops, which teachers bring from home. The fourth-grade students have a computer lab. They have six desktops in their rooms, which are used for typing, instruction, and individual research. They need a dedicated IT person because there is no tech support in the school now. The software they are using now can be divided into two categories: software, including Excel and PowerPoint, purchased from Microsoft, and Calendar, Gmail, and Gchat from Google products, which are all free. The one database they use is called Easy Grading Pro: it helps their teachers with their grading.

Currently they have one website for all of the different departments of the school, several Facebook pages, and a BlogSpot page with many pictures on it. They are updated by a coordinator in a lower school. The website, which was purchased from Clover, keeps parents informed about what’s happening at the school. The website has only basic information, however: there are not even e-mail addresses, because most parents will call to get more detailed information, and furthermore they encourage parents to come and see their advanced facilities. They don’t want clients to look at the basic information on the website and then make a judgment; they encourage them to call and come to the school to see for themselves. According to the administrator, the school is now constructing a new website, also purchased from Clover, which will be a substantial redesign. All the contact information and other detailed information about their programs will be on their new site.

The communication and outreach coordinator prefers using Gmail, and she has an e-mail list of all the parents in the middle school, so she can send them notifications or news. They have different Facebook pages for the different departments at the school. There is a fine arts department page, which focuses more on their work and what the fine arts department is doing. There is also one for Next Generation School, and another one for their Athletic department, so that parents can stay up on what’s going on. E-mails go out daily. The communications and outreach coordinator believes that it’s important to make information available in different ways, because some people resort to Facebook for everything, and others look to e-mail. The website allows a lot of people to see what’s coming up, in regard to community and school events, so it’s a great option for parents.

Right now the school wants to have more SMART boards in the classrooms. SMART boards are interactive wide boards. They are so large that they need to be put on the wall. In addition, they would like to update the computers that they bought four years ago. Another thing the school would like to do is use documents cameras. This would allow students who had made pieces of work to put them under the documents camera, which would project them on the screen so that everyone can see what they have done. They need a lot of documents cameras. In addition, according to the coordinator, it will be good if they had a single website where parents can access all the information freely and pay school-related bills online.
The administration of Next Generation School haven’t heard about UC2B so far. But they mentioned that when they moved into this new building, someone did contact them to ask about broadband. According to the coordinator, financial concerns are a huge thing for them. They are a for-profit school, so they don’t have any government funding. They do have their technology fund, but it all depends on what they can do and what’s available for what cost. Technology is not cheap and software for computers is also very expensive.

**Bibliography**


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**Webliography**


1 Executive Summary

The mission of Parkland College is “to engage the community in learning.” Parkland does just that: it engages its students and faculty and inspires them to reach their goals and discover new paths. IT is used across the campus in many ways, but the biggest issue currently is access to enough bandwidth. Students and staff are streaming video and performing online operations at unanticipated rates, and the speed and strength of the wireless can simply not keep up. When thinking about the long-term benefits of UC2B, Campus Technologies at Parkland College is strongly focusing on the financial opportunities it could bring. Connecting all of Parkland on one fiber optic network with a minimal monthly cost would lessen and/or perhaps remove corporate ties altogether between Parkland and companies such as ICN and AT&T.

2 Maps

Screen Shot of Interactive Map from the Parkland website: http://online.parkland.edu/maps/
The location of Parkland College (denoted by blue pin).
Illinois Community College Districts: Parkland Labeled in Green.
3 Photographs

WorkNet Public Computing Lab: Parkland College Extension.
Entrance to B Wing of Parkland College’s Campus (photo taken from www.Parkland.edu).

Parkland College campus (photo taken from Parkland.edu).
4 Demographics

The Parkland College website states, “Our campus is a melting pot of student life, with cultures as diverse as the communities we serve, students ranging in age from 16 to 86 and a growing international student presence.” The 2011-2012 Catalog for Parkland College explicitly states, “Parkland College ensures equal educational opportunities are offered to students, regardless of race, color, national origin, age, gender, gender expression, sexual orientation, religion, veteran status, Vietnam veteran status, ancestry, or disability.”

According to data gathered from the April 2010 Environmental Scan, there were 12,595 total credit and noncredit students enrolled at Parkland College in the fall ’09 semester. Of those students, 56.3% were part-time and 43.7% were full-time. Men made up 46.9% and women 53.1%. The average age of all students at Parkland is 26.7 and the median age is 22.2.

Parkland College supports Affinity Groups, which are groups of people with a common ideology or who share a common concern or skill. Parkland’s Affinity Groups are voluntary, employee-initiated networks, which allow faculty and staff who share common interests to connect and provide support for each other. Some groups are associated with professional organizations. All groups are open with regard to attendance and welcome any new members. Current affinity groups include: American Association for Women in Community Colleges, Bowling Group, Ally Team, Christian Email Group, LGBT Network, Men’s Breakfast Group, Movie Night, PayDay Lunch, Parkland Trotters, Ujima, and the Yarn Group. Details about each of these Affinity Groups can be found on the Parkland College website using the following URL: http://www.parkland.edu/about/affinitygroups.aspx

The 2009–2010 Tuition rates for Parkland College are $92.00 per credit hour for residents of District 505. In-state but out of District 505 rates are $243.00 per credit hour. Out of state/international students are charged $378.00 per credit hour. For Internet courses, the tuition is $132.00 per credit hour and is at a fixed rate. There are many opportunities for scholarships and funding available for Parkland students, which are explained in detail on the main website using the following URL: http://www.parkland.edu/studentservices/financialaid.

5 History

In December of 1963, members of the Boards of Education in both Champaign and Urbana discussed plans to develop a technical institute in the area. Educators and leaders in the community soon formed the East Central Illinois Steering Committee (ECISC), and the initial plan for a technical institute was changed to a master plan for an institute of higher education that would serve individuals in East-Central Illinois. By 1966, a Board of Trustees had been elected, William M. Staerkel was selected for the post of college president, and temporary offices for the institution were established. The following month major decisions were made about the education program and the selection of college staff. The architectural firm of Ernest J. Kump & Associates, of Palo Alto, California, was selected to design the permanent campus. Buildings for use as a temporary campus were leased in downtown Champaign in the spring of 1967. The
temporary campus existed for several years at various sites throughout downtown Champaign and close-by surrounding areas. During this time the McMillan-Ehler farm and adjoining tracts, totaling 233 acres, were purchased for the permanent site of the campus and the current campus was built.

Parkland College offered its first campus classes in September 1967, enrolling over 1,000 students. Since the campus opened, enrollment has continually increased. The fall of 1973 marked the opening of the permanent campus, whose first two phases of construction included the four main “wings” in Phase I, and the College Center in Phase II. The construction of Phase III, which included the Physical Education facility, followed shortly thereafter. Recent years have seen the addition of an administrative wing, the theater and Staerkel Planetarium, the Child Development Center, and the Agriculture Technology Center.

Parkland has provided vocational and academic instruction to more than 210,000 people since classes began in 1967. In 1996, Parkland College contracted with the National Center for Higher Education Management Systems (NCHEMS) and Paulien & Assoc, Inc. to assess the space needs of the college and to develop the Master Campus Development Plan. The results of this space assessment showed a 111% deficit of student lounge and service space, a 19% deficit of food facilities space, and a 46% deficit of administrative service space. This plan identified the overall deficit as being over 127,000 square feet of assignable area and an additional 37,000 square feet in additional programming.

In 2010 a strategic plan for excellence was implemented. As Parkland College continues to experience significant change in terms of technology, pedagogy, student needs and preparation, and community employment needs and expectations, strategies have been put into place and are planned to accommodate the dynamic needs of the Parkland community. This strategic plan proposes to expand the existing campus to provide for Student Services, Applied Technology, Fine and Applied Arts, Fitness and Recreation, Athletics, Maintenance, and other renovations. This will add approximately 210,000 square feet to the existing campus.

6 Technology Inventory

<table>
<thead>
<tr>
<th>Technology</th>
<th>Number available</th>
<th>Additional Info</th>
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<tr>
<td>Speedtest.net</td>
<td>52.24</td>
<td>Download (Mbps)</td>
</tr>
<tr>
<td>Speedmatters.org</td>
<td>39.192</td>
<td>Upload (Mbps)</td>
</tr>
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<td>Computers</td>
<td>2,504 on campus &amp; off-site</td>
<td>2009; majority PC</td>
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<td>Computers in labs</td>
<td>1,261</td>
<td>2009; majority PC</td>
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<td>Community computers</td>
<td>155</td>
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<td>E-mail client</td>
<td>For all students, faculty, staff</td>
<td>Parkland.edu</td>
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<tr>
<td>LaserJet printers</td>
<td>100–150; wireless capabilities</td>
<td>About ¼ are color; remote</td>
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<tr>
<td>Equipment</td>
<td>Quantity/Type</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>--------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Fax machine/copy machine</td>
<td>100</td>
<td>Estimate</td>
</tr>
<tr>
<td>Televisions/DVD/VCR</td>
<td>300</td>
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<td>Networked computers</td>
<td>All on one network</td>
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<tr>
<td>Phones</td>
<td>About 50–75</td>
<td>Estimate; each room</td>
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<td>Website</td>
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<td>Parkland.edu</td>
</tr>
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<td>Social networking</td>
<td>Yes; many</td>
<td>Twitter, Facebook, etc.</td>
</tr>
<tr>
<td>Audio equipment</td>
<td>Speakers, microphones, PA</td>
<td>Every room</td>
</tr>
<tr>
<td>Microsoft software</td>
<td></td>
<td>Every computer</td>
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<tr>
<td>Lab equipment</td>
<td>Thousands</td>
<td>Science/health departments</td>
</tr>
<tr>
<td>Agricultural Tech Center</td>
<td>Large multipurpose facility</td>
<td>Affiliated with Ag. Centers</td>
</tr>
<tr>
<td>Tablets/E-readers</td>
<td>100–300</td>
<td>Pilot program; grant-funded</td>
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<td>Databases/I-share</td>
<td>Access to hundreds</td>
<td>Library services; E-catalogs</td>
</tr>
<tr>
<td>Wi-Fi</td>
<td>Campus-wide</td>
<td>CISCO access points</td>
</tr>
<tr>
<td>Planetarium resources</td>
<td>Multipurpose</td>
<td>Projectors, specific software</td>
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<tr>
<td>Sound systems</td>
<td>Roughly 10–15</td>
<td>Suitable for auditoriums/labs</td>
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<td>Music/theater facilities</td>
<td>Hundreds</td>
<td>Estimate; various equipment</td>
</tr>
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<td>One radio station</td>
<td>Studios; various equipment</td>
</tr>
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<td>Prospectus News</td>
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<td>PCTV</td>
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<td>Video presence</td>
<td>Hundreds</td>
<td>YouTube, video, etc.</td>
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<td>Instant messaging/e-mail</td>
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<td>Health/wellness center</td>
<td>200+ machines</td>
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<td>Dental students</td>
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<tr>
<td>Health Simulation Center</td>
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<td>Healthcare students</td>
</tr>
<tr>
<td>Assistive Technology Lab</td>
<td>varied equipment</td>
<td>students with disabilities ed. students</td>
</tr>
<tr>
<td>Child Development Center</td>
<td>varied equipment</td>
<td></td>
</tr>
<tr>
<td>Additional software</td>
<td>thousands</td>
<td>department specific</td>
</tr>
</tbody>
</table>

### 7 Analysis

“Educational abundance and community enrichment” are two tenets clearly stated by Parkland College. The mission of the community college remains “to engage the community in learning.” Parkland does just that: it engages its students and faculty and inspires them to reach their goals and discover new paths. Parkland is such a diverse and dynamic organization that trying to generalize about the organization holistically is extremely difficult.
The 505 district Parkland encompasses is a rich geographic area that includes all of Ford County, and parts of Coles, Champaign, DeWitt, Douglas, Edgar, Iroquois, Livingston, Moultrie, McLean, and Vermillion. Parkland College has a main 255-acre campus as well as off-campus locations for instruction at 1307-1319 N. Mattis Avenue, and at the Collision Repair Training Center, 31 E. Kenyon Road, both in Champaign. Parkland is comprised of over 9 academic departments, with 100+ associate’s degree and certificate programs, thousands of students and staff, and countless adult education classes, workshops, and training opportunities. It is apparent that Parkland College is an enormous facility, both in terms of its varying physical locations and the breadth of resources available.

Technology usage currently reveals itself in myriad ways at Parkland College. Findings throughout the research process point to several pertinent technology issues that Parkland College is thinking about and scheming of ways to combat. The biggest issue, as identified by the individuals interviewed, is bandwidth. Students and staff are streaming video and performing online operations at unanticipated rates, and the speed and strength of the wireless can simply not keep up. Efforts to increase the bandwidth are underway, but this is an area that still needs development.

When thinking about the long-term benefits of UC2B, Campus Technologies at Parkland College is strongly focusing on the financial opportunities it could bring. Connecting all of Parkland on one fiber optic network with a minimal monthly cost would lessen and/or perhaps remove corporate ties altogether between Parkland and companies such as ICN and AT&T.

In terms of student involvement and funding, Parkland College seems to be doing well overall. Every year, class availability and student enrollment continues to grow. Plans for new facilities and projects continue each year. Problems surrounding the digital skills of students form one area of concern. The digital divide certainly exists, and reveals itself in myriad ways at Parkland, yet the individuals interviewed remained optimistic. Students and staff are growing increasingly competent with regard to technology. Much of this is believed to be because of the resources and training available at Parkland. ICTs and computer/technology classes can help individuals who may be viewed as less tech savvy to develop skills, thereby reducing the digital divide.

In sum, community colleges such as Parkland do much to address the digital divide. They help educate and liberate individuals who may be experiencing the negative effects of the technology gaps that exist throughout society. They provide resources and networking at much more affordable rates than other higher education institutions, and prepare individuals to be productive, technologically literate members of society. It is crucial that Parkland and related institutions remain connected; UC2B can provide this at an affordable rate that could be highly beneficial to the community overall.

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Webliography


55: Urbana School District 116

Anna Holland
Master’s student, GSLIS

1 Executive summary

Urbana School District 116 has 10 schools and 1 administrative building. Bridging the digital divide is one of the general technology issues currently facing Urbana schools. As the curriculum becomes more and more technology driven, access to the Internet both at home and at school has become essential to Urbana students. However, access to technology resources is not the only problem the administration faces. Developing and encouraging technology use in the classroom on the part of students and teachers alike also proves challenging. With no mandatory state or national technology requirements, some teachers are not motivated to incorporate or teach digital skills. Students struggle to understand the value of technology and how it can benefit them. The district as a whole, however, fosters a strong supportive attitude for teachers who take risks and try something new with technology, so long as it is student and learning focused. In the past several years, the administration has worked to update and improve its hardware. In general, District 116 has a long and well-documented history of technology use. Every three years the district assesses its entire inventory of technology resources in order to apply for funding to replace aging equipment. Presently, the district is upgrading all its buildings to wireless Internet access. The impact of UC2B might have on District 116 is not clear. The Urbana School District took part in the City of Urbana’s community-wide fiber project and as a result already has incredibly fast Internet speeds comparable to the service UC2B would provide. The fiber-to-home premise connectivity of UC2B, however, would provide a huge opportunity for students to purchase affordable, cutting-edge Internet service for their homes.
2 Maps

The locations of Urbana School District 116 schools and its administrative office.
Neighborhood profile: shown here is the proximity of District 116 schools to surrounding amenities, businesses, and organizations.
3 Photographs

Urbana High School, grades 9-12, 1002 Race Street

Urbana Middle School, Grades 6–8, 1201 S. Vine Street

Martin Luther King, Jr. Elementary, Grades K-5, 1108 W Fairview Avenue

Yankee Ridge Elementary, Grades K-5, 2102 S. Anderson Street

Leal Elementary School, Grades K-5, 312 W. Oregon Street

Thomas Paine Elementary School, Grades K-5, 1801 James Cherry Drive
Wiley Elementary School, Grades K-5, 1602 S. Anderson Street

Prairie Elementary School, Grades K-5, 2102 E. Washington Street, Urbana

Washington Early Childhood School, Children ages 3-5, 1102 N, Broadway Avenue

John M. Garth Adult Education Center, Adults, 211 N. Race Street, Urbana
Administrative server and computers at 205 N. Race Street.

Student computer lab.
4 Demographics of patrons or clients

According to the “Guide to Urbana Schools” pamphlet produced by District 116, the combined 8 Urbana schools have 330 teachers. Faculty averages 15.5 years of experience and 60% of District 116 teachers have at least a master’s degree—both higher than the state average (“Guide”). In addition, the student-to-teacher ratio is lower than the state average at the elementary and secondary school levels. The average teacher salary is $47,542, according to the Illinois Interactive Report Card. Compared to the state level, District 116 currently has a much higher multiracial ethnicity makeup of its students (see Table 1, taken from the Illinois Interactive Report Card database). In 2011, 83.3% of teachers reported as white and 6.7% as Black. Also, the majority of Urbana School District teachers are female. Only 19.2% of teachers are male (NIU, 2011). In 2011, 65.9% of students came from low-income homes (see Table 2, also taken from the Illinois Interactive Report Card). Grade and district enrollment levels have not changed drastically in the past several years (see Table 3). Presently, the district serves 3,974 students.

<table>
<thead>
<tr>
<th>Year</th>
<th>White (%)</th>
<th>Black (%)</th>
<th>Hispanic (%)</th>
<th>Asian (%)</th>
<th>American Indian (%)</th>
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</table>
5 History

The 1990s. In 1990, ICT was not standard in the administration. The assistant superintendent had brought his own IBM XT machine to work. It sat on the desk and had no connectivity or printer. The PC was primarily used for grades and simple word processing. However, technology use ballooned in the next few years. By as early as 1994, teachers were writing web-based lesson plans and taking students to the National Center for Supercomputing Applications (NCSA) at the University of Illinois at Urbana-Champaign to see the Web. Also in 1994, a group of interdisciplinary teachers applied for and received an NSF grant though the University of Illinois that funded the four or five of them getting e-mail at the middle school. Within two years of the grant, the district had created two positions for technology staff. One was a network specialist and the other held a director position (Owen, 2011). By 1996 the entire district had e-mail hosted by the University of Illinois and by 1999 the high school had two computer labs (Owen & Sly, 2011).

2000–2008. District-wide, technology use skyrocketed from 1996 to 2000. During this time, the rather progressive USD 116 Board of Education invested time and energy in fundraising and applying to grants for purchasing and providing funds for technology. From about 2000 to 2007, however, the technology funding dried up, because the board of education had already bought everyone computers and therefore did not see the need to maintain a budget for technology. As a result, as recently as 2009, the district still ran on 1 Mbps T-1 lines and could not stream video, audio, or conduct conference calls over the Web.

2009–2012 Technology Integration Plan. District 116 created a three-year technology integration plan beginning in 2009. The plan worked to “incorporate telecommunications,
instructional technology and information technology as a natural part of education to ensure that all students will have the opportunity to develop lifelong learning skills necessary to be productive citizens in an information-driven, global society” (“Technology Integration Plan,” 2009, p. 3). The integration of equitable technology in the classroom opened the door for new models of teaching that matched nontraditional student learning styles. At the time, only 46.9% of District 116 teachers reported in a survey that they were advanced personnel computer users, while the rest indicated had either intermediate or basic computing skills (p. 21). A major weakness of teacher technology use revealed by the 2009 district survey showed that a large percentage of teachers never generated graphs, used spreadsheets, or required students to participate in online discussion groups or collaborative projects. Moreover, the district faced new gaps and education needs. From 2002 to 2008, the percent of low socioeconomic students increased from 40.4% to 60.3% and district enrollment dropped from 4424 to 3752 students, creating a larger technology gap. It is estimated that “less than 50% of the students in schools with high economically disadvantaged populations are estimated to have Internet access at home” (p. 24). The 2009–2012 Technology Integration Plan attempted to provide high-quality bandwidth that supported audio and video webstreaming in all district schools so as to provide a place for minority and economically disadvantaged students a place to access technology resources.

Timeline of Key Technology Events.

2000s: Shift from paper to electronic grade books and implementation of Skyward, a student-record-keeping book.

2008: Board of Education makes the decision to dedicate working cash towards a technology refreshment plan to replace old equipment.

2009: Faster bandwidth connectivity and ability to stream videos and audio.

2011: Moving all schools to a completely wireless network.

Strategic Plan 2011–2016. As District 116 prepares to move into the future, a new strategic plan has been built to further the fundamental values and beliefs of the administration. An important concept of the plan involves providing technology infrastructure and facilities to better support the changing educational environment. With all but two buildings entirely wireless, new learning models are thriving. Students engage with technology opportunities of many formats, both built into the curriculum and not. For instance, students with cell phones or Kindles are not banned from bringing them to the classroom and using them when applicable to in-class discussion or work. School policies have not changed, but they have instead grown more acceptable and encouraging of personal technology devices. With many of the schools now wireless, classrooms have become more mobile. Teachers are able to move around the classroom with a laptop, and school-related clubs and organizations now have Twitter accounts. For example, at the high school, the football coach communicates via Twitter posts, writing a few quick words to encourage or remind players.
6 Technology inventory

District 116 describes the digital skills of their staff and students as varied. Some staff, students, and teachers possess a very adequate knowledge of digital skills while others struggle to incorporate technology into their learning or administration. Because there is no technology standard for teachers that requires them to use technology in the classroom, the learning of digital skills varies for students from classroom to classroom. In general, however, students and younger teachers seem to possess a better knowledge of digital skills than the older generations of teachers. Students are more open to trying new technologies, but sometimes lack an appropriate understanding of how technology will prepare them with future career-related skills.

As a whole, District 116 is invested in technology and is currently undertaking steps to replace outdated hardware across the district. Every three years, the district takes an inventory of technology resources in order to apply for funding and replace and retire old equipment. Below is a short inventory of the current core technology resources. The complete District 116 inventory is not currently available but will be completed sometime this December.

**Hardware**
- 1200 Mac and PC computers
- 30 iPads
- 45 MacBooks for teachers
- 2+ Laptop carts
- 2 Alpha smart carts
- 12+ Workstation and multimedia labs
- 1 iPad cart

**Software**
- Moodle
- School Messenger
- Skyward
- Yearbook design software

**Speeds measured**
- 3.24-10.44 mbps download, 2.22-9.37 mbps upload

7 Analysis

In total, District 116 has 10 buildings and an administrative office and serves 3,974 students and employs 330 teachers. When it comes to technology, the district continues to have an extremely positive attitude. Since the early 1990s, technology has been integrated into the administration and education structure of the institution. Today, the Urbana School District continues to broaden its tech horizon. As part of a new technology initiative, District 116 has plans to upgrade all of its schools to wireless buildings within the next three years.
The wireless setting has already drastically changed the way teachers are working in the classroom. A teacher can move around the classroom from one group of students to another with a laptop. Classroom computers are no longer restricted physically or spatially to a corner or a wall where there is an outlet. This “unplugging” allows for discussion-based learning to flourish. In addition, the wireless network has a guest account that allows students to enable their iPod (Touch) players, iPads, laptops, and other electronic devices while on school grounds. The current policy for wireless devices and cellphones is not open, but it is up to the teacher to determine whether or not a student device is something permitted in class. Many teachers do not have a problem with granting students permission to use the calculator on their phone, for instance, if an assignment requires it (Sly, 2011).

As a whole, the switch to wireless and faster broadband has been well received by students and faculty. However, because there is no requirement in the teaching core standards to include technology-based learning in the curriculum, some teachers still prefer to do basic processing by hand. Because technology is not mandatory in the classroom, students as a result receive varied exposure to technology. Two different classrooms teaching the same subject and grade level may differ greatly when it comes to incorporating technology.

The administration, however, is very supportive of teachers who try new things and take risks centered on students and student learning—even if they fail. As the vice superintendent says, “I think a lot of teachers, not just the early adopters, but also sort of the next wave of teachers are really driven by what they see students doing with technology and they are excited by that” (Owen, 2011). Just this year, the district purchased a cart of iPads for classroom walk-throughs. The iPads are used to make suggestions, record observations, and collect data to better document what each building is doing.

Students more readily accept new technologies. They learn best by trial and error and thus do not have the fear that some teachers have of breaking the equipment (Owen, 2011). The problem with student technology needs and use, however, is that (1) a surprising number of Urbana students only have Internet access on their phone and not in the home, and (2) students often do not interact with technology in ways the district might expect. For instance, a recent effort to provide all high school students with school e-mail addresses meant to aid students with their homework assignments and communicating outside the classroom with teachers and fellow classmates stalled because many students felt that e-mail is outdated and claimed that texting or social network messaging is a quicker way of communicating.

Rapidly advancing technology and changing student demographics create the biggest issue for District 116. With a low socioeconomic level, a new concern for the district has been the digital divide. Because Internet access is in many ways necessary for student learning, grade management, and communication with teachers, students without access to a computer or technology at home are disadvantaged. Compared to other districts with similar socioeconomic and demographic makeups, however, District 116 probably has a higher percentage of students with Internet access at home, likely due to the proximity to the university (Owen, 2011). Nonetheless, there are several low-income neighborhoods in which people cannot afford the Internet. Students and parents from homes that do not
have Internet have the option to use the student computer labs during limited after-school hours and days.

Students and parents with Internet access, on the other hand, can easily view grades, become followers of Urbana Schools on Twitter (currently 250 people are followers), or keep updated with school-related news and announcements. Internally, the district already has high-speed fiber, as it took part in the Urbana community fiber project several years back.

The greatest impact of UC2B would be in the availability and affordability of fiber-to-home connectivity to disadvantaged neighborhoods for students. Providing students with at-home access to the Internet would dramatically help bridge the digital divide that District 116 faces.

**Bibliography**


Webliography


Health Care

56: Amber Glen Alzheimer’s Special Care Center

Elizabeth Osisek
Master’s student, GSLIS

1 Executive Summary

The Amber Glen Alzheimer’s Special Care Center, owned by JEA Senior Living, is a center “[c]ommitted to being the leader in providing quality personal services for our residents, while honoring the experience of aging” (JEA). One of 22 facilities that the company has opened specializing in dementia care, the center operates under the “Meaningful Moments” program, “designed to honor the individual life story of every resident, while addressing their unique needs throughout the aging experience” (JEA). The center and its staff members are devoted to caring for elderly residents who do not use computers, so there is very little focus on technology. There are only three computers in the building, which are used exclusively by staff members for professional e-mailing and business spreadsheets.

While the center does not use technology very much, they are interested in obtaining wireless Internet access. All decisions regarding technology are made by JEA Senior Living, and the company had previously turned down a bid for a wireless connection because “they want to limit the potential for abuses with technology on company time” (Foster). However the company may be willing to meet the lower cost of the broadband provided by UC2B.

2 Maps

Location of the Amber Glen Alzheimer’s Special Care Center in Urbana.
Location in relation to local businesses.

Key:
- Grocery store
- Pharmacy
- Video store
- Verizon store
- Auto shop
- Dollar Store
- Restaurant
- Point of interest
3 Photographs

Outside the Amber Glen Alzheimer’s Special Care Center, 1704 East Amber Lane, Urbana, IL (photo courtesy of JEA Senior Living Website, http://www.jeaseniorliving.com/urbana.html).

Desktop of Business Office Manager
Administrative Director using the computer in her office.
4 Demographics

All of the residents at the Amber Glen Alzheimer’s Special Care Center are Alzheimer’s/dementia patients. Room rental costs from $3,650 to $6,510 per month (“Amber Glen” Pamphlet), depending on the room, so residents likely come from upper-middle- or upper-class families.

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<td>Stage 2</td>
<td>Very mild decline</td>
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<tr>
<td>Stage 3</td>
<td>Mild decline</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Moderate decline</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Moderate, mid-stage</td>
</tr>
<tr>
<td>Stage 6</td>
<td>Moderately severe</td>
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<tr>
<td>Stage 7</td>
<td>Severe, late-stage</td>
</tr>
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</table>

Stages of Alzheimer’s Progression Accepted. Data from SNAP for Seniors Website (SNAP)

5 History

The Amber Glen Alzheimer’s Special Care Center is one of 20 senior care facilities in 6 states owned or operated by JEA Senior Living. The Center opened in February 2006 and was JEA’s 22nd facility devoted to dementia care (Pressey). It is home to 66
residents living in 10 private and 28 semiprivate rooms. Licensed nursing staff is on call 24 hours a day, and activities center around JEA’s “Meaningful Moments” dementia-care program, “designed to honor the individual life story of each resident, while addressing their unique needs throughout the aging experience” (JEA). The company is “committed to being the leader in providing quality personal services for our residents, while honoring the experience of aging” (JEA).

Joy Rathe was named the first Administrator of Amber Glen in 2005 (businessbrief). She passed this role to Chris Neff (SNAP), who worked as administrator until 2010. The center is focused on creating a welcoming community for Alzheimer’s and dementia patients and their families, so the center’s events do not have a large impact on the Champaign-Urbana community as a whole. Moreover, the center still uses CD players and overhead projectors, so it has not had any significant technology updates since opening in 2006 (Eades, Avant).

6 Technology Inventory

Desktops: 3
- One at Business Office Manager’s desk
- One in Administrative Director’s office
- One for Health Services Director

E-mail – corporate e-mail address

Microsoft Office

Tech Support: Internet – EarthLink; everything else – corporate entity (JEA Senior Living)

Telephone System: AT&T

Website: <http://www.jeaseniorliving.com/>
- Maintained by corporate entity, JEA Senior Living
- Contains three pictures of the Urbana site
- Link to a Google map showing the Urbana site
- Link to the Urbana site’s community newsletter (still September 2011 as of October 20, 2011)
- Local staff are unable to update or alter the site

No online forms; all forms are available only in paper format

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7 Analysis

The Amber Glen Alzheimer’s Special Care Center uses basic technology to meet the staff’s needs. The three computers at the center are used only for sending e-mails and maintaining a few spreadsheets. The center’s Internet service, provided by EarthLink, is relatively slow, with download and upload speeds of 0.05 and 0.09Mbps respectively.
The center investigated setting up a wireless Internet connection, but that JEA Senior Living, the corporation that owns the center, said the cost was too high at the time. The administration would like to get a wireless connection and was very interested in learning about the details and costs of the broadband access that UC2B will provide. However, ultimately the decision of whether to purchase a wireless connection lies with JEA Senior Living.

While faster Internet speeds would be beneficial to the center, the staff members do not seem to be inhibited by the current Internet speeds. The focus of the center is on caring for residents who often would not even know what a computer is, so information technology is not a high priority.

Bibliography


Webliography


57: The Champaign County Christian Health Center

Afton Hallauer
Master’s student, GSLIS

1 Executive Summary

The Champaign County Christian Health Center is focused on preserving its current offerings and improving on technologies it already has, but may not be getting full use out of, such as their Volunteer Reporter program, organization website, and Facebook page.

The center has made significant advances in the past few years, moving their volunteer scheduling into an online document that can be accessed by all volunteers, as well as reinstating a computerized sign-in system through the Volunteer Reporter program, which tracks volunteer hours. Staff at CCCHC hope to gain more expertise in these programs and really increase the usefulness of these programs, allowing the center to become even more effective at serving its patients. Although CCCHC does have some plans for the future, such as moving patient records online, creating computer kiosks at which patrons could access health-education information, and expanding hours of operation and offerings to accommodate more people, many of these have been pushed to the periphery in the face of funding issues.
2 Maps

Champaign County Christian Health Center’s location in the greater Champaign-Urbana area.
3 Photographs

Front entrance to the building that houses the Champaign County Christian Health Center. CCCHC is on the second floor, in suite 2E.
Patient waiting room at CCCHC.

One of the four examination rooms at CCCHC.
4 Demographics of Patrons and Staff

The Champaign County Christian Health Center serves individuals who do not have health insurance. Although patients tend to come from roughly the same socioeconomic level, there is a great deal of diversity among those who visit the center. “We see immigrants, graduate students, international students, family members of those, community members, recent unemployed, and some homeless,” said the CCCHC administrator. The majority of patients come from Champaign-Urbana, although some do come from the surrounding areas as well, particularly for the center’s mental health clinic.

The majority of patients are adults, since all children can be covered under KidCare, a state program that provides inexpensive comprehensive healthcare for children. The CCCHC administrator pointed out that “occasionally we do have a lot of children of new immigrants of international students, and they don’t know [about KidCare] yet.” Children, however, are generally seen at the center’s satellite location at Orchard Downs, and not at the Second Street main branch. Those children are generally seen once by the staff at CCCHC, who tell the children’s parents about KidCare.

Although the site used to serve a very large Hispanic population at previous locations, Hispanic use of the center has dropped significantly since CCCHC moved to its current location on Second Street. “We had a very large Spanish-speaking population that would come to the clinic at previous locations and we’ve seen a dropoff in that,” said the CCCHC Office Coordinator, “It’s either a matter of they don’t know that we’re here, or potentially that the other locations were more conveniently located.”

Among staff members there is also a fair degree of diversity. CCCHC only has two paid staff members, the administrator, and the volunteer/office coordinator, both of whom are part-time. All other staff are volunteers. There are roughly 100 active volunteers at CCCHC. Among the volunteers, some are professional medical staff, others are pre-medical students, and still others are nonmedical student volunteers.

5 History

The Champaign County Christian Health Center has been in operation since 2003. During this time the center has been at a series of different locations. Originally, CCCHC was located in the New Covenant Church. It then moved to Salt & Light, where it stayed until at least 2006.

In 2007, CCCHC moved again, and was sharing space with that of the Champaign-Urbana Public Health District. When the Public Health District moved to their new location on Kenyon Road, CCCHC did so as well.

In mid-2008, the CCCHC opened at their current location, 507 South Second Street. This marked the first time that the organization had its own permanent space. According to CCCHC staff, in prior locations CCCHC had operated within significant space constraints. Whenever the clinic was in operation, staff would have to move their equipment out of the storage room, set up, and then break everything down again at the end of the night. Moving to their current location allowed CCCHC to permanently set up
operations within their own space: “It cut out a lot of time and a lot of confusion,” said the CCCHC Office Coordinator.

From the beginning, CCCHC has used computers and e-mail in its operations. CCCHC has also always had access to a fax machine and copier. The Volunteer Reporter program (which is used to record and track volunteer hours), while falling out of use at one point, has also been used by CCCHC since the beginning.

Staff was unsure exactly how long the center’s website had been up (which was originally created by the son of one of the center’s volunteers), although it may have existed from the start. CCCHC’s Facebook Page, on the other hand, is relatively new, having been created about two years ago by the center’s previous volunteer coordinator.

The use of online programs in volunteer scheduling has changed, however, from the system of Excel files used originally. These files would be e-mailed to all of the volunteers whenever a schedule change was made. “The online programs let us be a little less crazy,” said CCCHC Office Coordinator, “I can just have it shared with all my volunteers and update it as needed.”

This mission of the CCCHC has remained virtually the same throughout its existence, and the center continues to expand its offerings to patrons.

### 6 Technology Inventory

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7 Analysis

The Champaign County Christian Health Center seeks to provide free and holistic healthcare to Champaign-Urbana’s uninsured population. The organization operates with 2 part-time staff and over 100 volunteers, and is open every Tuesday evening and every second and fourth Wednesday of the month. They provide primary care, screenings, education events, a dental clinic which is open every Wednesday, and a mental health clinic which is open once a month.

Staff at CCCHC do not feel that their current technology in any way hampers them in doing their jobs, but they do have plans for the future. One plan is to place computer kiosks in the waiting room, which patrons could use to access health education information. There is also some interest in moving patient records online, as is done with many other health care centers.

There is not, however, any movement towards making the appointment system more electronic. Currently, CCCHC schedules patient appointments via the phone. Although messages can be left requesting appointments, patients are strongly encouraged to call between six and eight p.m., on Monday evenings to make appointments. “That seems a little more fair,” said the CCCHC Office Coordinator, “since it is first come, first serve.” Reminders to patients of their appointments are also made over the phone.

Generally, none of the patients are encouraged to contact the center via e-mail, although exceptions have been made for a couple of patrons who do not have regular access to a telephone. One reason for this policy is that CCCHC does not want to alienate patrons who might lack Internet access. However, it is unclear what level of Internet access is enjoyed by the majority of CCCHC’s patrons. According to the office coordinator, when CCCHC staff can’t accommodate all requests for appointments, they will often recommend the patron set up an appointment with the HeRMES clinic, a student-run free clinic out of the University of Illinois, which schedules appointments online. The office coordinator always asks whether the patron has “easy Internet access,” and very rarely comes across patrons uncomfortable with making the appointment online.

Volunteers, on the other hand, communicate almost entirely by e-mail. There are a couple of volunteers who still use the telephone as their main means of communication with the center, but all of the scheduling of volunteers is done via an online program that can be updated by the volunteer coordinator and accessed by all of the volunteers. These online programs are a fairly new development for the center, which previously relied on Excel files which were then emailed out to all of the volunteers.

As an organization that has struggled with funding in the past, finances are really the biggest concern facing this organization at every turn. When CCCHC considers moving patient records online, establishing patron computer kiosk stations, or expanding operations, the issue of funding surfaces right away: “We, as with most nonprofits, are all struggling with funding” said the CCCHC Administrator, “so [we do] anything we can to cost-save without having to take drastic measures.” This same sentiment was expressed by the volunteer/office coordinator as well: “There have been a few almost throwaway comments about other healthcare facilities that all have their patient files on computer programs and that kind of thing. But honestly, I don’t think we’re anywhere near going to that route.... With such a limited clinic, and given that we don’t have the financial

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resources to do it at all, I doubt that it’s going to be in effect any time in the next few years.”

In fact, much of the center’s focus is geared toward improving their use of technologies they already have, such as improving the organization website and Facebook Page, and learning how to effectively utilize the Volunteer Reporter program to run reports and compile better data on volunteer hours. “Honestly,” said the volunteer/office coordinator, “I don’t know that there are too many plans in the works except just getting a further hold on the programs that we’re using right now.... I don’t think we’re getting full use our of them, so I think the first step is really to maximize our use in that area and ... how we can use it, and then maybe we’ll go from there.”

Bibliography / Weblibliography


503


58: Christie Clinic

Samantha Millsap
Master’s student, GSLIS

1 Executive summary
Christie Clinic is a for-profit and physician-owned health care center with 18 locations dispersed across the east-central Illinois area. These facilities range in size and capabilities, from very small and located in the County Market grocery store on Kirby Avenue to the much larger central location in downtown Champaign. As the clinic’s website declares, the mission is to provide the health care that is necessary for long life but the encompassing vision is to “Create a Healthy Community.” Christie Clinic has thrived by utilizing information technology to its fullest capacity, and digital technology is widely used by doctors, nurses, and patients. Christie Clinic is doing an amazing job with providing opportunities for its patients and now UC2B can help play a role by essentially elevating its patients to meet the high level the clinic is at in regards to IT, through projects like its Patient Portal which allows patients to access their medical information, lab results, and the like on their own, from any place with Internet access.

2 Maps

Locations of all the Christie Clinic campuses in the central Illinois area; note their locations in relation to Interstates 74 and 57.
The main location, in downtown Champaign at the corner of Neil St. and University Ave. Nearby are Chase Bank, the Champaign County Housing Authority, the C-U MTD, and the Champaign Public Library.

3 Photographs

Christie Clinic on University Avenue in downtown Champaign.
4 Demographics of patrons or clients

No demographical information on the patients who visit Christie Clinic was shared for this report, though the clinic does at least keep track of age distribution amongst those visitors. Patrons are of all ages, income levels, ethnicities, and genders, and come from Champaign-Urbana, as well as from the areas of Rantoul, Danville, Mahomet and Tuscola, where Christie Clinics or convenient care centers are also located. Given the size and quality of the Obstetrics and Gynecology and Pediatrics departments, it can be presumed that a large number of women and children frequent the clinic.

5 History

Christie Clinic was founded in 1929 in Champaign, Illinois (About Christie Clinic), by Dr. C. W. Christie, Dr. J. W. Powel, Dr. J. P. McKinney and Dr. C. E. Albers (Urbana Daily Courier, p. 4).

The clinic purchased the Twin City Building and Loan Building at Neil Street and Clark Street in 1936 in order to expand and update the clinic. Previously the clinic had been operating out of the fifth floor of the Lincoln Building. This expansion saw the clinic add 42 exam rooms, a Physiotherapy Department, and a Radiology Department equipped with lead-lined rooms (Daily Illini, p. 2).
In 1997 Christie became affiliated with ProMedCo, a large company in Fort Worth, Texas. According to then Executive Director, Stan Piotrowski, joining with the firm “allow[ed] Christie to continue to be locally managed and provide access to financial resources to expand and remain in the forefront in the rapidly changing health care environment.” At this time Christie decided to begin moving away from paper patient medical records in favor of digital records. At this point Christie Clinic was the largest clinic to be affiliated with ProMedCo as well as the first in the state to do so (Pressey, 1997).

Christie’s affiliation with ProMedCo was terminated in May of 2001 after PMC filed for chapter 11 bankruptcy. Christie was able to buy back its management contract and Central Illinois Bank handled the financing of the purchase. The executive vice president of the bank had this to say about the clinic: “I think our knowledge of Christie’s stability in the community for so many years certainly went a long way in our decision.... Plus, we do feel, that for health care consumers, having something that’s locally controlled, with the doctors having control, makes it a lot stronger organization.” After this move the clinic was completely owned by 61 of its physicians (Pressey, 2001).

The clinic switched over to its current Electronic Medical/Health Record program in 2002, which meant the eventual end of paper charts for patients and brought about faster and ubiquitous access for doctors. Christie is currently searching for a replacement for this EMR/EHR.

In 2004, plans were announced for the clinic to expand to Danville (Phillips, 2004). The clinic there today has two departments, Family Medicine and OB/GYN, and the convenient care center offers those same specialties as well as Podiatry, General Surgery, Radiology, and Physical Therapy, among others. In 2006 a brand-new radiation oncology center was added at the downtown Champaign clinic location (Pressey, 2006).

That same year plans were announced to build a new campus in northwest Champaign in the Clearview development area, but were soon abandoned because an agreement on the price of the original building could not be reached between CC and the Atkins Group. This expansion plan was reintroduced in 2008, but in the new version the clinic was to retain its location in downtown Champaign, which would be completely remodeled. The expansion was estimated to cost $35 million (Pressey, 2008).

In 2009 Christie Clinic opened its third grocery-store-based convenient care center in the Count Market at Fourth Street and Springfield Avenue. The other two locations are at the County Market stores on Kirby Avenue and Glenn Park Drive, respectively, in Champaign (News-Gazette, 2009).

In April of 2011, Christie Clinic announced plans to begin outsourcing medical transcription work to Nuance Transcription Services, based in Burlington, Massachusetts (Pressey, 2011).

### 6 Technology inventory

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<td>Employees</td>
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Forms
Numerous forms in both paper and electronic formats; increasingly electronic, including:
“Authorization to Disclose Health Information”
“Authorization to Disclose Health Information: Verbal Release”
“Life Imaging™ (Radiology) Record Release”
(these are made available on the clinic’s website and are meant to be printed out and mailed in)

Social Networking
Twitter and Facebook: the website includes a Twitter feed with updates on wait times at various clinic locations

Bandwidth
50 Mbps

Tech Support
In-house

Other
T-1 Line, Wireless networks for public use

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</table>

7 Analysis
The health care industry has come to depend upon digital technology to a great extent. Christie Clinic has thrived by utilizing information technology to its fullest capacity, and digital technology is widely used by doctors, nurses, and patients. Christie’s establishment of an Electronic Health Record (EHR) system is perhaps the most significant event in the past few decades to happen at the clinic. By divorcing itself from paper charts and records, Christie Clinic was able to realize striking gains in terms of efficiency and speed when dealing with critical information needed to treat patients. With the EHR in place, physicians can access their patients’ records quickly from home and nurses can have a prescription refill request sent to the pharmacy in seconds. Not only is this system fast and easy, but it is also opening up communication between Christie Clinic and the two hospitals in the area, Provena and Carle. Hopefully with further advancements in EHR systems (Christie is currently searching for a replacement system for theirs, which is about a decade old) and a change in how these three health organization have traditionally viewed one another, the hospital vs. clinic antipathy that has existed might begin to dissipate, which could greatly benefit the greater Champaign-Urbana community.

The community is at the heart of the organization, as is clear throughout the clinic’s website and practices, as well as in the sheer number and accessibility of locations. It is
important to the clinic that it is physician-owned and also that the doctors and staff be a part of the community. For example, the physician interviewed for this study received her B.A. and M.A. from the University of Illinois. As a for-profit organization there it is understood that the clinic operates to make a profit as well as to provide the best health care possible to the community it services, but the clinic seems quite sincere in its efforts to help people while also prospering financially.

The way that UC2B can most benefit Christie Clinic is through their patients. Christie has established that using and staying up-to-date in information technology is a priority. With the Patient Portal, patients who visit Christie Clinic can access their medical information, lab results, and the like on their own—and can do so from home. However, usage of the Patient Portal is not as high as the clinic would like right now. This is an example of the digital divide, because though the issue could simply be that there are a lot of patients of Christie Clinic who prefer not to use the Portal, it is conceivable that there are many patients who might desire to use it but do not have the Internet at home or the needed skills. UC2B has the arsenal to bring more people affordable and fast Internet connectivity, which could easily increase the usage of the Patient Portal, though the project is not centered around teaching people in the community to be better users of technology. Christie Clinic is doing an amazing job with providing opportunities for its patients and now UC2B can help play a role by essentially elevating its patients to meet the high level the clinic is at in regards to IT.

Webliography


59: Community Blood Services of Illinois

I-Ju Chen
Master’s student, GSLIS

1 Executive summary

Community Blood Services of Illinois (CBSI) is a nonprofit organization that provides blood donated by volunteers to people who need it. CBSI uses technology in its operations currently and it is undergoing changes due to a merger. Less concerned with Internet speed, CBSI is focusing more on their system and services. Technology can help them become more competitive and save labor and resources which can be directed towards services and marketing.

2 Maps

Main office, located at 1408 West University Avenue in Urbana
The CBSI service area: the blue markers indicate CBSI facilities and the red markers indicate CBSI’s client hospitals.
3 Photographs

Front entrance of Community Blood Services of Illinois.

Office of Community Blood Services of Illinois.
Community Blood Services of Illinois provides free Wi-Fi for donors
4 Demographics of patrons or clients

CBSI’s clients are five hospitals in eastern Illinois. They all use an online ordering system to request the blood products they need and their staff people, who are responsible for ordering, are well trained in terms of digital skills.

Another group of patrons/clients of CBSI are the donors. People can donate blood if they are older than 16 years old, and donors form a diverse group of different ages, ethnic backgrounds, occupations, and are both male and female.

5 History

Community Blood Services of Illinois (CBSI) is a nonprofit organization that has served the sick and injured from 1972 through the present. CBSI merged with Mississippi Valley Regional Blood Center (MVRBC) in 2011 to serve more hospitals in Illinois, Iowa, Missouri, and Wisconsin, in response to a more competitive market.

1972-- CBSI is founded
1978-- CBSI adopts the NovaNet system for donor record keeping
1996-- CBSI replaces NovaNet with BBCS, a blood bank management system
1999-- CBSI launches its website
2011-- CBSI merges with MVRBC in August
2011-- CBSI completes merger and system migration from BBCS to MVRBC System

6 Technology inventory

<table>
<thead>
<tr>
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<th>Number/Content</th>
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</table>
7 Analysis

Community Blood Services of Illinois (CBSI) is a nonprofit organization that provides the eastern Illinois area with a blood supply. CBSI was founded in 1972 and their mission is to serve the sick and injured by maintaining an “adequate area supply” of life-saving blood and bone marrow, which is donated by healthy volunteers.

CBSI’s mission has remained the same since its founding. However, in these changing times the organization faces more challenges. For example, many hospitals have merged and they may change their policies for getting blood products or end their contracts with CBSI. Therefore, CBSI cannot remain static in its operations and needs to adapt in order to ensure the success of its mission. CBSI chose to merge in order to gain blood sources and increase their competitiveness in 2011. They are trying to provide a better space for their donors, so the Urbana blood center is being enlarged. They are providing wireless access so that people will not be bored while they are donating blood and use Facebook and Twitter to advertise and remind people come in and donate.

In the nearly forty years that CBSI has been serving the community, information technology has seen many changes. In the beginning, every document was handwritten; CBSI implemented a system to manage donor records in 1978. However, they did not adopt a comprehensive bank management system until 1996. At that time, everything changed because all staff had to learn a new system. As a result CBSI was able to provide better service due to its well-managed internal procedures. CBSI staff people currently use computers to deal with all office tasks and laboratory tests.

One of the challenges CBSI faces now is a result of the merger in 2011. They had to migrate to a new system. They provided in-depth training for all staff people, but the staff still needs more time to get used to the new system. CBSI is also concerned with collaborating well with MVRBC. Although there are many challenges for CBSI, the merger is also a good opportunity for the organization. They have access to more funding, more resources and more technical support. Due to the merger, they use MVRBC’s system now and there are many new functions of the system which were not provided by what they had before. For example, the new system will provide an online schedule function on CBSI’s website in the future. Currently, donors have to call or e-mail to make an appointment for donation. This new functionality should be in place by the next year.

CBSI uses technology not only for management but also for marketing. They started using Facebook as a channel to connect with donors in 2011. The fans of CBSI page are 387 and the number continues to grow. They update their fan page frequently, but actually there is limited interaction with fans. The Internet is not the main channel for advertising now, but will play a more important role in the future. Staff in the donor relationship department said that CBSI has to increase its visibility in the community. Technology could be a big help, but it is not the only approach. For example, older donors may not use the Internet or computers, so they need to find another way for reminding them to donate.

In general, Internet speed is not the main issue for CBSI. As things stand, their blood bank management system is located in Iowa (MVRBC) and CBSI is not responsible for server maintenance. The Internet is mainly used for staff communication, providing the
public with free Wi-Fi, and the Internet phone system. In the future, they will use video conferencing for better communication with MVRBC, so Internet speed will be an important factor. However, they already have three T-1 lines and one fiber-optic line, which provide enough Internet speed for their needs. UC2B can also benefit them if the project lowers the cost of fiber-optic lines, and then CBSI can use the funds saved to improve their services, marketing efforts, and so on.

In sum, CBSI is presently dealing with a great deal of change. They are making good use of resources, including not only blood products but also the system and technology provided by MVRCB. They are able to do more training of staffs and make them more comfortable with the changing technology, and as well as generate creative service and marketing ideas to assure the success of their mission.

**Bibliography**


**Webliography**


60: Illini Heritage Rehab & Health

Colleen McClowry
Master’s student, GILSIS

1 Executive Summary

Illini Heritage Rehab & Health Care is a publicly funded assisted-living facility and part of the larger Petersen Healthcare corporate model. According to the website, Petersen Health Care employs nearly 6000 employees and is recognized as a major partner in communities throughout Illinois, Missouri, and Indiana. Though funding and budget cuts limit the growth of digital technologies, they are utilized both by staff in daily work and by residents in daily activities.

2 Maps
The location of Illini Heritage Rehab & Health in relation to local schools and businesses.
3 Photographs

Outside of Illini Heritage Rehab & Health Care (photo courtesy of Petersen Health Care website: [http://www.petersenhealthcare.net](http://www.petersenhealthcare.net)).

Residents with their families (photo courtesy of Petersen Health Care website: [http://www.petersenhealthcare.net](http://www.petersenhealthcare.net)).
4 Demographics

The institution employs about 60 staff and houses around 50 residents. The staff is comprised of social workers, administrators, certified nurses and nursing assistants, physical therapists, janitorial staff, dietitians, and a handful of volunteers. The economic status of the staff is highly variable, given the range of positions currently employed. Staff and residents are highly diverse, reflected by individuals’ varied economic, religious, and sexual orientations. Due to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), official information regarding residents’ racial classification, economic status, sexual or religious orientation, and any other personal character traits and employment history remain confidential. A staff member guessed, however, that the average age of the residents is about 85; the oldest resident currently living at the facility is over 100 years old, and residents in their early 70s are considered to be on the younger end of the spectrum. The average age of the staff is about 35.

In terms of technology usage and capabilities, the majority of the staff would be considered “netizens.” Full-time staff are required to communicate using the Petersen Health Care e-mail system on a regular basis. The facility is not as “up-to-date” with regard to technology as some elderly care facilities. Still, even though most of the staff does not exactly rely on the Internet and computers for the majority of their work, they do indeed possess digital skills as a result of their mobile phone and computer usage outside of work. Most of them use computers at home, check their e-mail daily, and use social networking sites on a regular basis.

The residents, on the other hand, are an entirely different story. Almost all of them would be described as computer and Internet “illiterate.” Only one resident knows how to check his/her e-mail, and has only done so on very rare occasions, when family is visiting. Most of the residents don’t even use phones; only three of four of them actually have cell phones. The only technology that most residents rely on is the television.
5 History

The Illini Heritage Rehab & Health facility has existed for 35 years. It was initially located in the Catholic Charities building adjacent to its current location. Illini Heritage Rehab & Health was originally a privately funded mental health center for individuals of all ages. About 20 years ago, the focus shifted from mental health to concentrating on the elderly community, and the site moved to its present location. About eight years ago, the facility became a corporate entity owned by the Petersen Health Care Company. Since then, surprisingly little has changed in the actual infrastructure. Initiatives to beautify the facility by adding courtyards, landscape design, and new furniture have occurred several times over the years. The biggest changes have been the “behind the scenes” aspects such as funding, outreach, marketing, and staffing processes.

Petersen Health Care was founded in 1974 by James D. and Robert L. Petersen, two brothers who were both registered physical therapists. The two flagship nursing homes the Petersen brothers purchased at that time were Kewanee Home in Kewanee, Illinois, and Robings Manor located in Brighton. Today, Petersen Health Care is the largest nursing home chain in Illinois and has become the name synonymous with quality long-term care throughout the Midwest. There are over 15 different facilities associated with Petersen Health Care. Additionally, the company has even bigger plans to continue expansion bringing quality long-term care and independent living options to more seniors throughout the Midwest.

The history of technology use at Illini Heritage Health & Rehab is relatively recent. Radios, televisions, and phones have been used for as long as the facility has existed; and usage of computers and the Internet began about 10 or so years ago. The first computers in the facility were installed at the onset of the corporate model. When Petersen Health Care began to manage the facility over eight years ago, they added various desktop computers for the staff. Five years ago, wireless, networked computers were installed and the printers, scanners, and fax machines were updated. Around this time, the Illini Heritage Rehab & Health website was added to the Petersen Corporate website. This is the only Web presence currently used for the institution, although the prospect of social networking and blogging has recently been discussed. The group e-mail system was also added about three years ago. There are no other future plans to implement new and currently existing technology at the center because it is not seen as a necessity for the residents. The budget simply will not permit the introduction of any new technologies to the institution at this point in time.

6 Technology Inventory

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According to the mission statement found on the Petersen Health Care Corporate Website, Illini Heritage Rehab & Health embraces the philosophy that founded the company over 35 years ago. The proven business philosophy of strong community involvement, ‘bringing the community to the nursing home and the nursing home to the community,’ as well as Petersen’s ‘resident-care based philosophy,’ is what makes Petersen Health Care unique in the industry and is the reason the company is renowned as the Midwest’s leading long-term care provider. A friendly, welcoming community exists between the staff, residents, and the residents’ families. One staff interviewee stated how after working in many healthcare facilities in the Champaign-Urbana, Illini Heritage Health & Rehab proved to be “by far the best.” She said that “if I had to put my mother into a facility it would be this one. If I had millions and millions of dollars I would still put her in this one. I cannot believe the loving, the care, and the Christian support that goes on here.”

It is interesting to note how technology use, mainly through the television, is such a large factor in bringing the community together. In the front “communal space” of the facility, staff, residents, and families of residents can be found gathered around the television at any given time. This is important because while it doesn’t say much now for the current usages of technology with regard to high-speed internet and the UC2B project, it points to the general direction the facility may need to go in the future. As new, presumably more digitally literate residents enter the facility, there will be greater incentives to utilize high-speed technologies that they are comfortable using to sustain their comfort levels. In other words, the community is continually brought together by technology, and it will be important to sustain this in the future.

There are certainly positive aspects of the facility apparent in the welcoming and supportive atmosphere of Illini Heritage Health & Rehab, but there are many issues apparent as well. All three individuals interviewed cited overwhelming economic woes. The public sector’s economic situation is bleak in the state of Illinois. As of June 2012, the state is almost ten months behind on their Medicaid payments. Essentially, there is almost no money coming in to support the facility. This is affecting residents and staff.

### Analysis

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</table>

7 Analysis
across the board. Because there is barely enough funding to support the resident’s proper healthcare needs, the importance of technology is not viewed as critical at this point.

Add to this an apparent digital divide between the staff and the residents, and the issues surrounding technology usage grow even more apparent at Illini Heritage Health & Rehab. Staff and residents cooperate well, but they are clearly divided between the technologically literate and illiterate. Mostly this is a reflection of age, but factors such as economic status and education level also come into play. Finding ways to bridge the gap between the staff/resident digital divide and to bring in new technologies to this facility would prove beneficial. Given the bleak economic situation at Illini Heritage Rehab & Health, there is not a huge push for technology integration into the facility. However, a program like U2CB may be very beneficial in the long term, especially given that the aging population is growing increasingly digitally literate.

Webliography


61: Pavilion Behavioral Health System

John Newcomer
Master’s student, GSLIS

1 Executive Summary
The Pavilion Behavioral Health System includes a 77 bed inpatient hospital, a residential treatment center for you and a residential addictions treatment program. Outpatient services include partial hospitalization and intensive outpatient services as well as The Pavilion Foundation School, a private day school serving students with learning disabilities and behavior disorders. The health center depends on ICT technology to manage patient records and access healthcare information. It is perhaps not surprising that over half of The Pavilion staff members use digital technology on a daily basis. The Pavilion also relies on digital technologies for video surveillance, a crucial component for ensuring staff and patient safety. Today, digital technologies enable family members to become engaged through video conferencing. The Pavilion’s administration is excited by the potential for the UC2B project to provide sufficient bandwidth for such services, as well as offering family members a means of participation in patient treatment.
The Pavilion Behavioral Health Center is located at 809 W. Church Street in Champaign; the school is across the street.
3 Photographs

Front entrance of The Pavilion Behavioral Health Center
The Pavilion center relies on an AS-400 server, as shown above, to record information and share that information with the corporate office located in King of Prussia, Pennsylvania.
The former Harris Mansion, attached to the existing Pavilion building, will soon be torn down to make room for a more modern facility.
The Pavilion Foundation School located at 810 W. Church Street, across the street from the health center.

4 Demographics

Before discussing the opportunities for technology use at the Pavilion Behavioral Health Center, it is first necessary to describe the center itself, its clients, and the community it serves. The Pavilion and adjacent Pavilion Foundation School operate in the city of Champaign. The agency employs over 160 staff members, which include nurses, counselors, social workers, mental health technicians, administrators, and support staff (Bauer, 2001, p. B1).

While many of The Pavilion’s patients are local residents, as a corporate entity, the center accepts nonresidents as well. Patients and students come as far as Rantoul, Thomasboro, Bloomington, Mahomet, Tolono, Danville, and Blue Ridge to receive treatment (Bauer, 2001, p. B1). In terms of patron/client age, the health center provides care for children, adolescents, adults, as well as seniors. The Pavilion school enrolls children ages 8 to 19. The Pavilion center is also active in the community. It is necessary, therefore, to consider the surrounding area. Census Tract Data (2000) gathered from the U.S. Census Bureau website provides a statistical measure of this community.

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5 History

What later became the Pavilion Behavioral Health Center was founded as the Carle Pavilion in 1988. Located in the former Cole Hospital Building, the Carle Pavilion provided psychiatric and substance abuse treatment to its patients. The center was initially licensed for 46 beds and operated with a staff of 75 employees (Pressey, 1994, p. A-1). In 1995, the Pennsylvania-based Universal Health Services, Inc., purchased The Pavilion health center from the Carle Foundation. Universal Health Services operates health centers nationwide and is one of the three largest healthcare providers in the United States. Despite the change in ownership, the health center’s operation was largely unaffected. Carle maintained a close working relationship with the center, contracting its clinical psychiatrists out from the Carle Clinic (Pressey, 1994, p. A-1; Bauer, 2001, p. B-1). The change in ownership did allow The Pavilion to expand.
Shortly after the transfer, The Pavilion introduced new services to reach a broader patient audience. In 1997, The Pavilion added a residential treatment program designed for young adults. The same year, it opened the Pavilion Foundation School, located across the street from the health center. The school accommodated 40 students in 4 classrooms. The school targeted students with learning disabilities and behavioral problems (Merli, 2001, p. D-1). As a public corporation, The Pavilion marketed its services beyond the Champaign-Urbana area, and as a result children from as far away as Rantoul, Thomasboro, Bloomington, Mahomet, Tolono, Danville, and Blue Ridge came for treatment at The Pavilion (Bauer, 2001, p. B-1). Rising numbers of patients seeking treatment prompted the Pavilion school to enlarge its operation.

In August of 2002, The Pavilion expanded again, as the school completed a construction project to improve its facilities. The project more than doubled the school’s capacity, increasing the number of classrooms to 10 and increasing the student body to over 100 (Merli, 2001, p. D-1).

The Pavilion continues to fill a critical need in the community. In 2000, the hospital cared for 64 children with chemical dependency issues and 45 children received partial hospitalization (Merli, 2001, p. D-1). The Pavilion Behavioral Health Center currently has 77 beds for inpatient use while providing numerous outpatient services (Pavilion Behavioral Health Center). The Pavilion’s staff has increased to over 160 and the center has not finished growing.

At present, the facility is constructing a new wing on the site of the former Harris mansion. The Harris mansion was built in 1904 by B. F. Harris, founder of the First National Bank and the Urbana and Champaign Railway. Later used by the Cole Hospital in 1957, the mansion has proved less useful for The Pavilion’s purposes. In 2011, Jeremy Pitzer, then clinical director of The Pavilion, reported that the mansion was in terrible condition. Furthermore, Pitzer stated that its facilities were underutilized with only a “few scattered offices” in use (Wade, News-Gazette, 2010). Some Champaign residents expressed concerns about demolishing a historic structure while others feared the facility might lower property values (Wade, News-Gazette, 2010). These concerns notwithstanding, The Pavilion has received approval from the City of Champaign and plans to finish the project by fall 2012 if they receive approval from the State of Illinois as well (J. Sheehy, personal communication, November 21, 2011).

6 Technology Inventory

In collecting data, it became apparent that the Pavilion Behavioral Health Center makes extensive use of information and communication technology (ICT) in providing medical treatment and educational services. As a psychiatric hospital, ICT use is crucial for ensuring the safety of patients, staff members, and the community. While operating locally, the Pavilion Behavioral Center is connected to a nationwide digital healthcare network. A subsidiary of Universal Health Services, Inc., Pavilion taps into a corporate system headquartered in King of Prussia, Pennsylvania. Each of the corporation’s national healthcare centers are connected to the AS-400 operating platform. Pavilion staff members use this platform to record and access patient, staff, and healthcare information.
The Pavilion Behavioral Health Center depends on high-speed Internet to stay connected to the corporate network. To this end, Pavilion maintains multiple broadband Internet lines, which include a redundant one-and-a-half megabit T-1 line, as well as a local Comcast subscription. The Comcast subscription allows for 10 to 15 megabit download speeds and 3 to 4 megabit upload speeds.

As a psychiatric treatment center, Internet use is highly restricted. Only staff members are allowed to connect to the broadband networks. No public or patient Wi-Fi networks are available. The Pavilion Foundation School, however, does offer supervised Internet access for students. Pavilion therapists frequently go online with students during therapy sessions. Teachers can also conduct classroom activities for students in the computer lab.

For the public, the Pavilion maintains a website to share its mission, programs, services, and job opportunities. The website includes contact information and downloadable forms for patients, as well as an online portal for prospective employees to submit their résumés. The Pavilion Foundation School is also featured on The Pavilion site.

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7 Analysis

Research conducted for the present study underscores the importance of IT for medical providers, particularly those dealing with psychiatric care. As previously discussed, The Pavilion is making extensive use of digital technology—both at its hospital and at the Pavilion Foundation School. Still, the potential for IT resources remains virtually limitless.

For individual patients and staff members, IT is a wonderful tool in the providing of high-quality medical treatment and ensuring personal safety. As a psychiatric hospital, The Pavilion has adopted digital technologies more rapidly than other anchor social institutions. The health center depends on ICT technology to manage patient records and access healthcare information. It is perhaps not surprising that over half of The Pavilion staff members use digital technology on a daily basis. The Pavilion also relies on digital technologies for video surveillance, a crucial component for ensuring staff and patient safety.

The widespread use of technology at The Pavilion does not mean the center has exhausted all the possibilities. As early as 1994, the chief operating officer of The Pavilion noted the rise in outpatient services in the psychiatric field, reporting that “more people are using less costly services,” such as day treatment and outpatient care (Pressey, 1994, p. A-1). As the scope of The Pavilion expands, ICT use will serve a vital purpose in connecting patients to their care providers.
The CFO stated that one of the more intriguing developments in psychiatric care is the use of tele-medicine. Quite often parents are unable to attend family sessions for patients in short-term care. In the past, the services would have to be adapted. Today, digital technologies enable family members to become engaged through video conferencing. The Pavilion’s administration is excited by the potential for the UC2B project to provide sufficient bandwidth for such services, as well as offering family members a means of participation in patient treatment.

In addition to individual use, digital technologies have also opened the door for new group activities. Until recently the Pavilion Foundation School was equipped with just a few desktop computers in each of its classrooms and lacked a computer lab. Not long ago The Pavilion created a computer lab for its students, making it possible for teachers to engage their students in group computing activities. Monitored Internet access offers students the chance to locate online educational resources and improve their familiarity with computers—especially important in the digital age. New digital technology offers exciting potential for mental health providers to correct common misconceptions which may exist in the wider community.

**Bibliography**


**Webliography**


62: Provena Covenant Medical Center

Jennifer Hebel
Master’s student, GSLIS

1 Executive summary

Provena Covenant Medical Center is a 210-bed, comprehensive care facility that was originally founded in 1894 as Burnham City Hospital and renamed in 1919 as Mercy Hospital. The hospital in its current form has 250 physicians and is one of east-central Illinois’ most advanced medical facilities. In 2010 the facility had 8,380 in-patient admissions, 878 births, 230,714 outpatient visits, 32,358 emergency room visits, and 11,982 total surgeries and gastrointestinal (GI) cases. As a Catholic institution, Provena has a strong dedication to community service and charity, which reflects their mission of “build[ing] communities of healing and hope by compassionately responding to human need in the spirit of Jesus Christ.” Provena also has a solid economic impact on the community in terms of jobs and services purchased. In 2009, Provena’s impact on the area’s economy was estimated to be $327,037,000.

One of Provena’s main focuses is in providing a continuum of care, which extends to the home. Provena works with at-need patients to provide follow-up care and assistance in the form of contact and evaluation. In cases where the patient has no primary care physician, nurse-practitioner appointments ensure that he or she continues to recover well. Provena also has a strong focus on preventative care, using services such as the Center for Healthy Aging to prevent patients—congestive heart failure patients, for example—from needing to be admitted. Research at Provena has shown that patients who have follow-up care and ongoing contact recover faster and with fewer complications, and are less likely to be readmitted. Provena’s focus on holistic care can be found in many aspects of their services, such as in the construction and design of the new Blessed Beginning Birthing Center.
2 Maps

The location of Provena Covenant Medical Center: the hospital (“D”) is located near University and Lincoln avenues, just off of Park Street.

Satellite view of Provena Covenant Medical Center (“D”).
3 Photographs

Exterior view of Provena Covenant Medical Center. The Main Admissions lobby is on the right, not fully in view.

Exterior view of the other wing of Provena Covenant Medical Center, which is connected to the main building by the skywalk.
4 Demographics of patrons or clients

According to information obtained through the interviews, the patient racial demographics are primarily composed of black, white, and Asian patients. The hospital attempts to serve a significant portion of the underserved population of the Champaign-Urbana area, so insurance demographics reflect this. In terms of insurance coverage, approximately 40% of the patients are covered by Medicare, 20% by Medicaid, and the remaining 20% are self-insured or underinsured. Of that remaining 20%, half of the patients have commercial insurance but are underinsured, leading to high copays and financial strain. Provena’s mission of compassionate service means the hospital tries to reduce the financial burden of needed care as much as possible on their clients.
5 History

The institution that is currently Provena Covenant Medical Center has gone through many different incarnations in its history. The hospital was founded in 1919 as Mercy Hospital by members of the Servants of the Holy Heart of Mary. Throughout the hospital’s lifetime, the Servants of the Holy Heart of Mary, the Franciscan Sisters of the Sacred Heart, and the Sisters of Mercy of the Americas have sponsored the center. Recently, with the merger of two other Catholic hospital systems, the religious orders of the Sisters of the Resurrection and the Sisters of the Holy Family of Nazareth are now part of the sponsorship.

The founding order of what became Provena Covenant Medical Center was the Servants of the Holy Heart of Mary. Founded in 1860 by Father Francis Delaplace in Paris, France, the Sisters began by establishing orphanages. During the Franco-Prussian War of the 1870s, their mission expanded to include health care, a focus that continues to the present day. In 1919, the Illinois order of the Sisters were requested by the local parish to assume sponsorship and responsibility for the new Catholic hospital. As there were currently no sisters available to answer this request, the Sisters of Mercy of the Holy Cross accepted the role, hence the name of Mercy Hospital. When the Sisters of Mercy were no longer able to carry out this responsibility, the Servants of the Holy Heart of Mary were available to begin ministry at the hospital. The hospital continued to grow through the years, and in 1989 Mercy Hospital merged with Burnham City Hospital to form Covenant Medical Center. In 1997 the Franciscan Sisters of the Holy Heart, the Servants of the Holy Heart of Mary, and the Sisters of Mercy of the Americas created Provena Health by merging with two other Catholic health systems.

In 2011 Thompson Reuters named Provena Covenant Medical Center as one of the nation’s 50 Top Cardiovascular Hospitals. It was the only hospital in east-central Illinois to make the list, and one of only three hospitals in Illinois to receive the honor. The summer of 2011 also saw the beginning of the much-anticipated $5 million remodeling
of the current birthing center, which will be the Blessed Beginnings Birthing Center. This will be a major renovation, and the first since 1992.

In 2010 Provena lost its standing as a property-tax-exempt institution, due to claims that it was not providing sufficient charity care donations. The case had started in 2002 and Provena fought the ruling all the way to the Illinois Supreme Court. There the justices ruled against the hospital, citing a 1960 precedent case that supported the Champaign County Board of Review and the Illinois Department of Revenue’s determination that Provena did not qualify for a tax exemption as a religious or charitable organization. According to the Illinois State Constitution, tax exemption is only allowed on property that is exclusively used for charitable purposes. The State Supreme Court agreed, asserting that less than 1 percent of the hospital’s revenue in 2002 went to charitable care, which does not allow for the charitable exemption.

### 6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
<th>Social Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>650 PCs</td>
<td>EMR: Electronic Medical Record: MediTech</td>
<td>Facebook</td>
</tr>
<tr>
<td>150 Printers</td>
<td>Windows</td>
<td>Twitter</td>
</tr>
<tr>
<td>Phones: Mobile and hardline</td>
<td>Health Information Exchange</td>
<td>LinkedIn</td>
</tr>
<tr>
<td>Scanners</td>
<td>PACS: Picture Archiving and Communication System</td>
<td></td>
</tr>
<tr>
<td>Laptops</td>
<td>PCI: Patient Care Inquiry system</td>
<td></td>
</tr>
<tr>
<td>Servers: 280 at Bolingbrook facility. Provena is connected with DS3 lines.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fingerprint scanners for secure computer access</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 7 Analysis

Provena Covenant Medical Center is a site that is in a state of constant growth, both in terms of services provided and technology used. With an upcoming move to entirely electronic document storage and new technology, such as robotics, being used, Provena is well positioned to take advantage of UC2B. The implementation of UC2B will not revolutionize Provena’s operations, but it will open up new avenues for growth.

Provena Covenant Medical Center uses technology in a variety of ways and the way that they use information technology is just as varied. The primary usage of information technology at Provena is in the connectivity of the system. Provena runs off of an EMR, or Electronic Medical Record, called MediTech. Provena was the first facility to go live with MediTech 20 years ago, and has been using the same system until April of 2011, when the hospital upgraded to the current version. MediTech allows for sophisticated management of medical and financial data, using 23 different integrated applications to coordinate the system. These applications use the unit numbers of records to coordinate
information of an individual patient, and allow for a variety of different functions. Using MediTech, hospital staff can track lab results, vital statistics, prescribed medications, diagnoses, and other necessary information. This oversight allows for efficient care, as well as allowing nurses and physicians to stay up-to-date with patient care.

MediTech also serves as part of the government’s mandate for “meaningful use,” allowing the hospital to record and report on patient care, and demonstrate care improvements, and pinpoint areas that still require additional work. “Meaningful use” is defined by the Center for Medicare and Medicaid Services as “[t]he use of a certified EHR in a meaningful manner (e.g., e-prescribing); [t]he use of certified EHR technology for electronic exchange of health information to improve quality of health care; [and t]he use of certified EHR technology to submit clinical quality and other measures.” This hard data allows the hospital to demonstrate the quality of care that they provide, and justify medical procedures and expenditures. Physicians at Provena are able to dictate reports into any in-house phone, and these reports are then transcribed and uploaded into the EMR, after being electronically signed by the physician to create a legal record. Laboratory results can also be uploaded straight into the EMR to provide results more quickly. The EMR is also used to coordinate data for patient care between Illinois hospitals, as part of the Health Information Exchange. Provena hopes to add more applications to MediTech in the future, to allow for things such as electronic medication ordering. In the next 6–8 months Provena hopes to be entirely electronic to comply with government “meaningful use” mandates.

MediTech does have limitations. The way the system is currently designed does not allow for staff to add information on patients from the bedside, but instead all data must be entered from terminals. This means that a nurse must, for example, take a patient’s blood pressure at the bedside, write it down on a chart, and then either add the data manually into the system him or herself, or else send the data out to a transcription company for transcribing and uploading into the system. Besides being inefficient, this process creates more work for staff and allows for a greater possibility of transcription errors or information loss. It also creates more cost for Provena at a time when hospitals are hurting for funding. If MediTech could be altered to allow for the use of tablets or similar products, which would then be able to interface with the EMR, this would reduce the burden on the staff and save time and money and reduce mistakes. A more robust EMR would create a better system than the current hybrid one, where both digital and paper is being used.

Provena stays connected to the main Bolingbrook IT facility and the 11 other hospitals in its healthcare system via DS3 lines and servers. These servers are equipped with backups, so in the case of a hardware failure the connection is not completely lost. Furthermore, the DS3 lines have a redundancy built in, to allow for a hospital site to bypass a lost connection point and still be able to access the network. Seven IT personnel at Provena keep the system up and running. Further technology support is available from the Bolingbrook facility. The DS3 lines support a variety of types of Internet access. Provena has guest access of varying levels besides different security levels of employee access. Some computers have fingerprint scanners attached for more secure staff access. Both wireless and wired Internet access is available.
Provena also uses a sophisticated PACS, or Picture Archiving and Communication System, for radiology use. This program allows x-rays and any other type of image to be uploaded directly into the system for instant viewing. Radiology technicians are then able to manipulate the images in a variety of ways for targeted viewing. Their analysis can then be attached directly to the file and sent electronically to the attending physician. This system allows for better quality images, quicker analysis and results, and better storage of the information.

Provena has also begun to incorporate robotics into its system. Currently Provena surgeons are able to perform electro-physiology, hysterectomies, and gallbladder removals with the use of the da Vinci robotic surgery system. The hospital hopes to add the ability to perform prostatectomies robotically shortly as well. Not only does the use of robotics in surgeries reduce the strain on surgeons, relieving them of the need to stand for long hours, but it also allows for an easier and safer procedure for patients, and reduces recovery time. The system was purchased in July 2011 at a cost of $1.5 million and provides surgeons with a three-dimensional, high-definition image of the operation. A catheter, guided by tiny robotic arms, is controlled by a remote panel into the site and allows for greater dexterity without the need for large incisions.

One area of potential growth for Provena is in the realm of tele-medicine, something Provena has just started to provide through their Center for Healthy Aging. Currently, this is mainly available to chronic obstructive pulmonary disease patients, but the hospital is hoping to expand its services to other patients, such as diabetics and the elderly. Research has shown that patients who are not chronically ill, but instead are perhaps fragile and unable to travel safely, maintain their health better if medical staff stay in contact with them. Tele-medicine provides the opportunity to stay in contact with these patients, and reduces travel and time costs. This contact provides a psychological benefit to the patients, as well as allowing medical staff to monitor their condition more closely. Tele-medicine can help prevent hospital readmissions and reduce healthcare costs. UC2B will aid in the growth of this service by giving patients access to better and faster Internet connections, and allow for more people to have Internet access. This means that Provena can reach more people and have a larger pool of patients to reach. Also, more-vulnerable and at-risk patients will be able to access this service with the implementation of UC2B.

UC2B will also aid Provena in staying connected with its sister hospitals and remote sites. While Provena currently has DS3 connectivity, the fiber-optic connection and built-in redundancies will aid in staying connected to local satellite sites, reducing the cost of cable repairs and increasing available bandwidth, allowing the exchange of more data at a faster rate. UC2B broadband increases will also allow Provena to provide more services on-site for clients and guests, such as allowing those in the hospital to stay more connected with friends and family.

Webliography


63: Champaign County Emergency Management Agency

Abigail Sackmann
Master’s student, GSLIS

1 Executive summary
The Champaign County Emergency Management Agency is responsible for preparing for, warning about, and responding to manmade and natural disasters. The agency maintains and operates warning sirens, organizes storm-spotter volunteers, assigns addresses, and runs a heavily IT-centered Emergency Operations Center that serves as the hub for information and communication among important actors in the event of a disaster. The EMA’s perspective on emergency preparedness as it relates to technology, stressing the need for backups and redundancies, provides an interesting and valuable lens on IT use throughout the area, and an understanding of this could benefit all UC2B anchor social institutions.

2 Maps
CCEMA Office and Emergency Operations Center, 1905 E. Main Street in Urbana.

CCEMA is situated near the Champaign County Brookens Administrative Center, the Juvenile Detention Center, Prairie Park, and Prairie Elementary.
3 Photographs

CCEMA website.

Mobile Command Center.
Interior of the Mobile Command Center.
4 Demographics of patrons or clients

CCEMA serves the entire population of Champaign County. Below are select demographics for the county:

<table>
<thead>
<tr>
<th>Demographic Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>201,081</td>
</tr>
<tr>
<td>White</td>
<td>73.4%</td>
</tr>
<tr>
<td>Black</td>
<td>12.4%</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>0.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>8.9%</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
<td>0.1%</td>
</tr>
<tr>
<td>Persons reporting two or more races</td>
<td>2.7%</td>
</tr>
<tr>
<td>Persons of Hispanic or Latino origin</td>
<td>5.3%</td>
</tr>
<tr>
<td>White persons not Hispanic</td>
<td>70.9%</td>
</tr>
<tr>
<td>Foreign-born persons, 2006–2010</td>
<td>10.9%</td>
</tr>
<tr>
<td>Language other than English spoken at home, age 5+, 2006–2010</td>
<td>15.1%</td>
</tr>
<tr>
<td>High school graduates, age 25+, 2006–2010</td>
<td>92.3%</td>
</tr>
<tr>
<td>Bachelor’s degree or higher, age 25+, 2006–2010</td>
<td>41.2%</td>
</tr>
<tr>
<td>Housing units</td>
<td>87,569</td>
</tr>
<tr>
<td>Housing units in multiunit structures, 2006–2010</td>
<td>35.2%</td>
</tr>
<tr>
<td>Median household income, 2006–2010</td>
<td>$45,262</td>
</tr>
<tr>
<td>Persons below poverty level, 2006–2010</td>
<td>20.5%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau State & County QuickFacts. Data is for 2010 unless otherwise specified.

6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software and systems</th>
<th>Staff, volunteers, and partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Command Center</td>
<td>Microsoft Office on office computers</td>
<td>2 full-time staff</td>
</tr>
<tr>
<td>Five Dispatch Workstations</td>
<td>ArcView and/or ArcReader on three desktops</td>
<td>10–15 volunteers from Amateur Radio Emergency Service (ARES) available in emergency event</td>
</tr>
<tr>
<td>10 two-way radios</td>
<td>Two Websites:</td>
<td>10–15 other volunteers, including Public Information Officer</td>
</tr>
<tr>
<td>Phone system with 3 digital</td>
<td>WEB EOC: state EMA software available in EOC</td>
<td>Tech support from Champaign County and occasionally City of Champaign</td>
</tr>
<tr>
<td>Fax machine</td>
<td>SharePoint website for uploading grant materials</td>
<td></td>
</tr>
<tr>
<td>Generator</td>
<td>Weather Chatroom to connect to National Weather Service and</td>
<td></td>
</tr>
<tr>
<td>Camera on tower</td>
<td>Direct phone connection to National Weather Service</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>PA system</td>
<td>Google Earth</td>
<td></td>
</tr>
<tr>
<td>Two TVs</td>
<td>Champaign County Regional Planning Consortium maps (online)</td>
<td></td>
</tr>
<tr>
<td>Office and Emergency Operations Center:</td>
<td>Service through which the public may sign up to receive weather alerts either via e-mail or text message</td>
<td></td>
</tr>
<tr>
<td>Variety of radios for several frequencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell phones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 desktop computers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Several laptops for mobile work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large-screen TVs interfaced with computers in Operations Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular phone and internet access provided through Champaign County</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39 Severe Weather Alert sirens in Champaign, Urbana, Savoy, and UIUC campus</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 7 Analysis

The Champaign County Emergency Management Agency is a department of Champaign County, and is responsible for providing emergency services and coordination in the event of a natural or man-made disaster. Its duties including preparing for large events, tornadoes, snowstorms, thunderstorms, other severe weather, and hazardous materials reporting. The agency runs an Emergency Operations Center, which functions as a hub for information and communications during emergency events, as well as a Mobile Command Center.

Funding for CCEMA operations comes mainly from tax revenue from the county, but staff are continually applying for grants at the state and national levels for individual projects. Funding for hardware and software technologies, for example, comes mainly via grants. These are processed through the regional Illinois Emergency Management Agency (IEMA), the offices of which are located in Champaign. IEMA provides support for CCEMA, evaluates grant applications and the need for additional disaster relief help in relation to other counties, and gives feedback on their services.
Use of communications technology makes up a significant portion of what CCEMA does both in day-to-day operations and especially in the event of a disaster. Specifically, emergency planning necessitates the availability of many forms of communication lines in the event that one or many should go down. This is reflected in the number of different communications channels available in the office and the Emergency Operations Center, and is facilitated by EMA’s collocation with the regional 911 services of METCAD.

EMA views UC2B through the same lens of emergency preparedness, which brings up the important question of what will happen if the system goes down. Anchor social institutions should be aware of this and plan according to the importance of their connection—for example, it is being urged that some organizations keep their present connection and use UC2B for redundancy in case one of the connections fails. This is particularly important for large organizations such as government offices, hospitals, and the airport, for which a working connection is important or vital in emergency situations.

In addition to regular phone and Internet lines provided through the county, CCEMA uses several radio frequencies, digital cellular phones, a web-based chat room, and hard-lined systems connected directly to other agencies, such as the National Weather Service’s local regional office in Lincoln, Illinois. These various channels provide security of communication during emergencies, when it is likely that normal channels will be burdened by heavy use and more susceptible to outages.

One of the most secure of these communication backup systems is amateur radio, which the EMA taps into through the coordination and mobilization of a group of volunteer members of the local Amateur Radio Emergency Service (ARES), whose motto is “When all normal means of communication fail.” (http://www.wa9res.org/) These volunteers are trained to work as storm spotters and are deployed to strategic locations on a grid of Champaign County to report back weather conditions. Other volunteers are also mobilized in other parts of the emergency operations infrastructure, one being the Public Information Officer, who during emergencies is stationed in the Emergency Operations Center to communicate with the media and the public about the event.

Because much of the information used is spatial, the Champaign County Emergency Management Agency uses maps for a variety of purposes, from emergency planning to visualizing data for grants. They receive a host of Champaign County maps from the Champaign County GIS Consortium, some of which are stored locally on their servers and updated regularly, and some of which are designed specifically for their needs. These maps may be projected on the TVs in the Emergency Operations Center in order for decision makers to view various spatial data in different formats. They also use Google Earth and maps from the Regional Planning Commission’s website. Because this map data is very large, the 1 Gb local connection speeds of UC2B will facilitate faster downloads and access. The agency also tends to send out large files over e-mail, and is hoping that the faster speeds will increase the capacity for larger documents to be sent via county email.

CCEMA currently has public alert systems in place that include 39 sirens throughout Champaign, Urbana, Savoy, and the University of Illinois campus, as well as a program for which the public may sign up to receive alerts via e-mail or text message. The agency’s website shares information about CCEMA and its services, as well as
emergency preparedness information for the public and links to external sites such as the National Weather Service. They are considering social media avenues, more likely to post news of trainings and special events than as severe weather alert systems, which would require a standard protocol to ensure events are reported in a consistent manner.

The unassuming offices of CCEMA on S. Main Street in Urbana disguise the importance of this organization for the safety of Champaign County in the event of a disaster. There are systems in place to ensure reliable communication between local governments and with the public both before and during events. IT use facilitates the effectiveness of the organization through the use of map layers and other visualizations, multiple communication channels, and data about the county. UC2B will expedite much of this data exchange and communication, both speeding up and creating redundancy in the network. Most of all, CCEMA’s perspective on emergency preparedness is a valuable one for all citizens and organizations to be aware of, in order to develop plans and backups in the event of a disaster.
64: Champaign Fire Department

Yueh-Mei Lin
Doctoral candidate, Department of Educational Policy, Organization and Leadership

1 Executive summary

The Champaign Fire Department is the headquarters of six fire stations located in the City of Champaign. Information technology is very important for the Champaign Fire Department. They use technologies not only for training, fire reports, communication and interconnection but also for fire call services, fire inspection, building safety, and public education. The department uses various forms technologies, including computers, laptops, radar, and conferencing technologies. The purchase of their computer hardware, software, and other computer-related facilities are handled by the City of Champaign’s IT Department.

UC2B will not only improve connections between headquarters and the other stations, training and conferencing, but it will also enhance the connectivity between the fire department and both city government and the public.

2 Maps

The neighborhood of the Champaign Fire Department (“A”).
The Champaign Fire Department Building (from the fire department’s website: http://ci.champaign.il.us/departments/fire/).

The two photos above are of the conference room. The information technologies used in this room include a phone, remote control, DVD player, whiteboard, and a big TV screen.
Forms of information technology utilized in the fire truck are a laptop and a cellphone. The laptops contain data that are important to the fire officers when they are on a fire call. The data includes the blueprints of a building showing the electricity lines are located or where there might be a risk of chemical exposure, for example.

4 Demographics of City of Champaign
5 History

The history of the Champaign Fire Department is closely connected to the history of Champaign city government. The City of Champaign had its beginnings in the first meeting of the Village Board on April 28th, 1857. On February 21st, 1861, what was “West Urbana” received full legal sanction from the state legislature and formally became the City of Champaign. (http://ci.champaign.il.us/about-champaign/history/history-of-champaign-city-buildings/)

On January 7th, 1890, the Building Committee reported that “all the fire apparatus has been moved into the new building.” As far as the committee could judge, “the Fire Department of Champaign is now complete, and will compare favorably with any in Illinois outside of Chicago.”

By 1935, after only 45 years of service, the floor and the structure of the City Building appeared generally run down. Fire Chief John Ely, sent a letter to Mayor James D. Flynn, saying, “[W]e have realized that it would take a considerable expenditure of money to build (new) quarters and care for the fire equipment as it should be cared for, but since President Roosevelt has seen fit to grant monies to cities and towns for the purpose of erecting public buildings, we urge upon you this necessity.”

After a vote the construction of a new City Building began and the City Council had to provide temporary space for city operations. City offices and the Police Department shifted to the Walter Stern Building at 322–324 North Hickory Street. The Fire
Department remained behind, but prepared to move “on a moment’s notice” to 202 E. University Avenue. On January 2\textsuperscript{nd}, 1936, the Fire Department moved to its temporary quarters.

On May 28\textsuperscript{th}, 1967, a more important event took place—the Champaign Fire Department moved out of the first and second floors of the east wing to the new central fire station located at 207 W. White Street.

In the 1980s, Administrators and fire officers communicated with each other either via phone, radar, or paperwork. Federal law mandated that they record every fire call service, making for a lot of paperwork. Later, around 1993, the fire department started to use computers to record fire reports. The turning point seemed to be that one day a fire chief came to the office and asked the secretary about some fire events. He wanted to see the reports. The secretary told him that she could find those reports for him, but that it might take a week to go through all the paper files and put them together. This made the fire chief realize that something had to be done to improve efficiency. At that point computers were brought in to be used for creating the reports.

6 Technology inventory

<table>
<thead>
<tr>
<th>Technology</th>
<th>Software and Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 10 PC desktops</td>
<td>FireHouse</td>
</tr>
<tr>
<td>More than 10 PC laptops</td>
<td>MSDS tracking</td>
</tr>
<tr>
<td>Education software</td>
<td>Visio</td>
</tr>
<tr>
<td>Laserjet printers</td>
<td>TRAKiT</td>
</tr>
<tr>
<td>Scanner</td>
<td>Deccan</td>
</tr>
<tr>
<td>Telephones</td>
<td>MapInfo</td>
</tr>
<tr>
<td>Copy machine</td>
<td>Windows XP and Windows 7 (2 secretaries).</td>
</tr>
<tr>
<td>2 Projectors</td>
<td>T-1 lines connecting to Urbana and County</td>
</tr>
<tr>
<td>2 Projector screens</td>
<td>Website maintained by City of Champaign</td>
</tr>
<tr>
<td>Speakers</td>
<td>Wireless capabilities</td>
</tr>
<tr>
<td>Microphones</td>
<td>Facebook page</td>
</tr>
<tr>
<td>Teleconferencing equipment</td>
<td></td>
</tr>
<tr>
<td>Audio recorder</td>
<td></td>
</tr>
<tr>
<td>Video player</td>
<td></td>
</tr>
<tr>
<td>iPad</td>
<td></td>
</tr>
<tr>
<td>Digital camera</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Download (Mbps)</th>
<th>Upload (Mbps)</th>
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</thead>
<tbody>
<tr>
<td>Speedtest.net</td>
<td>7.95</td>
<td>12.02</td>
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</tbody>
</table>
7 Analysis

The Champaign Fire Department station is the headquarters of the six fire stations in Champaign, and has served the Champaign community for over 130 years. The mission of the Champaign Fire Department is “to protect life and property through professional services delivered with compassion and integrity.”

Currently, the department has 125 employees, including administrators and fire operations personnel. Their tasks consist of (1) providing support for fire operations, (2) offering emergency medical services, (3) code enforcement, (4) educating the community about fire and life safety, and (5) supplying hazardous materials response, rescue services, and emergency management oversight for the city. In 2010 Champaign Firefighters responded to 6,333 calls. The Champaign Fire Department has five divisions: Administrative, Building Safety, Prevention, Operations, and Training.

Technology plays a very significant role in the fire department because of the practical needs of their work. They use technology not only for training, fire reports, fire call services, fire inspection, building safety, and public fire-related education. The technologies used in their works consist of various kinds, such as computers, laptops, radar, conferencing technologies, and so forth. The City of Champaign IT Department coordinates the planning around and purchases of the computer hardware and software.

They use a professional software system, Geographic Information System (GIS). GIS “is an organized collection of computer hardware, software, geographic data and personnel designed to efficiently capture, store, update, manipulate, analyze, and display all forms of geographically referenced information” (ESRI, pp.1–3). The GIS used by the Champaign Fire Department was designed and installed by Geographic Technologies Group, Inc. (GTG), which maintains the system as well; this firm was retained by the City of Champaign to perform a City-wide Geographic Information System Strategic and Staffing Plan.

Since most of the Fire Department utilizes GIS software and data, the connectivity of their T-1 line is not sufficient enough to download and upload their files when several people go online at the same time. Also, when they use the connection to perform training or live conferencing, the streaming digital picture freezes or becomes blurry, and the training and conferencing are interrupted. The high-speed connectivity of UC2B broadband can help them improve: (1) interconnection, (2) communication, (3) training, (4) connection to government agencies, and (5) connection to the public.

“Interconnection” refers to the connection between the six fire stations. Since sometimes these six stations work together, they need to exchange information through the T-1 line. As mentioned before, since their data and information may involve maps or other GIS systems, the files can be huge. Accordingly, they need more effective broadband. The fiber-optic broadband of UC2B would improve the speed of their connectivity.

“Communication” refers to the conferencing between the six fire stations. At the present time the speed of T-1 line is not fast enough to make for a good qualitative live-streaming conference. With the UC2B broadband, they believe that the live conference would be no problem. Third, training: according to the administrators, the Champaign Fire
Department quite often needs to hold training sessions for their fire officers. However, since the T-1 speed is not fast enough for them to carry out live training by means of the streaming screen, they need to move fire officers from their home fire station to the headquarters to do the training. In the future, through UC2B’s fiber connection, they would be able to do live training, and thus those fire officers could stay in their station. Those fire officers would save time and be able to answer a fire call service more effectively.

Fourth, the connection between the Champaign Fire Department and government agencies: these include both the City of Champaign and government agencies in other states. Since fires also take place outside of the City of Champaign, they sometimes also need to connect to agencies in other states or in the federal government. The improvement in connectivity of UC2B will enhance this capability as well.

Fifth, the connection to the public: several projects of the fire department are related to the public, such as building safety and fire education. The building safety project in particular needs the input of the public, because the Champaign Fire Department aims to have a centralized systems that keeps all the information on a given piece of property. Yet, the initiative has not been well received because the T-1 connectivity is slow. The UC2B project would improve connectivity and entering data would become faster and easier. The administrator hopes that this would encourage more people to participate.

In sum, the installation of fiber-optic broadband not only will improve the intra-connection between headquarters and the other five fire stations with respect to fire officers’ training and conferencing, but it will also enhance the connectivity between Champaign Fire Department and government agencies and the public. More specifically, as the Fire Chief states, “[If] we have broadband, then we can easily and clearly communicate through this building with other five fire stations, and do the training, general management and budget. The usage of interaction is not just for fire departments, but also is used to communicate with city government, general government agencies and the general public.”

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65: Eastern Prairie Fire Protection District

Jane Sandberg
Master’s student, GSLIS

1 Executive Summary

Eastern Prairie Fire Protection District is a volunteer fire department serving an area to the north of Champaign-Urbana. 2011 marks the district's 50th year serving unincorporated Champaign-Urbana. As a small, volunteer fire department, the Eastern Prairie Fire Protection District’s current uses of technology are highly selective, and focus on the district’s need for record keeping. While Internet speed is not currently an issue for the district, the connection's reliability is somewhat unstable; UC2B will hopefully address this issue.

2 Maps

The location of the Eastern Prairie Fire Department station ("A").
The outer edges of the district. Note: the western edge is actually one mile north of the marker.

3 Photographs

The Eastern Prairie Fire Protection District station, in the Wilber Heights area.
The computer for volunteers, which is backed up on the chief’s computer.
This is the computer on which I Am Responding is being installed on a trial basis.
4 Demographics

No information about the demographics of either the district’s volunteers or constituency was available.

5 History

2011 marks the 50th year that the Eastern Prairie Fire District has served the unincorporated area north of Champaign-Urbana. The volunteer district, originally named the Wilber Heights Fire Department, was founded to protect residents of the area, which had grown to house employees of a warehouse and bakery for the Eisner supermarket chain.

Today, the district encompasses agricultural, industrial, and residential areas in areas to the north of Champaign and Urbana. Though the district has been reduced in size over the years, due in large part to annexations by the two cities, there remains a strong need for fast response to fires and medical emergencies in the area, and the 25 volunteers of the district continue to serve unincorporated areas in the Champaign-Urbana area.

6 Technology Inventory

Hardware
Staff desktop computers 3
Staff laptop computers 2
Tech support Volunteers

<table>
<thead>
<tr>
<th>WIRELESS speeds</th>
<th>Down (Mbps)</th>
<th>Up (Mbps)</th>
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<td>Speedtest.net</td>
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<table>
<thead>
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<tr>
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7 Analysis

As a small, volunteer fire department, the Eastern Prairie Fire Protection District’s uses of technology are highly selective. The station’s limited budget and the prohibitive costs of emergency response software leaves the district relatively limited regarding the development of new technological endeavors.

Documentation makes up a large percentage of the station’s workload. Some of this documentation is due to federal reporting regulations. Other documentation is kept internally in case the district is ever in a position where it needs to provide testimony, witnesses, or evidence. Both types of documentation require basic information such as location and response time. After responding to fires, the district contributes more complex data to the National Fire Incident Reporting System (NFIRS, a database maintained by FEMA), including injuries and dollar amount damages. The district also keeps information on medical calls, which make up the largest share of the station’s 250 annual calls, and, since the firefighters are volunteers, the district also monitors how long it takes its volunteers to arrive at the station after a call. The station’s internal records are stored on the chief’s computer and backed up on another computer.

Another common use for computers is for training. The district’s first laptop was purchased to improve firefighter training through the incorporation of videos and PowerPoint presentations. The International Fire Training Association's (IFTA) curriculum is also available online, allowing for a greater reliance on computer-based training. Firefighters also use the computers for social networking, and the district is currently considering the purchase of I Am Responding, a program that tracks which firefighters are responding to a particular call.

The station owns a Garmin GPS unit, thanks to an organization called the Mutual Aid Box Alarm System (MABAS). This service aims to facilitate out-of-district response to major disasters, with the GPS assisting in the navigation of unfamiliar territory. The district’s extensive training, however, means that truck drivers are readily familiar with the district’s territory, and atlases are kept in all of the station’s vehicles, leading to limited use of the GPS technology.

Apart from the potential purchase of I Am Responding, many of the district’s current technology uses are not particularly time sensitive. Station personnel were concerned
less with acquiring a faster connection and more interested in a more stable connection. The station’s broadband and wireless connections are relatively speedy, but nearby industrial establishments are sometimes very taxing on the system, causing the network to go down fairly regularly. These bandwidth problems will hopefully be addressed by UC2B’s push for expanded connectivity.
66: Parkland College Police

Lela Kretzer
Master’s student, GSLIS

1 Executive summary

The Parkland College Police, under the Department of Public Safety, see themselves as a service agency with law enforcement powers. In this capacity, the Parkland police have very diverse responsibilities. Currently, the organization uses information and communication technologies (ICTs) daily to carry out the mission of the Department of Public Safety. For example, the department maintains classroom security through its key management systems and the 911 icon on all campus computers, available in case of an emergency. The department also hosts the college’s switchboard, managing telephone communications throughout the community, and police officers use Mobile Data Centers while in the field.

In the event of an emergency, the ability to reach members of the community very quickly, as well as state and federal agencies, will be absolutely crucial. One challenge particular to Parkland College is a technology gap among students and the fact that Parkland College is not residential, so students are very spread out outside of class time. This adds complexity to Parkland College’s emergency notification. Reliably fast communication and Internet connections will make a big difference and this is certainly an area where the UC2B project will help.

2 Maps

3 Photographs

Staff work station at Public Safety.
Telecommunications Officer at Public Safety.
Department of Public Safety at Parkland College.

4 Demographics of patrons or clients

<table>
<thead>
<tr>
<th>Parkland College: 2010-2011 Staff Demographic Data (Parkland College, 2011)</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonresident Alien</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Asian</td>
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<td>16</td>
</tr>
<tr>
<td>White</td>
<td>274</td>
<td>414</td>
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<tr>
<td>Two or more races</td>
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<td>8</td>
</tr>
<tr>
<td>Ethnicity unknown</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>386</td>
<td>506</td>
</tr>
</tbody>
</table>

| Parkland College: Fall 2011 Student Demographic Data |
|---|---|---|
| Level | Frequency | Percent |
| Freshman | 5432 | 58.0 |
| Sophomore | 3000 | 32.0 |
| Dual Enrollment | 14 | 0.1 |
| Unclassified/other | 395 | 4.2 |
| Dual Credit | 527 | 5.6 |
5 History

Parkland College’s police officers today work in the Department of Public Safety. Prior to this, security on campus was administered by what was called the Department of Health, Safety, and Security. Throughout Parkland’s history, there have been many individuals working in many different capacities serving this mission of security on campus. They have been known variously as “Public Safety Officers,” “Security Patrol,” “Patrol Officers,” etc. These professionals have included both sworn officers and nonsworn officers.

In 1993, the News-Gazette reported that Parkland College hired nine ‘security officers’ to complement the five “health, safety, and security officers” serving the community. Prior to this hiring, Parkland had contracted with Hurst Security Services (beginning in 1991) to provide night and weekend security. From 1975 to 1993, Douglas Davis, director of the Department of Health, Safety, and Security, was the only sworn officer on campus.

A 1994 article suggests that this new security service caused some controversy in the Parkland community. Some department heads felt that an armed security force was inconsistent with the philosophy of the college and that security officers were prone to overreaction. New hires in 1993 brought the number of (nonsworn, unarmed) patrol

<table>
<thead>
<tr>
<th>Resident Mix</th>
<th>In-district</th>
<th>6807</th>
<th>72.7</th>
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<td>Out-of-district</td>
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<td>23.3</td>
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<tr>
<td>Out-of-state</td>
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<td></td>
<td>1.1</td>
</tr>
<tr>
<td>Foreign country</td>
<td>276</td>
<td></td>
<td>2.9</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
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</tr>
<tr>
<td>Asian/Pacific Islander</td>
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<td>American Indian/Alaskan Native</td>
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<td>394</td>
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<td>57.3</td>
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<td>18.8</td>
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</tr>
<tr>
<td>Female</td>
<td>5059</td>
<td></td>
<td>54.0</td>
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<td><strong>Age Groups</strong></td>
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</tr>
<tr>
<td>Under 17</td>
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<td>17–20 years old</td>
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<td>40–55 years old</td>
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<td>Over 55 years old</td>
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<tr>
<td><strong>Total</strong></td>
<td>9368</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

5 History

Parkland College’s police officers today work in the Department of Public Safety. Prior to this, security on campus was administered by what was called the Department of Health, Safety, and Security. Throughout Parkland’s history, there have been many individuals working in many different capacities serving this mission of security on campus. They have been known variously as “Public Safety Officers,” “Security Patrol,” “Patrol Officers,” etc. These professionals have included both sworn officers and nonsworn officers.

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A 1994 article suggests that this new security service caused some controversy in the Parkland community. Some department heads felt that an armed security force was inconsistent with the philosophy of the college and that security officers were prone to overreaction. New hires in 1993 brought the number of (nonsworn, unarmed) patrol
officers to eight, with two sworn police officers also added to the department. (Howie, 1994)

Also on 1994, Davis retired as head of the department, a position he had held since 1975. At the same meeting that approved Davis’ retirement, the board unanimously voted its support of the department in response to the recent criticisms. (Howie, 1994)

Von Young, formerly of the Champaign Police Department, became chief of Parkland Police in 2002. He is Parkland’s third police chief and the first African American police chief. He was also the first African American police officer in the City of Lincoln and the first African American lieutenant in Champaign.

Sergeant Yvonne Meyer started with Parkland College Police in 2003. Before that she worked with the Champaign Police Department as a Police Services Representative, working with various computer programs including dispatch software.

A 2008 News-Gazette article reported a bomb threat that led to the evacuation of the campus. The threat did not materialize, but the incident resulted in more attention being directed to the security protocols at Parkland College. The digital divide on campus complicated any emergency notification system. While many younger students were most easily reachable via the Internet or text messaging, Public Safety needed other options to reach less-connected students. The system in place displayed messages on all network computers and on-campus closed-circuit televisions, but the police chief hoped to develop notification that would reach students before they arrived on campus. At the time of this article, Parkland was considering various vendors for an emergency notification system that would allow for multiple means of communication, including e-mail, text messaging, and voice messaging, all in a variety of languages. In the college’s newspaper, college relations officer Kopmann informed students of the availability of IRIS, the selected emergency notification system. (Kopmann, 2011 and Bauer, 2008)

6 Technology inventory

The Department of Public Safety uses many technologies and applications, some developed in-house and some commercial products. In addition to the specific software listed in the table below, Public Safety also uses software provided by the State of Illinois to report traffic collisions, a weather-alert system, SQL-based databases, and office suite. Among the technologies developed in-house are a system to monitor projectors in Parkland’s classrooms and protect them from theft, a 911-icon on each classroom’s computers to provide immediate contact with the Parkland police, and an e-bulletin board linked to the department’s website. Each squad car is equipped with a laptop linked to the state police websites, which is called a “mobile data center” or “mobile data terminal.” In addition to state police databases, Parkland police officers also get information from the National Crime Information Center (NCIC). Public Safety does maintain a Facebook page, but this is not regularly updated. Telephone service in the department is provided by Verizon. Public Safety has 15 sworn officers, 8 dispatchers, and 3 patrol officers.

<table>
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<tr>
<th>Software</th>
<th>Creator</th>
<th>Description</th>
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<tr>
<td>Automated Records</td>
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</tr>
<tr>
<td>Management Systems (ARMS)</td>
<td>computer aided dispatch (CAD)</td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------</td>
<td></td>
</tr>
<tr>
<td>Colleague</td>
<td>Datatel, Inc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integrated business workflow system</td>
<td></td>
</tr>
<tr>
<td>SimpleK</td>
<td>Prosystech, Inc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master key system and key issuance management</td>
<td></td>
</tr>
<tr>
<td>Onvisource</td>
<td>Onvisource, Inc.</td>
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<tr>
<td></td>
<td>Call recording</td>
<td></td>
</tr>
<tr>
<td>Acrobat</td>
<td>Adobe Systems, Inc.</td>
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<td></td>
<td>Portable document software</td>
<td></td>
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<tr>
<td>Immediate Response</td>
<td>TechRadium, Inc.</td>
<td></td>
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<tr>
<td>Information System (IRIS)</td>
<td>Emergency alert system</td>
<td></td>
</tr>
<tr>
<td>GroupWise</td>
<td>Novell, Inc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Messaging software platform</td>
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<table>
<thead>
<tr>
<th><strong>Equipment</strong></th>
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<tbody>
<tr>
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<td>4 laptop computers (XP operating system, used in police vehicles)</td>
</tr>
<tr>
<td>Scanner</td>
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<td>Digital cameras</td>
</tr>
<tr>
<td>Copiers</td>
</tr>
<tr>
<td>Fax machine</td>
</tr>
<tr>
<td>Electronic Fingerprinting Machine (L1 Solutions) to conduct background checks</td>
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Results of speed tests:
Speedmatters.org  Down: 38,026 kbps   Up: 49,495 kbps
Speedtest.net     Down: 33.10 mbps    Up: 11.06 mbps

7 **Analysis**

The Parkland College Police, under the Department of Public Safety, see themselves as a service agency with law enforcement powers. In this capacity, the Parkland police have very diverse responsibilities. Early in its history, the Parkland College police faced a community that was not sure it really wanted campus law enforcement. Later, however, tragic events at other campuses created a national awareness that saw the necessity of armed law enforcement in an educational setting. These tragedies led to increased responsibilities for the Parkland police. In addition to providing services and presenting themselves as helpful, friendly, and approachable, the department was now also responsible for planning, maintaining, and potentially implementing extreme crisis management operations. Technology has a significant role to play in all these activities. (Bauer, 2003 and Kingsburry, 2011)

Currently, the organization uses information and communication technologies (ICTs) daily to carry out the mission of the Department of Public Safety. The department maintains classroom security through its key management systems and the 911 icon on
all campus computers, available in case of an emergency. The department also hosts the college’s switchboard, managing telephone communications throughout the community. Police officers use Mobile Data Centers while in the field. These are laptops with which officers can make reports and access law enforcement resources, such as state police databases, from anywhere, allowing them to spend more time in the community. The department also issues emergency notifications and weather alerts.

As with many organizations, communication is key for the Parkland police: within the community, among officers and personnel, and with other agencies. College campus law enforcement administrators are particularly concerned with this issue because of shootings and other violent incidents on campuses nationwide. At Parkland College, school administrators have noted that better communication with students in the event of an emergency could save many lives, and for that reason communication strategies within the Parkland community have received a great deal of attention. (Cook, 2007)

As we have heard from many organizations regarding ICTs, the interviewees felt that speed was an important area for improvement for the department. In the event of an emergency, the ability to reach members of the community very quickly, as well as state and federal agencies, will be absolutely crucial. One challenge particular to Parkland College is a technology gap among students and the fact that Parkland College is not residential, so students are very spread out outside of class time. This adds complexity to Parkland College’s emergency notification. On a day-to-day level, communication is a huge part of the Parkland police and Public Safety operations. As one interviewee said, “it’s radios to computer, computer to radios, constantly, all day long.” Reliably fast communication and Internet connections will make a big difference and this is certainly an area where the UC2B project will help.

Another challenge for the Parkland police is the diverse nature of the student body. Parkland College has a higher proportion than many other campuses of older students. In the interviews as well as a News-Gazette article, it was mentioned that the technology gap between the younger and older students complicates some activities of the police department, most notably the emergency notification system. The current system relies on e-mail, text, and voice messaging. There is the potential that a student may not have a cell phone and so the emergency message may not reach the student before s/he arrives on campus. Additionally, the Immediate Response Information System (IRIS) requires that students register online to receive these messages. For a student who is not comfortable with ICTs, this is a barrier. (Bauer, 2008)

In the interviews, several innovations involving technology were mentioned for Parkland College. First of all, there is some interest in installing cameras, as the University of Illinois and many other institutions have done. At the moment there are several issues with this proposal, including the wiring of the buildings and concerns about privacy. If the infrastructure issues can be settled, however, there is evidence that cameras on campus do help to deter crime and gather information about safety issues. The department also recently developed a system to deter the theft of overhead projectors in classrooms. Another innovation is the potential for community members who report an incident via the 911 icon on their computer screens to fill out an electronic form at the same time. In general, collaboration between Parkland College’s IT department and the Department of Public Safety would bring great benefits to the college. According to the
information gathered from interviews, Public Safety staff members are very comfortable and competent with the technologies that they use and that competence extends to ideas for improvement. However, the staff will need IT input and support to accomplish their technological goals. (Kacich, 2010)

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http://www.prospectusnews.com/news/more-than-just-cops-1.2114568
67: Urbana Fire Rescue

John Newcomer
Master’s student, GSLIS

1 Executive Summary
The Urbana Fire Department has been providing public safety services since the birth of the City of Urbana in 1833. The department’s use of IT is directed toward supporting its mission to provide effective emergency response and prevention services, and to this end the department has already adopted many innovative uses of information technology. These uses satisfy both the internal needs of the department (for example, installing Mobile Data Centers in fire engines) and the external needs of the community (for example by promoting online safety videos for the public). They are also looking to the future, for example into using digital technology for communicating with speakers of foreign languages, which would be beneficial in this very diverse city. In addition, expanding community Internet access through the UC2B project offers numerous advantages for Urbana Fire Rescue, such as the ability to make its existing information resources available to a wider audience and expanding their online information resources to match future demand.
The Urbana Fire Department Main Station is located at 400 S. Vine Street in Urbana.
This map provided indicates key places in the vicinity of the Urbana Fire Department Main Station (blue dot).
The Urbana Municipal Building on 400 S. Vine Street houses the Main Fire Station.
The Urbana Fire Department relies on networked software to share and record information concerning calls for service, personnel, and training.
The Urbana Fire Rescue Commander vehicles are equipped with a networked laptop computer to provide information about calls for service.
The department fire engines rely on Mobile Data Centers (MDCs) in order to respond to calls for service.

4 Demographics of Urbana and UIUC

<table>
<thead>
<tr>
<th>2010 Census Data</th>
<th>Urbana, Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>41,250</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White Alone</td>
<td>60.4%</td>
</tr>
<tr>
<td>Black Alone</td>
<td>16.3%</td>
</tr>
<tr>
<td>Asian Alone</td>
<td>17.8%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
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</tr>
<tr>
<td>Median Household Income</td>
<td>$42,655 **</td>
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<tr>
<td>% of Families Below Poverty</td>
<td>13.3% **</td>
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</tbody>
</table>

UIUC

<table>
<thead>
<tr>
<th>Total Student Population</th>
<th>41,949</th>
</tr>
</thead>
</table>
International Students | 7,223
Countries Represented | 115
Ethnicity
White Alone | 57.3%
Black Alone | 5.2%
Asian Alone | 11.4%
Hispanic or Latino Alone | 6.6%

5 History

The birth of the Urbana Fire Department accompanied the early formation of the city of Urbana. Founded in 1833, Urbana initially relied on its residents to assist in putting out fires. As the town grew, so did the need for an organized fire response service. By 1855, a volunteer force known as the “bucket brigade” was answering this call. Unanticipated tragedy, however, would prompt a greater expansion of local fire services; on October 9th, 1871, the city suffered a devastating fire that destroyed much of its prominent downtown. Oddly, this fire occurred on the same day as the Great Chicago Fire. The fire prompted changes in Urbana’s fire services as residents demanded a better fire response. (Urbana Fire Department Vertical File)

In 1874, Urbana Fire Rescue was officially founded. The city took additional measures to prevent future fires by installing water mains in 1875 and using brick as the primary construction material (History of Downtown). Urbana Mayor Colonel Busey, elected in 1880, directed the fledging department, which operated from its main station at 107 N. Broadway Ave (Urbana Fire Department Vertical File).

Over the ensuing decades, Urbana Fire Rescue witnessed a steady expansion. In 1894, Thomas Kaucher became the first recorded fire chief. Within a few years, the department purchased its first horse-drawn wagons to assist in fighting fires. Initially, teams of horses were rented from the city’s Livery Stable (Urbana Fire Department Vertical File). In 1908, the department moved its main station from 107 N. Broadway to 116 W. Elm Street. Shortly after the move, the department changed from a volunteer force to a fully paid one. The firemen worked six days a week with Sundays off (Urbana Fire Department Vertical File). On August 24th, 1964, the fire department moved once again to its present location in the Urbana city municipal complex at 400 S. Vine Street (Urbana Fire Department Vertical File).

More recently, Urbana Fire Rescue has broadened its workforce, services and clientele. In 1990, Amy Richardson became the first female firefighter to join a growing department (News Gazette, October 30, 1990). On August 23rd, 1995, Urbana remodeled its city complex—the site of the main fire station (Urbana Fire Department Vertical File). Three years later, the department expanded its coverage by accepting a contract from the University of Illinois Urbana-Champaign. The plan offered the Urbana department a $1.7 million annual contract to provide joint coverage, along with the Champaign Fire Department, of campus facilities (Osterreicher, 1997, p. 2).
In the wake of the September 11th terrorist attacks, Urbana Fire Rescue assumed leadership for regional emergency response. The Department of Homeland Security designated the Urbana department as a regional rescue response team in 2003, specializing in rope/high angle, confined space, trench, and structural collapse rescue. The department has received federal funds to assist in this role (Bauer, 2003, p. B1).

At present, Urbana Fire Rescue plays an active role in the community. It operates from four stations under the direction of Fire Chief Michael Dilley—nominated by Mayor Laurel Prussing in 2007 (Monson, 2007). The department conducts fire safety seminars for residents and performs home and business inspections for fire hazards. It promotes awareness and education by reaching out to diverse audiences.

6 Technology Inventory

In collecting data, it became apparent that Urbana Fire Rescue already makes extensive use of information and communication technologies (ICT). Based on personal observation and staff interviews, this author compiled a brief overview of technology available at the Urbana department. It is important to note that much of the software utilized by the department does not operate in isolation, but as part of a broader network inclusive of other government agencies. The following section discusses digital resources utilized by the department, as well as those made available to the public.

The primary information network utilized by the department is the Fire House reporting system. It is a software-based information system that connects each of the four fire stations on a high-speed T1 Internet line. The data reported is then uploaded to a website for access by the State Fire Marshal’s Office and the National File Reporting System. This program enables firefighters to record and query information from the shared network. Each of the Urbana firefighters receives training in how to operate the Fire House program. The fire department uses the city IT support team to maintain its information system.

Due to the nature of their work, Urbana Fire Rescue must stay connected while responding to calls in the community. To this end, the department has installed mobile data centers (MDCs) in each of the fire engines and command vehicles. MDCs operate through cellular wireless signals and provide firefighters with a host of information including dispatch tickets, “pre-plans” (building plans), and emergency contact information. One Urbana Division Fire Chief shared that the department can access a complete listing of pre-plans for each building on the University of Illinois campus.

Reliable Internet access serves as an important tool for Urbana Fire Rescue. Firefighters regularly connect to the Internet to find information about hazardous materials and zones as well as online research. Web resources such as Close Calls provide firefighters with personal safety information and training scenarios. Finally, Web access is helpful to firefighters in accessing electronic trade journals.

Not only is ICT important for Urbana Fire Rescue’s internal use, it is also important for informing members of the public. The Urbana Fire Rescue website, constructed as part of the Urbana government website, features a variety of information for public consumption. This includes the department mission and structure, personal safety tips.
and instructional videos, and updates about upcoming CPR, AED, and first aid training courses. The website even includes a digital page designed specifically for children.

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software and Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Computers</td>
<td>Telephone Access</td>
</tr>
<tr>
<td>Mobile Data Centers (MDC)</td>
<td>High-speed Internet (T-1)</td>
</tr>
<tr>
<td></td>
<td>Department Website</td>
</tr>
<tr>
<td></td>
<td>Firehouse Reporting Software</td>
</tr>
</tbody>
</table>

7 Analysis

For the Urbana Fire Department, the use of IT is directed toward supporting its mission to provide effective emergency response and prevention services. The department has already adopted many innovative uses of information technology. These uses satisfy the internal needs of the department as well as the external needs of the community. As one fire captain commented, “Over the last twenty years, the fire department has embraced technology more than ever.”

In spite of the progress of technology use, certain limitations persist. Addressing existing constraints offers one strategy for improving ICT use at fire department. As one division chief acknowledged, “There are a number of things we would like to do” but cannot due to “the firewalls and access concerns of the IT people. The main issue is that protecting against viruses . . . also restricts our ability to do things better.” This Division Fire Chief would like to see greater mobile connectivity and access. In addition, he would like to be able to update dispatch information and upload reports in real time.

Aside from improving internal information systems, digital technology may open new channels of communication. In particular, digital technology may be useful for communicating with speakers of foreign languages. As previously stated, Urbana Fire Rescue supports a particularly diverse clientele. Its customers include foreign-born residents and international students. One fire captain related that “[a]t the local grade school we have fifteen or sixteen different languages spoken.” He stated that a mobile device to translate or facilitate communication between firefighters and foreign-language speakers would be useful. With the rapid advance of digital technology, this may be soon realized.

A few observations of digital technology use are encouraging. The present study suggests a trend towards greater digital literacy among both firefighters and community members. One fire captain explained, “Most people are pretty savvy because most people have Internet at home and use social networking.”

Expanding community Internet access through the UC2B project offers numerous advantages for Urbana Fire Rescue. First, the department will be able to make its existing information resources available to a wider audience. Users who previously lacked Web access will be able to explore personal safety tips and other information on the department website.
Second, improving Internet access will enable social institutions such as the Urbana Fire Department to expand their online information resources to match future demand. At present, the Urbana Fire Rescue website offers a wide array of information. Yet, as one fire captain concedes, this information is not necessarily updated on a daily basis. Greater access to online information might lead to expanded digital opportunities. The fire captain related, “The other day we had a gas leak and it shut down a small block area. We had people who saw our fire trucks and came down there. We also had people calling the city departments asking about evacuation. Well, we didn’t ask anyone to evacuate. So that’s something we could put on the website: ‘No evacuation necessary.’” Greater community access to digital resources enables residents to become better informed about fire prevention and personal safety issues, enabling Urbana Fire Rescue to better serve its clientele.

**Bibliography**


Urbana Fire Department Vertical File. Champaign County Historical Archives, Urbana, Illinois.


**Webliography**


68: Urbana Police Department

Lily Grant
Master’s student, GSLIS

1 Executive summary

The Urbana Police Department depends heavily upon sophisticated computer technology to make its work effective and efficient. The police are fortunate to have a full IT department through the City of Urbana supporting their work, and they use customized computer software to manage local police records. The department has fully mobile connectivity through a statewide wireless police network, which can access local, state and national law enforcement information and records. Though the department is already rich in technology resources, UC2B could offer several opportunities to further enhance and refine their digital capabilities, such as possible video surveillance use, increased training opportunities via webinars, and sharing of computer resources with other law enforcement agencies in the Urbana-Champaign area.

2 Maps

The Urbana Police Department is located in the City Building at 400 South Vine Street in Urbana. The neighborhood is adjacent to downtown Urbana and includes a mix of local businesses, banks, city government offices, and residential houses.
The Urbana Police Department is centrally located within the city of Urbana.

3 Photographs

The City Building in Urbana. The Urbana Police Department offices are located at the front of the building, with the reception window immediately to the right as you enter the building.
Lieutenant Richard Surles of the Urbana Police Department with a fleet of squad cars. Lieutenant Surles is the North Patrol Commander for the police department.
A laptop computer mounted in a police squad car. These computers are used for police communications and for accessing local, state, and national police data via the Illinois Wireless Information Network (IWIN). The computers also receive dispatch tickets generated by 911 operators. In addition to the laptop, squad cars are also equipped with small printers.
Office computers at the Urbana Police Department. These computers are used by officers to enter police reports.

4 Demographics of patrons or clients and department staff

The Urbana Police Department is primarily male, and officers tend to be young. The current age range of police officers is 21 to 55. There are 47 male officers and 8 female officers. Police Support Services staff include 13 women and 1 man. Staff ethnicity and income demographic information was not available for this study.

The following graphs illustrate demographic information for the population that the police department serves, which includes all residents of Urbana. The graphs were created using information from the 2000 U.S. Census.
5 History

The Urbana Police Department was founded in July of 1855. In addition to serving Urbana, the department hired out its services to Champaign (then known as West Urbana) until the small neighboring town could establish a police force of its own. The department was originally located next to the County Courthouse, and relocated to its present location on South Vine Street in the 1960s. The department has grown steadily along with the population of Urbana, with twice the number of officers serving today as there were half a century ago.

As the department developed, it took advantage of each new form of communications technology that came along. Early in the twentieth century, police officers communicated with police headquarters via a callbox. Callboxes were placed throughout town and were simple telephone devices. When the light on the box lit up, the officer would unlock the box and answer the call from the dispatcher. By the end of the 1930s, callboxes had been replaced by radios. Though radios have, of course, evolved, they remain a staple of police communication even today. Each officer continues to receive calls from dispatch via radio, as well as through their computer.

In the 1980s, the City of Urbana began developing the software package that would become the Area-Wide Records Management System (ARMS). ARMS replaced a records system that was comprised of index cards containing information on individuals who had been in contact with the police. The card system was organized by name, which was an obvious limitation: one needed to know the correct name of a person in order to find any information about him or her. ARMS provided much more robust search capabilities than were available in the analog system it replaced.

In 1993, the police department acquired Mobile Data Terminals (MDTs) for its squad cars. MDTs were simple computers, comprised of a keyboard and a small, text-only screen. Only 12 types of searches were possible and limited information would be returned from local, state, and national databases. Though impressive for its time, it was very limited by today’s standards.

In 2000, Urbana replaced its MDT units with Mobile Digital Computers (MDCs). MDCs are ruggedized laptops that connect wirelessly to a statewide network. These laptops enable officers to retrieve very detailed law enforcement records while in their squad car. MDCs also receive dispatch tickets from the local dispatcher and are able to send and receive administrative messages. MDC units continue to be used today.
6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, Systems, and Communication</th>
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</thead>
<tbody>
<tr>
<td>43 Desktop computers</td>
<td>Facebook page</td>
</tr>
<tr>
<td>29 laptop computers in squad cars</td>
<td>Website through City of Urbana</td>
</tr>
<tr>
<td>29 small printers in squad cars</td>
<td>Microsoft Office</td>
</tr>
<tr>
<td>Printers</td>
<td>Scheduling software</td>
</tr>
<tr>
<td>Scanners</td>
<td>ARMS Software (see Analysis)</td>
</tr>
<tr>
<td>Projectors</td>
<td></td>
</tr>
<tr>
<td>Cameras</td>
<td></td>
</tr>
<tr>
<td>Barcode Scanners</td>
<td></td>
</tr>
<tr>
<td>Telephones, landline and cellular</td>
<td></td>
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<tr>
<td>Radios</td>
<td></td>
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</tbody>
</table>

The department’s Internet speed averages 5 mbps for both upload and download.

7 Analysis

Good police work requires a combination of hard work, good information, and efficient communication. The Urbana Police Department still works as hard as it always has, but access to good information and communication systems have been improved by the department’s use of advanced computer technology. The Urbana Police have taken full advantage of the remarkable advances in computer technology that have taken place over the past few decades.

Many police departments rely on vendor-supplied software and hardware, but the Urbana Police Department is fortunate to have a fully staffed IT department supporting their work. The IT department not only custom builds computers, but it has also created an impressive custom-built police software system called the Area-Wide Records Management System (ARMS). Development of ARMS began in the 1980s, and by the end of the 1990s the University of Illinois and Champaign police departments had adopted the program as well.

The ARMS software package is a records management system that allows all three local police departments to have quick and easy access to police reports. The database enables officers to retrieve records based on a number of different criteria, such as name, location, crime, license plate number, driver’s license number, and many other identifiers. ARMS is used by all police officers and support staff to maintain and access local records.

Each squad car is equipped with a specially designed laptop that allows officers to access local, statewide, and national records via the Illinois Wireless Information Network (IWIN). The local data is stored in ARMS, the state data is in the Law Enforcement Agencies Data System (LEADS), and the national data can be found in the National Crime Information Center (NCIC).

LEADS obtains information from all law enforcement agencies in the state. Participating agencies enter records into the system pertaining to stolen property, warrants, officer safety information, and missing persons. If the matter is serious enough that law
enforcement in other parts of the country should be notified, it is also entered into NCIC. For instance, a warrant related to a speeding ticket would likely only be entered into LEADS, but a warrant relating to a serious crime, such as murder, would be entered into both LEADS and NCIC.

The LEADS system is operated by the Illinois State Police and allows officers to check license plates, driver’s license numbers, warrants, and stolen property information. Access to LEADS is granted only to Illinois criminal justice agencies and approximately 800 agencies currently have access statewide. In addition to police departments, courts, state’s attorneys, probation departments, and county jails use the system.

Because access to LEADS is restricted, its administrative messaging feature is especially valuable. Similar to instant messaging, this LEADS feature provides law enforcement agencies with a quick and easy way to communicate with one another. Since no one other than law enforcement can access the system, all messages received through LEADS are regarded as official communication. If a communication is received through another means and needs to be verified, the receiver can ask the sender to send an administrative message instead.

NCIC, the national crime reporting database, was developed by the FBI in the late 1960s. NCIC connects law enforcement agencies throughout the country, and averages around 7.5 million transactions per day. NCIC contains information similar to that found in LEADS, but it has additional information such as counterterrorism files and information about national security threats.

The ability to access local, state, and national databases wirelessly from their squad cars gives police officers a tremendous advantage when combating crime. Suspects in one crime can be linked to other incidents more easily now, stolen property is more readily recovered, and the officers are saved considerable legwork and time. The difference between police work today and police work just a few decades ago is dramatic.

In addition to their internal use of computer resources, the Urbana Police Department takes advantage of technology in their community outreach efforts. The department’s webpage is extensive, and includes information on police procedure, staff contacts, police services, and crime information. There are a number of useful forms available on the site in PDF format, such as a citizen complaint form and a crime victim checklist. The site includes a unique feature called “Cops Corner,” which is a series of informative videos originally produced for public television. The videos cover topics such as what to expect when you call 911, how to keep your home and vehicle safe, and how to set up a neighborhood watch group.

Approximately every eight hours, a local crime report is automatically generated by the department’s ARMS software. These reports are posted in PDF format on the website under Media Reports. These provide detailed reports of incidents to the local media and interested members of the public.

In January of 2011, the department began subscribing to CrimeReports.com, a website that displays local crime data on Google maps. The maps are populated with the location of each incident reported, along with a brief description of the nature of the crime. The data listed here is drawn from the data listed in the Media Reports.
None of these things could have been accomplished without effective collaboration between the police and IT staff. The City of Urbana has long emphasized the importance of IT development, beginning with the creation of general ledger and payroll software three decades ago. The city IT staff work closely with users to create products that meet their needs. Currently, they are working to create more web-oriented products for the police force, since that is what the officers, who are primarily young, prefer. To further improve the ARMS software package, an ARMS committee, made up of police staff from Urbana, Champaign and the University of Illinois, has been created to provide suggestions and feedback to the IT staff.

Though the police department is already rich in technology resources, this does not mean that there is nothing that the UC2B project could offer them. For instance, if the department chose to make use of a video surveillance system like the one that the university uses, the increased bandwidth offered by UC2B would make this a viable option. Another bandwidth-heavy project that the department already takes part in is adding crime data to a Geographic Information System (GIS). The increased connection speeds offered by UC2B would provide improved performance when working with GIS.

Though the city IT department has already wired 20 buildings in the downtown area with broadband fiber, the fiber-equipped area of Urbana remains somewhat of a technological island amongst less well-connected neighborhoods. The completion of the UC2B project will complete the broadband infrastructure needed to enable high-speed computer connections between all parts of the Urbana-Champaign area. Because the broadband project is so extensive, it will also provide much-needed redundancy in the network, allowing information to be rerouted around a problem area if part of the network is damaged. Additionally, the increased bandwidth would allow the city IT department to make more effective use of online training (via webinars) when they roll out a new computer software package. Webinars could also provide improved communication between local police departments.

The completion of the broadband network would have benefits beyond that of simply improving communication. High-speed connections between various local governmental agencies would mean that they would potentially be able to share technology resources with each other, thus leveraging their buying dollar. All of these benefits would improve not only the efficiency of the police department itself, but would, by extension, help improve the safety and security of the community that they serve.

Bibliography


Webliography


69: Village of Savoy Fire Department

Abigail Sackmann
Master’s student, GSLIS

1 Executive summary

The Village of Savoy Fire Department provides service to the roughly 7,000 citizens of Savoy, as well as contractual service to homes and businesses outside village limits. The mission statement maintains that the department

[S]hall minimize the effects of fire, emergencies, and disasters. The department will accomplish our mission through fire prevention, public education, and continual professional development of emergency response personnel. When called upon the department will provide a rapid and professional response to emergencies and show care and compassion to those in need.

The nature of firefighting and the benefits of the use of technology mean that the department uses Information and Communications Technologies (ICT) quite extensively, in large part for reporting and efficiency. This is done mainly through the use of FIREHOUSE software, which helps to manage business, day-to-day operations, planning, communications, and technical challenges. One of Savoy Fire Department’s biggest goals with a UC2B connection is to be able to connect to METCAD, Champaign County’s 911 dispatch center, in order to access their addressing and other data to automatically populate their FIREHOUSE database.
Approximate boundaries of Village of Savoy.
UC2B line locations and Savoy Fire Department.

3 Photographs

Computer in the Command Vehicle Car 410: it is used for inspections and to record preplans of buildings, which are needed to make firefighting more effective.
Engine 452.


4 Demographics of Village of Savoy

| Population, 2010 | 7,280 |
| Population, 2000–2010 | 62.6% |
| Population, 2000 | 4,476 |
White, 2010 (a) 77.4%
Black, 2010 6.8%
American Indian and Alaska Native, 2010 0.1%
Asian, 2010 12.6%
Native Hawaiian and Other Pacific Islander, 2010 0.0%
Persons reporting two or more races, 2010 2.4%
Persons of Hispanic or Latino origin, 2010 2.7%
White persons not Hispanic, 2010 75.7%
Foreign-born persons, 2006–2010 18.6%
Language other than English spoken at home 21.7%
High school graduates, age 25+ 97.7%
Bachelor’s degree or higher, age 25+ 65.4%
Median household income, 2006–2010 $50,172
Persons below poverty level, 2006–2010 10.1%

Source: http://quickfacts.census.gov/qfd/states/17/1767860.html accessed 4/2/12

5 History

The early history of the Savoy Fire Department is significant in that it was the main reason for the incorporation of the Village of Savoy in 1956. Prior to that year, the Champaign Fire Department responded to all fires in the area, including those outside of the city limits of Champaign. In 1956 the Champaign City Council voted to cut services outside of Champaign in an attempt to cut costs. Suddenly farms and houses outside the city no longer had fire protection, and a petition was signed by 61 citizens to incorporate Savoy into a Village, mainly for the purpose of providing funds for fire protection of the area. On April 7, 1956 Savoy citizens voted to incorporate by a vote of 50 to 49 (the vote was contested and approved). The Village Board convened for the first time on July 11, 1956, and established the Savoy Volunteer Fire Department (VFD), which put out its first fire on the morning of November 6. Within the next year they had raised enough funds to build a department building and buy a fire truck.

Photograph taken at the first VFD open house, October 12, 1958.
The Savoy Fire Department bought its first computer in 1996 and the reporting software it still uses, FIREHOUSE, in 1997. Prior to this all reporting—federal law requires the reporting of every phone call and response—was done by hand or typewriter, which was extremely time-consuming. In 1999 cable modems were installed through a free partnership with a cable company and ISP called Insight, which has since been bought out by Comcast. In February of 2012, the Fire Department launched its new self-hosted website, designed entirely by staff and providing an extensive amount of information to the public.

6 Technology inventory

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<thead>
<tr>
<th>Hardware</th>
<th>Software and systems</th>
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</tr>
<tr>
<td></td>
<td>Facebook site</td>
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| Speedmatters.org  | Download 23.225 Mbps | Upload 5.131 Mbps |
| Speedtest.net     | Download 22.33 Mbps  | Upload 5.95 Mbps  |

7 Analysis

In contrast to common practice in many larger local government systems, Savoy Fire’s IT is managed separately from that of the Village of Savoy. Because of the practical necessity of reporting details on every incident, technology plays a key role the activities of the department, mostly in streamlining tasks to allow for more-efficient management of resources. This is done mainly through the use of FIREHOUSE software, which helps to manage business, day-to-day operations, planning, communications, and technical challenges. (http://www.firehousesoftware.com/products/fh/ accessed 4/8/12) According to the Fire Chief, this software, which the department has been using since 1997, has a very user-friendly interface, great customer support, and can create tailored reports based on what data is needed.

The first step of the documentation process is to conduct inspections of buildings to measure dimensions and note any particular hazards that might be significant in the case of a fire. These “preplans” are loaded onto a newly acquired tablet as well as a computer in the department’s command car, which can then be easily accessed during an emergency event. Every call is recorded in the FIREHOUSE database along with information about response, including data on when the first and subsequent units were deployed and arrived at the site and other useful data. This data combined is compiled into a “run report” and assembled in a database. The software also keeps track of department activities and trainings, as well as data on when fire hydrants, hoses, pumps, and aerials need to be tested or replaced.
In addition to this main database, another was created in-house in 2002 to keep track of all contractual agreements with individuals and businesses outside of village limits that subscribe for fire protection.


One of Savoy Fire Department’s biggest goals with a UC2B connection is to be able to connect to METCAD, Champaign County’s 911 dispatch center, in order to access their addressing and other data to automatically populate their FIREHOUSE database. The Urbana Fire Department currently does this through a fiber connection and the Champaign Fire District does so through a T-1 line, but up till now a direct line running from Savoy to METCAD was not feasible due to cost. This would serve a dual purpose of making reporting more efficient and enabling the firefighters to “rip and run,” or access addressing automatically from a call for very fast deployment. The Savoy Fire Department also sees the potential for more GIS data sharing, as access to more spatial data such as utilities, roads, topography, and building imprints could be beneficial for services.
Housing

70: Clark-Lindsey Village

Cao Haixia
PhD student, Peking University, and visiting student, GSLIS

1 Executive summary

Clark-Lindsey is a not-for-profit continuing care retirement community located on the edge of the University of Illinois campus. For more than 30 years, it has provided residents with exceptional service that has earned it an outstanding reputation throughout the state.

Clark-Lindsey has three components, which are Village Apartment Living, Meadowbrook Health Center, and Renewal Therapy Center. Meaningful relationships with residents and their families are at the heart of their philosophy. Meadowbrook’s services include assisted living, skilled nursing care, and respite stays. It accepts Medicare and is a preferred provider for Health Alliance, Health Alliance Medicare Advantage, Blue Cross/Blue Shield, and Humana Medicare.

Technology and networked computers both facilitate management and provide the residents with entertainment and more opportunities for communication. Clark-Lindsey Village has provided some classes for their elderly residents for basic guidance. More and more volunteers were added to this work. It’s difficult for all seniors to keep up-to-date with technology and software, especially when a person is very old and physically inconvenienced by disabilities. But Clark-Lindsey Village Center will try to meet older people’s needs and provide network technology to enrich their lives. They are looking forward to a UC2B connection to facilitate a better Internet connection for their residents and staff.
2 Maps

Clark-Lindsey Village Neighborhood

The location of Clark-Lindsey Village in the Champaign-Urbana area.

3 Photographs
Clark-Lindsey Village: Outside

Clark-Lindsey Village: computing facilities for patrons.
Clark-Lindsey Village: staff computing area.

Clark-Lindsey Village: all the computers in the library room.
4 Demographics of patrons or clients

There are 102 beds in Meadowbrook Health Center, including 19 Assisted Living, 58 Skilled Nursing, and 25 Medicare-certified beds in Renewal Therapy Center. Most employees (they have nearly 200 staff) know how to use computers; just a few of the residents, being seniors, can use computers.

5 History

According the Clark-Lindsey Village website, it was officially created in 1978.

6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Speed Down</th>
<th>Speed Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>About 50 desktops</td>
<td>speedmatters.org</td>
<td>33969</td>
</tr>
<tr>
<td>10 laptops</td>
<td>speedtest.org</td>
<td>33.38</td>
</tr>
<tr>
<td>15 iPads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>About 25 personal desktops in apartments</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7 Analysis

Clark-Lindsey Village provides services to seniors. As the organization is a nonprofit institution, they do more than provide basic services to the elderly, and they try to offer a variety of cultural entertainment for them. The arrival of the computer age has brought great challenges for the center. Some of the residents are physical inconvenience, so the demand for computer use is not great. But there are some people with children who live elsewhere in the U.S. or overseas who need to use e-mail, Skype, or other computer-assisted means to communicate with them.

The administration has heard about UC2B and expresses support for it. In 2002 Clark-Lindsey implemented comprehensive computer management, greatly improving the efficiency of the office. And then the computers have been made available for the residents in the library of Clark-Lindsey Village.

Factors affecting access to the computers

There are some issues affecting the use of computers in the village. Firstly, in general making computers and other advanced equipment more accessible older people is problematic. Americans over 60 are only half as likely to have ever used a computer compared to younger people. In fact, so few older Americans have any experience at all with the latest technological advances (only 22% have ever even used the Internet) that overall attitudes are clearer when one looks at the under-60 group. This situation also exists at Clark-Lindsey Village. Secondly, fees are a barrier. Unlike at the public libraries, residents wanting to use the computers at Clark-Lindsey Village have to pay a fee. Admittedly, Clark-Lindsey Village faces budget issues, which is why they charge those fees. In the future they are hoping local government will provide free and high-speed Internet access for the residents.

Future vision of technology

Clark-Lindsey Village Center has provided some classes for their elderly residents for basic guidance. More and more volunteers were added to this work. It’s difficult for all seniors to keep up-to-date with technology and software, especially when a person is very old and physically inconvenienced by disabilities. But Clark-Lindsey Village Center will try to meet older people’s needs and provide network technology to enrich their lives.

Webliography


1 Executive summary

Since 1939, the Housing Authority of Champaign County (HACC) has provided affordable housing for low-income families and individuals of central Illinois. The HACC is an important organization in Champaign County, especially in Urbana and Champaign. Its focus in recent years has been on rebuilding housing projects that were no longer serving the needs of the community. Two housing developments have been rebuilt and converted into mixed-income housing and plans of two more redevelopments are being developed.

The technology needs of the HACC are twofold: those of the agency itself and those of the tenants. The HACC has a very sound information technology program. The needs of the staff are met and IT developments have been given careful consideration over the years. Although there is always room for more funding and improved technology, HACC’s technology needs are being met.

The technology needs of the tenants are more of an issue. Serving the low-income population is always difficult, not only in terms of funding but also in terms of awareness of their technological needs. The technology needs of the tenants are currently outside the scope of the HACC services; however, because so many of the residences will be eligible for the UC2B services, it may become an issue that needs to be considered. Approximately 350 units of the 536 units managed by the HACC will be eligible for UC2B Broadband Service.
2 Maps

HACC and the surrounding anchor social institutions.

This map shows a select number of HACC housing developments in Champaign and Urbana.
3 Photographs

The outside of the main administration offices on Park Street in downtown Champaign.

These computers are used by high school students enrolled in a college preparatory program.
Printers for employee use.

Server room located in the administrative building.
4 Demographics of patrons or clients

Although aggregate demographic information is not easily available from the HACC, one demographic qualifier is that most or all of the recipients of public housing are at or under the poverty line.

<table>
<thead>
<tr>
<th># In Family</th>
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<tr>
<td>1</td>
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</tr>
<tr>
<td>2</td>
<td>$41,700</td>
</tr>
<tr>
<td>3</td>
<td>$46,950</td>
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<tr>
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</tr>
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<tr>
<td>7</td>
<td>$64,650</td>
</tr>
<tr>
<td>8</td>
<td>$68,850</td>
</tr>
</tbody>
</table>

Family income limits for HACC services. Source: HACC website.

5 History

Since 1939, the Housing Authority of Champaign County (HACC) has provided affordable housing for low-income families and individuals of central Illinois. The HACC is an important organization in Champaign County, especially in Urbana and Champaign. HACC has had a close relationship with the University of Illinois and in the 1980s HACC worked with the U of I Housing Research Center to redesign public housing communities built in the 1940s. Focus was put on reducing crimes and creating safe spaces for children. Since 2000, much attention has gone to rebuilding and re-conceptualizing existing housing projects.

As with most organizations providing essential services to lower-income communities, funding is always an issue. The constant balance between funding and meeting the needs of residents is a predominant theme in the history of HACC.

The Crystal View Townhomes and Douglass Square are two housing developments that have recently gone through redevelopment. Both communities were originally built in the
“barracks” style architecture of the 1950s and the buildings had deteriorated beyond repair. Also, the communities were plagued by high poverty and crime that affected the living standards of the residents. Both developments are now mixed-income communities and HACC has plans to redesign the bulk of their housing as mixed-income residences.

The goal of redeveloping even more of the HACC properties has created some problems for residents. Residents asked to leave the housing development communities have been given Section 8 vouchers, which can be used with private rental companies, but residents are having a difficult time finding housing that fits within the given budget. HACC has said that the redevelopment will not begin until every family has found suitable housing.

As of 2011, the total number of housing sites overseen by the HACC is 536. This includes 192 family units, 244 elderly units, 84 mixed-population units, and 16 scattered sites.

6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software/Other</th>
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</thead>
<tbody>
<tr>
<td>19 Desktops</td>
<td>WinTen</td>
</tr>
<tr>
<td>10 laptops</td>
<td>Microsoft Office</td>
</tr>
<tr>
<td>Server</td>
<td>Wireless Internet</td>
</tr>
<tr>
<td>Telephones</td>
<td>Upgraded telephone service</td>
</tr>
<tr>
<td>Printers (at least 2)</td>
<td>Website: <a href="http://www.hacc.net/">www.hacc.net/</a></td>
</tr>
<tr>
<td>Sound System</td>
<td></td>
</tr>
<tr>
<td>Overhead Projector</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speedtest.net</th>
<th>Download (Mbps)</th>
<th>Upload (Mbps)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>7.62</td>
<td>24.64</td>
</tr>
</tbody>
</table>

7 Analysis

The HACC, as an institution, has a very sound and highly developed technology system. The network administrator has been with HACC for 16 years, is in tune with technology changes, and implements those at the HACC accordingly. Their technology needs are at an average level and the technology budget falls within the capital budget, being primarily used for purchasing equipment. Large technology purchases must be approved by the HACC Board and be put in resolution form for approval. The most advanced software program used is WinTen, a program used to for everything from tenant and landlord information to payroll. The employees possess competent computer skills and are able to successfully manage the software used on a daily basis. There are other HACC locations throughout Champaign and Urbana (see Network Admin Interview) that are connected to the main server at the administration offices in downtown Champaign. All in all, technology needs are covered and technology is utilized in a timely manner to serve the needs of HACC staff, tenants, and landlords.

One interesting finding was that paper forms for all tenant information are still used. When asked about the use of paper forms, the network administrator stated that the paper format is preferred because of the sensitive information contained in the forms, as well as the security risk of keeping such information in digital format. She did mention that it
could be difficult for some tenants to access forms online, due to lack of access to computers or poor computer skills. The board chairperson said from his experience as the chairperson and also from his own work running a job training agency that most of the tenants don’t have the access or skills to do things online. He has seen, over the last couple of years, applications of many kinds migrating to online access only and has noted difficult it is for some people to overcome the challenge of applying online. This involves learning basic computer skills, as well as setting up an e-mail account. He was very concerned with the emphasis on technology being convenient for agencies but not for the consumers. Although it seems unusual or antiquated that paper forms are still being used at HACC, this might actually be serving HACC tenants better than if everything was only accessible online.

There is little in the way of technology resources available to tenants at the HACC administrative offices. There is a bank of computers that are used for a college preparatory program but other than that, tenants seldom use computers at the offices. There are computers, however, located at most of the residences, which have been donated by HACC and other organizations. These computers are not connected to the HACC system and are mostly connected to the Internet through Comcast. The board chairperson stated that the resident boards are very conscious of making sure residents have access to computers and try their best to provide appropriate technology.

Approximately 350 units out of a total of 536 will be eligible for UC2B Broadband Service. This includes 6 housing developments and 10 scattered sites. The interviewees were hesitant to comment on whether or not tenants will take advantage of the UC2B service. The question of the priority of the Internet was brought up and they were uncomfortable giving a definitive opinion. This is understandable given the fact that most people taking advantage of HACC services are under or at the poverty line. The HACC staff are not in a position to generalize about the financial situations and priorities of the tenants. Whether or not tenants will utilize the UC2B Broadband service is something only time can tell. The network administrator did show interest in how UC2B could lower costs to some of the computers that are under her control but not running through her server.

The last consideration is that of recent plans for demolishing a housing development in Champaign. The residents of this housing development have been given a warning and Section 8 vouchers and are now responsible for finding new housing. Section 8 vouchers can be used at any private real estate company and usually only cover a portion of the rent. But apartment hunting is now done largely online and without proper access, finding new housing can be a difficult process. HACC has promised to help these tenants find housing and the redevelopment will not happen until all residents find proper housing, but it looks like tenants might need more help finding housing than HACC is giving. The network administrator stated that at least one resident has come into the offices to use the computers to look for housing, but there is no program to address this need in place. This is a daunting task, one that current resources may not cover.

Webliography


Housing Authority of Champaign County Website. http://www.hacc.net/default.html


Prairie Winds of Urbana

Rachel Lux
Master’s student, GSLIS

1 Executive summary

Prairie Winds of Urbana is an affordable assisted-living community. Certified to operate through the State of Illinois’ Supportive Living program, Prairie Winds serves adults 65 and older who need some help maintaining their independence. Prairie Winds provides an alternative to a nursing home or struggling alone at home, especially benefitting seniors who cannot afford a private assisted-living facility. Prairie Winds is operated by Blair Minton & Associates Management (BMA), a management company that operates assisted-living facilities throughout Illinois and the Midwest.

Prairie Winds relies on BMA for most of their technology needs, and the IT specialist is able to remotely log on to any computer at Prairie Winds from BMA’s home office in Bradley, Illinois. Outside of general office technology use, though, Prairie Winds also promotes resident use, providing a computer lab with a PC, a Dakim touchscreen computer equipped with BrainFitness software, and a printer.

Prairie Winds is working to change the age-related digital divide by creating a blogging program that will allow residents to share stories, memories and jokes online with friends, family, and the community. Prairie Winds staff is also actively beginning to engage with Facebook, posting photos and videos of resident events and parties. Furthermore, they are very interested in setting up Skype for the residents, allowing more people to connect with their families who may not live near the Champaign-Urbana area. UC2B could be very beneficial to Prairie Winds in their mission to help their residents connect online and share their residents’ stories on the Web to capture their invaluable community history and experiences.
Prairie Winds of Urbana is located at 1905 W. Prairie Winds Drive in Urbana; it is marked by the “A.”

This map shows Prairie Wind of Urbana’s facility in relation to other neighborhood organizations and businesses. The facility is located just southeast of the Colorado Avenue and Philo Road intersection, near the Philo Road Business District and just northwest of the Stone Creek Golf Course. Other organizations nearby include Grace United Methodist Church and the Renner Wickoff Chapel. The Prairie Winds duplex homes are located directly east of Prairie Winds of Urbana. While the organizations do share services and some facilities, they are under separate management.
3 Photographs

Front view of Prairie Winds of Urbana’s building.

This is a typical staff desk at Prairie Winds of Urbana.
This is the staff computer for in-service training. This computer is used only for online training and is linked back to the corporate office. If other computer applications are attempted, a report is logged and sent back to the corporate office.

This is the resident computer lab. It is located in the resident library, and has Internet access and other computer applications for the residents to use. On the left is the Dakim touchscreen computer, trivia game designed to improve senior memory skills, run entirely via touchscreen, so no additional controls (e.g., mouse or keyboard) are needed.
4 Demographics of patrons or clients

There are currently 92 residents at Prairie Winds of Urbana. The community is specifically for senior citizens 65 years old and up, and the average age of the current residents is 85, more and more younger residents are applying.

Currently, five or six residents have computers in their room (all desktops). If residents want Internet access in their apartments, they must subscribe through Comcast and pay for it as a separate fee. In addition to those with computers, we learned that an average of 10 residents regularly use the resident computer lab, either for the PC or the Dakim touch screen. The Dakim usage is variable: some residents try it once and some residents use it multiple times a day.

In addition, the State of Illinois has some demographic requirements for qualifying as a Supportive Living Program, including (from Illinois Supportive Living “Resident Fact Sheet”):

- Undergoing a preadmission screening;
- If a resident is seeking assistance through the Medical Assistance Program, he or she must be found in need of nursing-facility-level care
- Being without a primary or secondary diagnosis of developmental disability or serious persistent mental illness;
- Having income no less than the current maximum allowable amount of Supplemental Security Income (SSI) (2011 SSI amounts: $674/single person; $1011/couple);
- Been tested for and found clear of tuberculosis; and
- Not participating in any other home- and community-based services waiver

5 History

Prairie Winds of Urbana is operated by Blair Minton & Associates (BMA Management Ltd.), which is a senior assisted-living facility management company based in Bradley, Illinois, and one of the top 25 largest senior assisted living facility management companies in the United States. Established in 1999, BMA strives to provide welcoming communities for seniors, regardless of one’s financial situation.

Construction on the Prairie Winds of Urbana facility began in 2006, and it officially opened on April 25, 2007, and all 92 units are currently occupied. In 2008, Life Services Network—a statewide association representing the leading providers of older adult services—recognized Prairie Winds of Urbana with the Seal of Confidence for commitment to resident satisfaction (“Business & Professional Briefs”).

In terms of technology, most of the changes that have taken place have been in how the day-to-day office operations have been handled. Because the facility has been open for less than five years, fairly new technology has been in place since the beginning of operations. However, the office has seen a shift in documentation with the move from hard copies to online documentation. When exchanging information with the corporate office (BMA), documents are either submitted through online forms or scanned in and e-mailed. About 95% of invoices are now done online, and are routed through a processing
center in North Carolina. Writing physical checks has declined from 20–30 a month to 2 or 3. When Prairie Winds first opened, almost all documentation was in physical form, which then had to be photocopied and mailed to the corporate office and then filed at Prairie Winds. Now, most of the day-to-day operations documents are filed online.

However, when dealing with transactions with the State of Illinois, Prairie Winds must still fax documents to Springfield. The state requires that forms with sensitive information be submitted this way to avoid a potential security breach online. Prairie Winds thus still uses a mix of methods when processing paperwork, though the majority of those operations have moved online.

More recently, Prairie Winds has made several key updates to their information communication technologies (ICTs). In July 2011, a computer exclusively for staff in-services (trainings) was installed. The computer has a direct link to the corporate office, and any reports generated from the trainings are automatically submitted to BMA upon completion. Also at that time a Dakim touchscreen computer was added to the resident computer lab. The Dakim BrainFitness software is designed specifically for seniors to aid memory retention and improvement through trivia and games. The system is operated completely via touchscreen, so residents can use it without worrying about knowing how to use a mouse or keyboard.

In the fall of 2011, Prairie Winds purchased a Flip video camera. Prairie Winds staff hopes to use video in more ways in the future and plans to train various staff members on the Flip camera. These events will then be added to Prairie Winds’ website and Facebook pages so residents, along with their family and friends, can share in the memories.

6 Technology inventory

These tables outline the most-used technology equipment at Prairie Winds, as well as the speed test results. The majority of the tech use is basic daily office functions, though some nursing functions use technology and there is resident computer access as well. Also, Prairie Winds staff is very dedicated to documenting events at the facility with photos and videos, and then posting those photos and videos online to share with residents’ family members and the community. There is no set budget for technology specifically for Prairie Winds, as those purchases are directed through BMA (the corporate office).

<table>
<thead>
<tr>
<th>HARDWARE/EQUIPMENT</th>
<th>SOFTWARE/ONLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 PC computers (Office Use)</td>
<td>Microsoft Office (Excel, Word, PowerPoint, etc.)</td>
</tr>
<tr>
<td>1 staff training computer (PC)</td>
<td>E-mail (combination of web-based and Exchange)</td>
</tr>
<tr>
<td>1 computer that monitors residents’ emergency pull cord system (Lifeline)</td>
<td>Website: <a href="http://bma-mgmt.com/prairiewindsurbana/">http://bma-mgmt.com/prairiewindsurbana/</a></td>
</tr>
<tr>
<td>1 resident computer (PC)</td>
<td>Facebook (Group Page): <a href="http://www.facebook.com/group.php?gid=124074822112">http://www.facebook.com/group.php?gid=124074822112</a></td>
</tr>
<tr>
<td>1 Dakim touchscreen resident</td>
<td>Corporate Website: <a href="http://bma-mgmt.com/">http://bma-mgmt.com/</a></td>
</tr>
</tbody>
</table>
computer
Flip video camera
Photocopier & Printers
Scanner
Standard Landline Phone System
Comcast Internet Connection/Wi-Fi access for visitors
Operating System: Microsoft Windows 7

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</tr>
<tr>
<td>Ping</td>
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<td>26 ms</td>
</tr>
</tbody>
</table>

7 Analysis

Prairie Winds of Urbana is the first supportive-living community in the Champaign-Urbana area, providing quality apartment-style housing and care for seniors at reasonable costs with assistance from Medicaid. According to Supportive Living Facilities Illinois:

The aim of the program is to preserve privacy and autonomy while emphasizing health and wellness for persons who would otherwise need nursing facility care. (“Resident Fact Sheet”)

In general, Prairie Winds is facing many of the same problems that a lot of businesses, nonprofits, state agencies, and individuals are also dealing with: the economy. Because it’s a supported assisted-living facility, Prairie Winds receives assistance from Medicaid. Due to the economy in the state of Illinois, those payments are usually lagging 4 to 6 months—something that has also been discovered in other anchor social institutions. Fortunately, because Prairie Winds is an assisted-living facility that is more affordable than higher-end assisted-living communities, they have a steady waiting list for open units.

Currently, Prairie Winds is fairly up-to-date on technology, especially in the office/administration side of operations. We learned through our interviews that Prairie Winds takes most of its technology cues from either BMA or the nursing industry at large. Though they do not have an on-site IT employee, BMA has IT personnel at its home office in Bradley, Illinois, who are used when staff have a problem they cannot fix on their own.

Most of the tech usage at Prairie Winds happens in the office/administration area or with some of the nursing functions. Currently, Prairie Winds does not do any kind of online charting, though they are looking to start that in the future, as need dictates. Another interesting tech use is that employees are turning more to the Internet for problem solving. Prairie Winds definitely seems to be an environment that encourages creative problem solving and technology use, on the part of both the staff and residents.
In the future, Prairie Winds plans to continue to expand and evolve its tech uses across several areas: office use, social media use, and resident use. First, we learned in our interviews that Prairie Winds would like to potentially switch from PC to Mac computers down the road, though no plan is currently in place for this. Also, BMA is exploring broader ICTs such as an online-based phone system and “cloud computing” abilities that would both limit the need for servers and office networks and expand its’ employees capabilities in terms of being able to work from home or while traveling and still have access to as much as they would if they were in the office.

Second, BMA recently formed a task force to focus on social media and how to best “get the story out” about its facilities (including Prairie Winds) and, more importantly, the residents’ stories. Preserving the rich histories and life experiences of Prairie Winds’ residents and sharing those stories in a format that’s available to the residents’ families and friends and the community as a whole is very important to BMA and Prairie Winds. Currently, Prairie Winds uses a Facebook page, as well as photo galleries and short videos on their website, to share some of the events. However, in the very near future Prairie Winds will be starting resident blogs. They will post at least two a month, and will feature anything from residents’ stories and memories to favorite jokes and photos. The hope is the residents will be excited to see their words in print on the computer screen, and the staff will be able to help more residents go online to find these things. The mission is really twofold: get the stories out to the public, and get the residents online.

More and more residents have families spread across the country, and as video-chat programs like Skype become more prevalent, the Prairie Winds staff would like to be able to set up the resident computer with Skype and teach residents how to use it, so they are able to see their children and grandchildren when they talk to them. The staff believes this type of chat program would be a great motivator for residents wanting to get online, and the UC2B Big Broadband connection could aid greatly in ensuring that Skyping or other forms of video chatting is a pleasant experience for the residents. We also learned that Skyping could be a good way for Prairie Winds staff to communicate with residents’ family members. When a family member lives out of state or can’t regularly come in, a face-to-face video chat could be more productive than a series of phone calls and text messages, which could help streamline family communications and requests with the administrative offices.

Prairie Winds staff are very excited about being included in the UC2B Big Broadband grant, and there are many ways the project could benefit the center. The faster the connections, the more streamlined the day-to-day operations can become. But most importantly, faster Internet speeds could connect residents to their families in ways they never dreamed possible. As Prairie Winds staff continue to push interested residents to explore the computer, the Internet, and the Dakim touchscreen, they would have more time to focus on what kinds of programming and classes and one-on-one training they may be able to provide for the residents if Internet connection speeds were no longer an issue.

**Bibliography**


**Webliography**


73: Round Barn Manor

Rachel Lux
Master’s student, GSLIS

1 Executive summary

Round Barn Manor is an elderly low-income housing apartment complex subsidized by the U.S. Department of Housing and Urban Development (HUD). Residents 62 years of age or older who meet income qualifications may apply for residency. Round Barn Manor is owned and operated by Apartment Investment and Management Company (Aimco), a real estate investment trust.

Most of Round Barn Manor’s technology needs are met by Aimco, which provides major IT support through their corporate IT headquarters in South Carolina and develops many of the software programs Round Barn Manor administrative staff use on a daily basis. Round Barn Manor also has an onsite computer lab for its residents. The lab is very well equipped, and usage has gone from only a handful of residents when it first opened in 2007 to 50% of the residents now using it in some capacity. Even with these significant growth numbers, Round Barn Manor residents face a digital divide when it comes to computer literacy skills. In the future, Round Barn Manor may need to look more closely at how to address this divide, while providing the tech updates that society (and the more tech-savvy residents) may demand. UC2B could be very beneficial to Round Barn Manor in their mission to help their residents connect online with their families, friends, and community groups.

2 Maps

Round Barn Manor is located at 2000 W. John St. in Champaign; its location is designated by the “A”.
The location of the Round Barn Manor in relation to other neighborhood organizations. It’s located in the western part of Champaign, just southwest of the intersection of W. Springfield Avenue and S. Mattis avenues, and southeast of Kaufman Park. Other organizations nearby include Swann Special Care Center, Champaign Park District, Champaign Fire Department No. 4, Champaign Operations & Maintenance, Round Barn Banquet Center & Catering, St. John’s Lutheran Church, and Little Lamb Preschool.
3 Photographs

Front view of Round Barn Manor.
An example of a staff computing area in the administrative offices.

This is part of the resident computer lab. The lab contains three computers and three printers. These computers have normal-sized screens. All are equipped with Internet access, speakers, and printing capabilities.
This is the third computer in the resident lab, on the opposite wall from the other two. It also is equipped with Internet access, speakers, and printing capabilities. In addition, it is set up with a large-icon desktop to accommodate poor eyesight. This is also the “Skype Station” computer; it has a headset and the Skype video chat program has been on it.

4 Demographics of patrons or clients

Round Barn Manor has 156 units constructed for independent living, all of which are currently full; there is a waiting list for future openings. All but two of these units are designated for elderly residents, 62 years old and above. The remaining two reserved for younger residents with special needs.

While more specific resident demographic information could not be shared, to qualify to live in Round Barn Manor, prospective residents must meet requirements set out by the U.S. Department of Housing and Urban Development (HUD) (as this housing is subsidized by federal funds), or meet Section 8 housing requirements. Within Round Barn Manor, different units are designated for residents at different income levels, including those making no more than 20, 30, 40, or 60% of the median income in Champaign County (News Gazette, $3 million renovation underway).

5 History

Round Barn Manor is owned and operated by Apartment Investment and Management Company (Aimco), which manages a wide array of apartments throughout the United States. Aimco was established in 1975 as a real estate investment trust. The company
rents and leases its apartment units to a diverse base of residents. It also provides management services to third-party owners” (Aimco, “Company Description”). As of September 2011, Aimco owned or managed 565 properties in 38 states, Washington D.C., and Puerto Rico.

Construction on Round Barn Manor began in 1976, funded by the Illinois Housing Development Authority. Round Barn Manor officially opened in 1978. In 2007, Round Barn Manor underwent its “most major” renovations in its 30-year history. Renovations, which cost $3 million and began on the third floor and worked downward, included remodeling the kitchen and bathroom in each unit; replacing the heating and cooling systems; installing new roofing, siding, and windows; and landscaping (News-Gazette, $3 million renovation underway).

Also in 2007, a resident computer lab was established with funds from Round Barn Manor’s operating budget. Upgrades to the computers and lab equipment continue to be provided through the facility’s operating budgets. A student from the University of Illinois came to teach a five-week computer literacy course for residents. In these classes, the student came to the Round Barn Manor lab and worked with residents on questions, demonstrating anything they wanted to know and working one-on-one with residents to improve computer literacy skills. The response to the classes was good, and those—along with classes provided through the Champaign Public Library and Urbana Adult Education—have also helped Round Barn Manor residents increase their computer skills and interest levels.

Because of Round Barn’s lengthy history, administrative functions have seen the most changes over the years, particularly the documenting systems: changing from hard copy files to electronic file storage, converting from completing documents on a typewriter to using Microsoft Word, and using cell phones to communicate with residents rather than two-way radios or pagers.

6 Technology inventory

These tables outline the most-used technology equipment at Round Barn Manor, as well as the speed test results. The majority of the tech use happens in the administrative office, but there is a resident lab with three computers and printers that gets used frequently. Administrative personnel provide all of the IT support for the resident computer lab. For the office, however, IT support comes from Aimco’s corporate IT, which is based in Greenville, South Carolina. Funds to maintain the resident computer lab comes from Round Barn Manor’s operating budget. The yearly budget for administrative tech upgrades is established through the corporate office, and administration declined to share the yearly budget figure.

<table>
<thead>
<tr>
<th>HARDWARE/EQUIPMENT</th>
<th>SOFTWARE/ONLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 PCs and 1 laptop (office use)</td>
<td>Microsoft Office (Excel, Word, PowerPoint, etc.)</td>
</tr>
<tr>
<td>1 computer that monitors residents’ emergency pull cord system</td>
<td>E-mail (corporate program)</td>
</tr>
<tr>
<td>Computer Equipment</td>
<td>Corporate Website/Link</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>1 computer that runs door security system</td>
<td>Corporate Website: <a href="http://www.aimco.com/">http://www.aimco.com/</a></td>
</tr>
<tr>
<td>3 PCs in resident computer lab</td>
<td>Round Barn Manor Corporate Website: <a href="http://www.aimco.com/Communities/default.aspx?PropertyID=043117">http://www.aimco.com/Communities/default.aspx?PropertyID=043117</a></td>
</tr>
<tr>
<td>3 printers in resident lab</td>
<td>Corporate developed software (OneSite)</td>
</tr>
<tr>
<td>Office printers</td>
<td>Doc Management System</td>
</tr>
<tr>
<td>Digital camera</td>
<td></td>
</tr>
<tr>
<td>Photocopiers</td>
<td></td>
</tr>
<tr>
<td>Scanners</td>
<td></td>
</tr>
<tr>
<td>Fax Machines</td>
<td></td>
</tr>
<tr>
<td>Standard Landline Phone System</td>
<td></td>
</tr>
<tr>
<td>Comcast Internet Connection</td>
<td></td>
</tr>
<tr>
<td>Operating System: Microsoft Windows</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speedmatters.org</th>
<th>Speedtest.net</th>
</tr>
</thead>
<tbody>
<tr>
<td>Download</td>
<td>7572 kbps</td>
</tr>
<tr>
<td>Upload</td>
<td>6186 kbps</td>
</tr>
<tr>
<td>Ping</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### 7 Analysis

Because of its status as a federally regulated low-income housing provider and their corporate management company’s direction, Round Barn Manor is fairly up-to-date when it comes to information and communication technologies (ICTs), both in the administrative offices and in the resident computer lab.

Most technology uses in the administrative offices, including the use of proprietary database software (such as OneSite), are implemented by Aimco, the corporate office that owns Round Barn Manor. Aimco’s corporate IT office is located in Greenville, South Carolina, and if any networking issues, troubleshooting matters, or software/hardware updates come up, the corporate office can access Round Barn Manor’s computers remotely. Because of this, Round Barn Manor does not need to have an IT specialist on staff. Also, when Aimco adds new software or when new employees are hired, any IT training is provided by the corporate office, either on a web-based program or at a satellite office in Chicago.

When simple troubleshooting matters arise—particularly when residents have questions or problems in the computer lab—two administrative staff members are usually able to resolve the problems, and often help residents use the computers and the Internet or printers in the lab. If there are more advanced problems, Round Barn Manor has found alternative solutions in the past. For example, a resident’s son who has a consulting business did pro bono work when two of the three computers had viruses.
While the staff at Round Barn Manor have a high level of computer literacy, the complex itself does not have an online social media presence at this time, and its website is hosted through Aimco (and can only be located if you search for affordable housing in Illinois via Aimco’s site). A Facebook page or more accessible website is something Round Barn Manor would consider in the future, but at this time there are no plans to implement this.

Aside from technology advances that have streamlined office functions, the residents, too, are keeping up with technology advancements. Some of them have computers in their apartments, and many of them have cell phones. More and more residents are abandoning their land lines altogether, and those who are particularly savvy use texting a fair amount as well. Because the residents have already qualified for affordable housing, they also qualify for various grant opportunities, including grant money that provides cell phones.

Arguably the technology change that has made the biggest difference—at least to the residents—is the public computer lab. Residents may subscribe to Internet service within their individual units and pay for it as a separate fee, but the computer lab, which has three PCs, three printers, speakers, and Skype video chat capabilities, provides free internet access. When it was established in 2007, administration estimated that only 1 to 2% of the residents used it. Now, four years later, we learned in our interviews that around 50% of residents at Round Barn Manor use the lab in some capacity. The dramatic increase in computer use is interesting. Many residents have now set up e-mail accounts and Facebook pages to stay in touch with family members who do not live in the area—especially to send and receive photos of family members. Because of the increased interest in using the computer to communicate with family, Skype was installed on one of the computers, along with a headset, so residents are able to video chat with their family and friends who cannot visit as often as they’d like. Overall, this has made residents feel much happier and more in touch.

Often residents are not immediately comfortable using the lab, but warm to the idea when they know there are people on hand to patiently instruct them in its use. The administrative staff tries to assist as much as possible when residents have questions in the lab. They also encourage residents to take workshops and classes at Champaign Public Library and Urbana Adult Education to enlarge their computer literacy skill sets. Grant money was also used to bring in a student volunteer from Parkland College to assist residents with using the computers, printers, and Internet, which encouraged more use of the lab. Also, many residents were more comfortable using the computer for playing games, and this may lead to these residents eventually using the computer for more tasks.

While the administration at Round Barn Manor had not heard much about the UC2B grant, a broadband connection would enable them to continue to provide a fast Internet connection for their residents. It also may enable residents to stay more involved in the community groups they’re interested in, if these groups are also connected via UC2B. Residents may be able to attend meetings and provide input without leaving the apartment complex, which could be an excellent benefit in some cases (inclement weather, illness, temporary mobility issues, etc.).
Overall, it appears demographic groups that may be overlooked in other public computing situations are indeed interested in learning about the computer, improving their skills, and interacting online. Better understanding this demographic group’s needs, learning styles, and fears will help develop programs and opportunities for these senior residents to fully experience the “netizen” experience if they so choose.

Bibliography


Webliography


74: The Windsor of Savoy

Afton Hallauer
Master’s student, GSLIS

1 Executive Summary

The Windsor of Savoy is a retirement community in Savoy with facilities for both independent and assisted living. The institution currently has a couple of desktop computers available for resident use in the independent living wing, and one additional computer in the assisted living wing. Those residents that use the shared computers are able to ask staff members for assistance. Residents can also increase their knowledge of computers through a six-week computer class currently being offered at the center through Parkland. A culture of lectures and courses for residents already exists at The Windsor of Savoy, which might pave the way for new technologies to be more easily utilized by residents and more quickly integrated.

Staff at The Windsor of Savoy hope to expand the scope of their wireless Internet to encompass the entire building; currently, wireless is only available in the common areas of the assisted living wing. The administrator of The Windsor of Savoy also expressed the hope that the center might improve their emergency response system for residents in assisted living. The center currently has an automated paging system through which residents can call for help, but the system has no way of tracking where the resident is, making quick responses more difficult if the resident is not in his/her apartment at the time s/he need assistance.
The location of The Windsor of Savoy within the Champaign-Urbana, Savoy area.
3 Photographs

The front entrance for the independent living units at the Windsor of Savoy.

One of two computers available for use by residents in the library in the independent living wing of The Windsor of Savoy.
This is the staff computer at the front desk of the independent living wing at The Windsor of Savoy. The assisted living wing also has a front desk.

Residents playing bridge in one of the common areas of the independent living wing of The Windsor of Savoy.
4 Demographics of Residents and Staff

The Windsor of Savoy currently has 138 independent living apartments and 36 assisted living apartments. Residents are generally in their 80s and 90s. Roughly 80% of the residents at The Windsor of Savoy are women and 20% are men. The backgrounds of patrons are varied.

There are roughly 90 nonoffice and 10 office staff at The Windsor of Savoy. Among the staff, roughly 65% are women and 45% are men. Many of the staff at The Windsor of Savoy (around 50 of the 100 total staff) are part-time and are either high school or college students. Among the nonstudent staff, educational backgrounds are mixed. Roughly 10 staff members have a bachelor’s degree and 3 of those have higher degrees as well.

5 History

The Windsor of Savoy opened in 1988. It was built by Carle Foundation Hospital and continues under their operation to this day. The Windsor of Savoy is and has always been a senior retirement community.

When the center first opened, it was strictly an independent living environment. As residents aged, however, the staff adapted to the growing needs of residents. One wing was converted into a personalized care wing sometime in the mid- to late 1990s. In this wing, residents could get additional assistance from staff. This wing later became The Windsor of Savoy’s licensed assisted living wing. Prior to January of 2001, no category of licensed assisted living senior housing existed. Following the establishment of this category, The Windsor of Savoy moved to become licensed. This process took several years, because of the limited number of state licensing surveyors. By 2006–2007, however, The Windsor of Savoy gained a license for their assisted living wing.

The Windsor of Savoy administrator was not sure precisely when the center first got computers, Internet, and wireless Internet. It is certain, however, that the center has had these features for at least the last three and a half years. During that time, the administrator suggested, it is possible that the computers have not been switched out, although they do get regular maintenance and updates.

6 Technology Inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software, Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 resident desktop computers in library in the independent living wing of The Windsor of Savoy</td>
<td>REPS software for management team</td>
</tr>
<tr>
<td>1 resident desktop computer in common area of the assisted living wing of The Windsor of Savoy</td>
<td>Organization website</td>
</tr>
<tr>
<td>13 staff desktop computers</td>
<td></td>
</tr>
<tr>
<td>2 Blackberries, for use by the administrator and the marketing manager as work phones</td>
<td></td>
</tr>
</tbody>
</table>
1 LCD projector in independent living
1 laptop used for presenters in independent living
Wii in assisted living
3 staff pagers for the floor staff in the assisted living wing

<table>
<thead>
<tr>
<th>Staff Computers</th>
<th>Download Speed (Mbps)</th>
<th>Upload Speed (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speedmatters.org</td>
<td>1.393</td>
<td>1.317</td>
</tr>
<tr>
<td>Speedtest.net</td>
<td>1.39</td>
<td>1.18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resident Computers</th>
<th>Download Speed (Mbps)</th>
<th>Upload Speed (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speedmatters.org</td>
<td>1403</td>
<td>1292</td>
</tr>
<tr>
<td>Speedtest.net</td>
<td>1.37 Mbps</td>
<td>1.11 Mbps</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wireless</th>
<th>Download Speed (Mbps)</th>
<th>Upload Speed (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speedmatters.org</td>
<td>1139</td>
<td>389</td>
</tr>
<tr>
<td>Speedtest.net</td>
<td>0.1 Mbps</td>
<td>1.19 Mbps</td>
</tr>
</tbody>
</table>

**7 Analysis**

The Windsor of Savoy is currently grappling with the divide between a sense of a growing future demand for technological services and the demands of current residents, many of whom make limited or no use of services such as communal computers or the Internet. The Windsor of Savoy must strike a balance between the needs and desires of current residents and staying competitive for the future. The residents who use the computers available in community areas tend to go to them to check e-mail, perform Internet searches, and play games like Mahjong and Solitaire.

Wireless is only available in the common area of the independent living wing of The Windsor of Savoy. Staff have hopes of expanding coverage to the common areas of the assisted living wing and ultimately of providing coverage of the building as a whole. Currently, the wireless is primarily used by outside programs, such as Parkland, during computer classes that are held at the center and by family members of the residents. “Residents themselves don’t use it too much,” said the Windsor of Savoy administrator, “Also, they tend to have their own if they want it.” Staff expects this to change, however, as generations more familiar with computer and Internet age. “It might not be the biggest demand from our current residents,” said the Windsor of Savoy administrator, “but, even in five years, it might be something that people expect.” Because of this, The Windsor of Savoy is focused on expanding wireless coverage.
Keeping residents active and connected to the outside community is a major concern of The Windsor of Savoy. The center currently has Wii systems for use in the assisted living wing of The Windsor of Savoy. Residents participate weekly in Wii tournaments with organizations outside of The Windsor of Savoy. Because a culture of utilizing new technologies for this purpose currently exists at The Windsor of Savoy, the staff would likely be open to embracing new programs and technologies in the future. The challenge for the staff is knowing where to go next.

At present, the center has a total of three computers available for resident use. Two desktop computers are available in the library in the independent living wing. One computer is in the common area of the assisted living wing. Although this might not seem like it would be sufficient for the roughly 174 apartments at The Windsor of Savoy, according to one resident, getting access isn’t an issue. At least one computer is usually open at any given time.

One trend that may account for this availability, however, is the tendency of more tech-savvy residents to have computers and Internet access of their own, and not to utilize the communal computing areas at The Windsor of Savoy. This is a disadvantage for the facility, as it separates people with more expertise from others who might benefit from that expertise. Residents are unable to learn from each other as effectively as they might if the shared computers were more widely used by more-experienced residents as well as beginning learners.

The staff at The Windsor of Savoy are quick to help residents with any computer questions that arise. One resident put it simply: “[W]e have help, that’s no problem.” Additionally, The Windsor of Savoy hosts a six-week computer course taught by a Parkland instructor. This course appears to be offered every couple years at least. The computer course is just one of many lectures and courses available at The Windsor of Savoy, which reflects a mission to keep residents informed and to allow for the integration of new technologies.

The Windsor of Savoy currently uses emergency pendants in the assisted living wing. These pendants are linked to staff pagers through which residents can call for help. However, the system currently has no way of tracking where the resident is, making quick responses more difficult if the resident is not in his/her apartment; it may be improved in the future to allow for GPS monitoring of the pendants.

According to the administrator at The Windsor of Savoy, there is little to complain about regarding current Internet available at the center. “I think our speed is good,” the administrator remarked, although “[I]t does seem to go down frequently enough that I know the helpdesk number by heart.” Although the Carle IT staff (which The Windsor of Savoy uses for all of their tech problems) are quick to respond to problems at The Windsor of Savoy, staff expressed hopes that UC2B might offer a solution to problems such as the Internet going down periodically.

**Bibliography/Webliography**


Transportation

75: Champaign-Urbana Mass Transit District

Abigail Sackmann and Andrei Rosulescu
Master’s students, GSLIS

1 Executive summary

The Champaign-Urbana Mass Transit District is at the forefront of technological innovation, a fact that is recognized by any bus rider in town. New kiosks are being installed to communicate exactly which buses will be departing from a given stop and in how many minutes, and this information is also accessible both on the organization’s website and through a text messaging service. The winner of a competition for developing mobile apps to communicate this information became available to the public in early March, 2012. Internally, the district gathers vast amounts of information using several software applications and systems in order to plan routes effectively, providing reliable and responsive service on a daily basis. CUMTD is a major stakeholder in the UC2B project, and will use broadband to make its service even more accessible, user-friendly, safe, and reliable.
“A” is the Illinois Terminal in Champaign; “B” is the main facility at 1101 University.
MTD service area, from CUMTD.com.
3 Photographs

Garage facilities (photo from promotional video *We Are MTD*, accessed 2/21/12 at www.cumtd.com/aboutus).

4 Demographics of patrons or clients

The CUMTD provides transportation service to a majority of the area in the Cities of Champaign, Urbana, and the Village of Savoy (see map above for service boundaries).

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Urbana</th>
<th>Champaign</th>
<th>Savoy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>41,250</td>
<td>81,005</td>
<td>7,280</td>
</tr>
<tr>
<td>White</td>
<td>60.4%</td>
<td>67.8%</td>
<td>77.4%</td>
</tr>
<tr>
<td>Black</td>
<td>16.3%</td>
<td>15.6%</td>
<td>6.8%</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Asian</td>
<td>17.8%</td>
<td>10.6%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Persons reporting two or more races</td>
<td>3.1%</td>
<td>3.0%</td>
<td>2.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Persons of Hispanic or Latino origin</td>
<td>5.2%</td>
<td>6.3%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Foreign-born persons</td>
<td>18.3%</td>
<td>12.1%</td>
<td>18.6%</td>
</tr>
<tr>
<td>Language other than English spoken at home</td>
<td>24.3%</td>
<td>17.0%</td>
<td>21.7%</td>
</tr>
<tr>
<td>High school graduates, percent of persons age 25+</td>
<td>93.2%</td>
<td>92.8%</td>
<td>97.7%</td>
</tr>
<tr>
<td>Bachelor's degree or higher, percent of persons age 25+</td>
<td>55.3%</td>
<td>48.1%</td>
<td>65.4%</td>
</tr>
<tr>
<td>Median household income</td>
<td>$34,951</td>
<td>$36,498</td>
<td>$50,172</td>
</tr>
<tr>
<td>Persons below poverty level</td>
<td>29.8%</td>
<td>27.2%</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

5 History

Before CUMTD was formed by a referendum in 1970, buses had operated in Champaign-Urbana intermittently since 1901, when a small bus line was established that operated for 11 months. In 1925, buses operated alongside streetcars run by Illinois Power and Light Company. Eleven years later, both the buses and trolley lines were bought by a subsidiary of General Motors, which replaced all of the streetcar lines with more buses and operated them for the next 30 years as the Champaign-Urbana City Lines.

Ridership during this period peaked in 1958, when one million people rode the buses, and then slowly declined as families began to purchase and use cars. In response to this trend, GM sold the lines in 1965 to Westover Transit Management, and within five years this company had put a petition to the Illinois Commerce Commission to cease operation. However, in the same year, 1970, a referendum to create a Mass Transit District was overwhelmingly approved by voters on November 24. Operations of CUMTD began on August 2, 1971 and the district received its first federal grant later that year.

In those early years, according to an administrator, “Our technology was that every bus operator had a dime, and if the bus broke down they would walk to the nearest phone and call in to tell us what was wrong. That was the technology.” A key turning point came in the late 70s, when equipment was installed for radio communication between the buses and the main facility. The new ability to transfer information over space changed the way the system operated and foretold the direction of technological developments to come.

In 1982, the district attempted a tracking system based on triangulation Loran-C, location information being broadcast to a local cable provider and displayed on a local channel. The innovative idea was that the public could watch the channel to see their bus plotted on a map, and be able to time its arrival at their stop. However, with the inadequate technology of the day this system turned out to be quite error prone, and bad information being worse than no information, was removed from the public view.

In 1984, the district began to use an integrated software called Fleet-Net, (http://www.fleet-net.com/) designed for public transit organizations for tracking and managing man hours, assigning duties, payroll, accounts receivable, accounts payable, inventory, maintenance, and work hours. This software is in fact still used by CUMTD, and the company has worked closely with the district over the years to adopt it to new technologies and other software packages.
CUMTD developed their first website in 1996, designed by an employee on leave with a broken leg. Text-based, like all websites at the time, it has undergone steady updates and redesigns through the years, always on the cutting edge and providing up-to-date information for the public.

In 2000, another tracking system was developed in partnership with a program at the University of Illinois. This project languished when the main researcher graduated, but prompted the district to start a project implementing an existing Computer Aided Dispatch and Auto Vehicle Location system (CAD/AVL) from a company called Init Inc. (www.initag.de/en/index.php) This is the main system in use by CUMTD today, allowing for the accurate tracking information that bus riders have come to expect.

The next big development for the district was to remodel and move into their new facility at 1101 E. University (see photo above). Another key turning point in providing services to riders was in 2009, when they partnered with Google Transit to provide a feed to use with Google Maps. The process of sorting and refining data for the feed took well over a year of work, but a successful feed was finalized in early 2011, laying the groundwork for all of the diverse user applications in use today.

### 6 Technology inventory

<table>
<thead>
<tr>
<th>Software</th>
<th>Hardware</th>
<th>Personnel and Partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Init Inc. CAD/AVL tracking system</td>
<td>T-1 Line between Illinois Terminal and University Ave. Facility</td>
<td>300 employees total</td>
</tr>
<tr>
<td>Visual Studio, used by developers</td>
<td>Fiber-optic lines</td>
<td>30 with desktops</td>
</tr>
<tr>
<td>Microsoft Office Environment</td>
<td>Telephone service through Champaign Telephone</td>
<td>Social Networking Specialist in Marketing Department</td>
</tr>
<tr>
<td>Adobe Suite</td>
<td>Internet Information Server for web hosting</td>
<td>2 Statistical Experts in Planning Department</td>
</tr>
<tr>
<td>Various software developed in-house, e.g., employee intranet</td>
<td>CAD/AVL servers</td>
<td>3 main IT staff, Manager, Software Developer, and Network Administrator</td>
</tr>
<tr>
<td>PERDUIS System for driver bidding</td>
<td>Windows Server 2008</td>
<td>Subcontracting work</td>
</tr>
<tr>
<td></td>
<td>Microsoft SQL Server for databases</td>
<td>Partnership with UIUC Police to share video surveillance</td>
</tr>
<tr>
<td></td>
<td>30 office desktops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dispatch system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Security cameras on buses, buildings, and kiosks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work stations in Control Room</td>
<td></td>
</tr>
</tbody>
</table>
Computers in buses with GPS, touch-screen interface, and radio connection to CAD/AVL

<table>
<thead>
<tr>
<th>For Public</th>
<th>Kiosks (total of 25 will be installed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website</td>
<td>Application competition for mobile app creation—to be released in early March</td>
</tr>
<tr>
<td>100 buses</td>
<td>Text messaging service</td>
</tr>
<tr>
<td>15 vans</td>
<td>Pilot project to replace text message service with similar GSM-based service</td>
</tr>
</tbody>
</table>

7 Analysis

The Champaign-Urbana Mass Transit District’s mission is to “improve the mobility of the population,” and they are extremely successful toward this end, having been recognized both nationally and internationally for outstanding service. (See CUMTD.com/about-us) CUMTD strives to be user driven, easy, comfortable, and effective, and leads the nation in both bus service and technological innovation. The system is constantly moving forward, keeping up with the fast pace of technological innovation both in relation to service to the public and internally.

The main system used is the CAD/AVL, mentioned above. It includes everything for the dispatchers to keep track of and communicate with each bus. It at once gathers information in real time and reports and records ongoing statistics about bus location, time, and ridership for each bus at each location on its route. The constant stream of information is gathered and broadcast to a wide range of applications for both internal and external use. In the control room, the real-time information is posted on a large map with icons where the buses are located, color coded according to whether they are on time, and if not, how late they are running. The information constantly watched by the dispatchers tells who is driving each bus, what route s/he is on, whether s/he are on time, the route’s destination, a vehicle’s block, when the next bus will be in that location, and more. This enables CUMTD staff to make decisions about immediate service, including whether to send out a back-up bus ahead of a late one in order to make sure it arrives at its scheduled stops on time. The control room also tracks up-to-date weather conditions, which influence these types of decisions.

The system, in addition to reporting real-time information about each bus, also records the data for use by planners. This data includes all of the information noted above alongside the actual numbers of passengers for each bus on each route at each stop, which helps planners make decisions for changes in service—they know when a bus’s ridership has increased or decreased, at which times and between what stops, with alarming accuracy. According to a senior administrator, “We have a banquet of
information every single day, all day. It’s an all-you-can-eat buffet of information, and
the question becomes choosing which dishes to take, and how to digest all of this
information.”

Inside the buses, this reporting allows the operators to be aware of what is going on in the
system and to be more responsive; they are constantly in touch with the dispatch center.
Each bus has a touch-screen computer through which the driver receives updates on the
route and weather conditions, and communicates information back to the main facility. A
new development to be implemented in the near future is automatic changing of the sign
on the outside of the bus that communicates the route and destination to passengers.
Currently this sign is changed manually by operators, but using the tracking system it
will soon be possible for the computer inside the bus to change the signs automatically
based on location. In the main facility, all employees have access to an intranet to
communicate with one another, receive messages from other employees and supervisors,
find any information about the work environment, fill out necessary forms, and see
photos of other employees, which is helpful for new staff being trained. In addition, there
is wireless access throughout the building.

In terms of services for the public, the main developments have to do with access to real-
time information, demand for which is growing about 150% per year. Obviously, keeping
up-to-date in terms of communicating data is of vital importance to customer satisfaction.
According to the Technology Supervisor, “Every time a new method of communicating
with the public becomes available, we embrace that openly and try to get our information
out through those avenues.” A great example of this is CUMTD’s texting service,
through which a rider can text a bus stop number to the system and receive a very quick
automated response communicating which buses are scheduled to depart, and in how
many minutes. The time reflects the actual time the bus will leave the stop, taking the
data of where the bus is currently and translating it into the number of minutes it is away
from any given stop. This is used often by riders, but because of its cost as a text message
service through SMS, the district is looking into other services that would run through
GSM, the Global System for Mobile Communications, a standard used by smartphones.
They recently released an API as part of a competition for developers to create
applications that make it easier for the public to access real-time information.

The website provides an easy-to-use service to locate different routes to take from point
A to point B, and users can specify what date and times and filter by walking distance,
time between points, and number of transfers. For old-school users, all of the system
maps and schedules are also available on the website in easy-readable form. In addition
to the traditional website, CUMTD uses social media, including Twitter, Facebook, and
blogging, in order to communicate with and listen to the public.

The district is a major stakeholder in UC2B, having invested about $350,000 in the
project. UC2B will have a major impact on both their internal and external services, and
how many people in the community can use these services. According to the Technology
Supervisor, “With UC2B, we’ll be able to provide faster and more accurate information
to the public, and also to create a more secure environment by being able to get video
feeds from cameras at all of our stops that are equipped with cameras, mostly on
campus.” Indeed, the area most impacted by UC2B’s fast speeds will be streaming and
recording from these security cameras, set up at kiosks and on buses. They have a new
relationship with the UIUC Police which allows them to share their security footage with one another over the 1GB local connection, doubling the areas that can be monitored for both. Streaming video takes a lot of bandwidth, so the number of sites that may be recorded and monitored will increase dramatically.

Another area that will see improvements as a result of UC2B is the backup of this system, creating redundancies and increased security. The district recently began using a new data storage and recovery system, which is installed remotely and communicated over fiber, and these capabilities will only grow with the broadband speeds of UC2B.

Anyone who uses the CUMTD bus system is well aware and appreciative of the constant improvements in communication and services. The district is on the cutting edge with regard to technology: for its users, the district can provide remarkable real-time information in a variety of formats to reach the largest number of riders possible, and internally, the district is developing systems that make both the organization and the buses operate efficiently. All of these areas will be influenced positively by UC2B; the Champaign-Urbana Mass Transit District will be a great example of what can be done with a new world-class broadband infrastructure.
1 Executive summary

The Federal Aviation Administration was created to oversee and control any type of air travel in or across the county. It is an agency within the Department of Transportation. Its stated mission is “to provide the safest, most efficient aerospace system in the world”; its vision for the future is to “strive to reach the next level of safety, efficiency, environmental responsibility and global leadership” while also remaining “accountable to the American public and our stakeholders.” (www.faa.gov/about/mission) Aircraft and air travel were radical technological innovations and the Federal Aviation Administration continues to try to stay on the cutting edge of aerospace technology. The office in Savoy, Illinois faces two major obstacles that affect most government agencies: budget and security issues. These influence the use and adoption of new technologies at the site.

2 Maps

This is a satellite image of the Federal Aviation Administration tower (red dot) next to the Willard Airport (A) in Savoy, Illinois. In this image the layout of the runways, the airport terminals, and the tower is visible. http://www.aopa.org/airports/KCMI
The red dot in the diagram above is the FAA tower at the Willard Airport complex. This type of diagram is one typically used by pilots, airport employees, aircraft owners, etc.
http://www.aopa.org/airports/KCMI
3 Photographs

In this image the Federal Aviation Administration tower is seen, as well as some of the airport hangers and a small test plane.
This is an image in the Champaign County Historical Archives in the Urbana Free Library. The picture appeared in the September 28, 1956 edition of the News-Gazette. The caption reads “UI Airport Tower. The control tower at the 77 acre University of Illinois Airport, southwest of Savoy, is one of the essential and imposing appearing features at this airport, used for transportation, instruction, and research purposes. The airport was dedicated in 1945.”
4 Demographics of patrons or clients

The Federal Aviation Administration Tower does not target or serve specific groups of people or community members. The agency serves anyone who flies—commercially or privately, airport workers, skydivers, the government, even anyone who orders things via Federal Express or UPS—indeed the American public. The agency’s goal is “to provide the safest, most efficient aerospace system in the world.” So while they do not have a traditional set of customers or patrons the agency, its administrators, and employees attempt to serve everyone in the United States by offering a secure way to travel across the country.

5 History

1926 – Air Commerce Act passed. According to this law the Secretary of Commerce was to support air commerce, create air traffic laws, license pilots, certify aircraft, create airways, and aid air navigation. The newly created Aeronautics Branch in the Department of Commerce takes over these responsibilities.

1930s – Four major airlines are established: United, American, Easter, and Transcontinental and Western Air (TWA)

1934 – The Aeronautics Branch is named the Bureau of Air Commerce. Subsequently, it encourages airlines to set up the first air traffic control centers in Newark, New Jersey, Cleveland, Ohio, and Chicago, Illinois.

1936 – The bureau takes control of the oversight of the three centers listed above and improving safety becomes a high priority.

1938 – The Civil Aeronautics Act is passed by President Franklin Roosevelt. This law establishes the Civil Aeronautics Authority (CAA) and an Air Safety Board that will look into accident prevention.

1945 – Construction finished and Willard Airport is dedicated, with flights to begin in 1954.

1966–1967 Congress approves the creation of the Department of Transportation to develop and maintain comprehensive transportation policies. In 1967 the department began to function and the Federal Aviation Agency is given the new name of Federal Aviation Administration.

Throughout the 1960s and 1970s The FAA tries to modernize its technology and keep up with new developments. A few examples from this transition period include updates to the National Airspace System (NAS), development of an Automated Radar Control System (ARTS), and establishment of the Central Flow Control Facility. Each of these changes was meant to update air traffic control and safety, as well as prepare the FAA for future innovations.

1982 – FAA releases its first strategic plan for modernization. The National Airspace System (NAS) Plan is a 20-year outline for continuing to improve the air traffic control and air navigation systems. Some goals are to enhance the Air Traffic Control (ATC) system with a new Free Flight program and to develop the Global Positioning System (GPS) technology for commercial flight.
1991 – The NAS Plan is replaced with the Capital Investment Plan. This new plan combines projects and plans from the original NAS Plan while adding “higher levels of automation as well as new radar, communications, and weather forecasting systems.”

1996 – FAA creates an acquisition management system, a new personnel system to streamline recruitment, and a reward and discipline program.

1998–2000 – The FAA begins testing a new personnel system called the core compensation. By the year 2000 the FAA transfers over 6,000 employees to the new system.

2001 – On September 11, 2001 four U.S. airliners are hijacked; the day ends with the destruction of the World Trade Center towers in New York, damage to the Pentagon in Virginia, one plane crashing in a Pennsylvania field, and thousands of people dead or wounded. It is a shock to the American people as well as the FAA and an event that changes air travel in the United States forever.

November, 2001 – Aviation and Transportation Security Act is signed by President George W. Bush, which creates the Transportation Security Administration (TSA) within the Department of Transportation. This new agency will take over the security responsibilities from the FAA in 2002.

2003 – The Vision 100 – Century of Aviation Reauthorization Act (100 years after the first flight by the Wright brothers) supports the idea of a Next Generation Air Transportation System (NextGen). The NextGen plan will take a multiyear, multiagency effort with the goal of establishing an “air transportation system for the year 2025 and beyond.” In December, 2004 the Department of Transportation Secretary releases the Integrated Plan for the Next Generation Airport System, which officially introduces the plan, outline, and objectives for creating NextGen.

The work of the FAA has established air travel as a normal part of life for the American people. Their work has connected people throughout the nation and the world. In fact, the FAA points out, it “has created the safest, most reliable, most efficient, and most productive air transportation system in the world.” Much of what will happen in the future depends upon the technological innovations that are sure to change the aviation industry. The FAA is looking to its NextGen plan to ensure viability and continue to provide safe, secure, and efficient service and air travel.

### 6 Technology inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software and Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-14 Office Desktops</td>
<td>Microsoft Office 2003</td>
</tr>
<tr>
<td>Personal Laptops and Desktops</td>
<td>Adobe9</td>
</tr>
<tr>
<td>Printers</td>
<td>SharePoint</td>
</tr>
<tr>
<td>Radio hardware</td>
<td>Internet Explorer 8</td>
</tr>
<tr>
<td>Audio Recording equipment</td>
<td>Oracle (and other database programs)</td>
</tr>
<tr>
<td>Remote Server and backup server</td>
<td>1 Mbps connection</td>
</tr>
<tr>
<td>LAN</td>
<td></td>
</tr>
</tbody>
</table>
7 Analysis

While air travel, airlines, and airports have become increasingly connected with new technologies, the FAA has lagged behind due to security and budget issues. The FAA office and tower at Willard airport has about 37 employees and many must share computer equipment. A good estimate is that about 15 people have their own personal laptops or computers, but the majority of employees share computers and printers. The printers are networked so that there can be sharing; however, certain people have their own office printers due to the amount of paper they go through or for security reasons. Whether or not an employee has a computer or printer depends upon job position and function. Furthermore, the digital skills of the employees using the technology equipment vary greatly.

Most of the computers are considered to be relatively old. The FAA tries to operate on a life cycle plan of four years for a desktop and three years for a laptop, and then the equipment gets replaced. But for example, one interviewee stated that he just got a “new” laptop that was already a year old. Programs and software installed on the computers are also outdated. For example, the facility uses Microsoft Office 2003, Adobe 9, and Internet Explorer 8 and was just updated to those applications recently. They also use database-type software such as Oracle and similar programs. To share information the FAA tower uses SharePoint, a Microsoft product that allows employees to “set up Web sites to share information with others, manage documents from start to finish, and publish reports to help everyone make better decisions” (Microsoft Corporation, 2011)

The FAA tower is responsible for controlling and monitoring the air space around Willard Airport. Any aircraft, commercial or private, skydiver, rocket pilots, etc. within a radius of 40 miles and a height of 10,000 feet communicates with the tower. The University of Illinois’ Institute of Aviation also works with the FAA at Willard Airport to practice take offs, approaches, and landings. Another function of the FAA is to collect data from every plane that flies through their air space. They also collect data for the Institute of Aviation. This data is meant to be shared with supervisors and quality assurance departments to improve services and ensure safety. For example, the FAA office audio records all frequencies, positions, conversations, and radar data.

The FAA tower at Willard Airport is operating with a remote server that has only a 1 Mbps connection. None of the machines are allowed to have any type of wireless access; consequently they have to connect through a remote LAN or hard-line wire to be connected to the Internet. All of the information flowing in and out of the facility must be maintained through a secure connection so wireless is not a possibility unless an extremely secure, tight connection could be established. The files take up a large amount of bandwidth as well, because most are of a large size and must be reformatted or translated. So the connection they have may be very secure, but it is also at times very slow. In fact, because the network is shared between 12 and 14 computers the employees sometimes have to warn each other that they will be downloading or sending a large file. In this way they can coordinate the computer use and try to make the most of a slower connection. The server and connection is not the only aspect of information technology not in-house. The backup server is also kept remotely. The FAA tower at Willard Airport
is connected with two backup systems, one in Oklahoma City and the other in Atlantic City, and again this is due to security and budget concerns.

The information technology support is also set up remotely. If the office at Willard has issues or concerns they call the IT staff in Indianapolis, Indiana to report the problem. The IT staff there then access the computers remotely and install a program, fix a virus, and troubleshoot. Furthermore, everything done to a computer must get approval. To install a new program, update software, or install a printer must be approved and handled by the IT staff. The process can take quite a bit of time, because first an employee must report an issue, get approval, and then the downloading and installing begins but with such a slow connection it can take hours. However, the employees did mention that the IT staff does pretty well in keeping up with their reports and issues and handling them in a timely manner. There are three to four IT staffers in Indianapolis assigned to the Willard Airport FAA office, and this is really a cost-effective way for the FAA to provide technology support, as opposed to having an in-house IT person at every location.

The FAA office does have certain technology issues and obstacles to overcome in everyday work but much of that cannot be changed. It comes down to the government being concerned about the overall security of data and protecting that via secure, remote servers. The office also faces budgetary concerns, which dictate much of the decisions made by the government in regards to what types of technology to use and endorse. Because of this the future of information technology at the Federal Aviation Administration is unclear. However, the FAA office at Willard does try to adapt its technology to its situation, that is, create or use programs or software that allows them a little more flexibility but are still protected and safe. For example, the staff support specialist has recently created an internal website that has different sectors for different jobs: there is an administrative corner, an air traffic controller corner, etc. This will be used for file and information sharing. Employees can log onto the internal website, access the manual, PDF, or file, whatever they need, without waiting for a download. Creating and using this type of information technology is a way for the employees and offices to work within their limits set by the government.

The FAA will likely not be able to take advantage of UC2B. The office is very self-contained and would be unable to use any type of broadband network that is not connected or approved by the government. The staff interviewed for this study suggested that Willard Airport would be able to benefit much more from the type of service that UC2B can offer.

Security is one of the main reasons that the Federal Aviation Administration is unable to take full advantage of new technological innovations. They are most concerned about the safe, secure transmission of data than the speed with which it is done. It was pointed out, however, that because different departments and supervisors are requesting more and different types of information, such as audio recording, radar data, and printed readouts to get a fuller picture of operations, something will have to change in the agency. The cloud was suggested as a possible way to accomplish the task of sharing information with offices across the country, yet again though it would have to have the tightest, securest connection The FAA does everything it can to ensure secure premises and technology, which can create barriers to advancement.
A second reason for the FAA’s information technology being what it is has to do with the budget. The government and the administration do not have the budget to equip every FAA office with the same types of connection or technology. For example, the FAA office at Willard is considered a 1 priority (5 being highest) from an IT standpoint. This is largely due to the smaller size of the facility. It is just not thought to need certain types of technology, bandwidth, or connection. In fact, as reported in the Daily Illini, the FAA is planning on combining some of the tower’s activities with a facility in Elgin, Illinois:

The information technology set up at the Federal Aviation Administration is not ideal and there are many areas that could be improved but the two phrases and reasons I heard over and over again in my interview were budgetary concerns and security issues. This is not likely to change very much in the near future unless they can get involved in certain programs or windfalls, but again, that all depends on the timing and individual situations. The office at Willard is doing a good job of working within in the system but they are still up against the bandwidth limit and a slow connection. It seems the future for this particular site is especially uncertain due to the possible realignment with Elgin and the closing of the University of Illinois’ Institute of Aviation set for 2014. (Dollear, 2011) It will be interesting to see what types of technological advancements and innovations the Federal Aviation Administration will adopt in its attempt to continue to provide the safest, most efficient, and most secure air travel in the world.

Bibliography

Webliography
77: University of Illinois Willard Airport

Sunghwan ‘Sunny’ Kim
Master’s student, GSLIS

1 Executive summary
Willard Airport has two large parts to it: the aviation department oversees the actual flights and the equipment, while the administration department assists the clientele and manages the airport as a whole. Both airport managers and airport patrons rely on various information resources to decide what they should do. Since airport controls air transportation, the controllers must have detailed weather information and high level of security information. Passengers need information concerning ground transportation and hotels. For these reasons the airport relies on several connections to local institutions, and uses digital devices and a network to collect necessary information. As a result, the UC2B project will significantly impact this institution not only with regard to increased network speed, but also with regard to advanced community connectivity.

2 Maps

Willard Airport is located at 11 Airport Road in Savoy, Illinois, in the southern portion of Champaign County. Because of the noise problem and safety issues, airports are usually located faraway from downtown. This is also the main reason why people need transportation information regarding the airport.
3 Photographs

The exterior of the Willard Airport.
There is no public computer for use by customers. A free telephone hotline and some limited local hotel contact information can be found in the passenger convenience center. Patrons can access the Internet by using the free Wi-Fi service in the airport, and they also can get information by asking staff at the information desk.
Three employees manage the airport. All of them have their own desktop to handle their tasks, and there are more computers in the meeting room and other workplaces. They also have printers and fax machines in the office.
The sign indicates the services available for patrons. Almost all of these are also related to the Internet (source: http://en.wikipedia.org/wiki/University_of_Illinois_Willard_Airport)

4 Demographics of patrons or clients

The Airport doesn’t record its patrons’ demographics, but below is data on the total number of visitors. Airline companies keep records of their customers’ demographics and purpose of travel, but they never share that information with the airport.
5 History

Willard Airport is one of only a handful of commercial airports in the country owned and operated by an educational institution. Willard Airport, often referred to by its FAA designation, “CMI,” was named for former University of Illinois president Arthur Cutts Willard. Formal dedication of the airport took place on October 26th, 1945 with the first scheduled airline service beginning in 1954. The University of Illinois at Urbana-Champaign established its nationally recognized Institute of Aviation at Willard Airport in 1946. The university takes full advantage of the training and research opportunities offered by the institute. Today Willard Airport is served by one air carrier, American Eagle, which operates morning, afternoon, and evening flights. Willard Airport is also home to a private jet service: FlightStar.

6 Technology inventory

<table>
<thead>
<tr>
<th></th>
<th>Download speed</th>
<th>Upload speed</th>
<th>Ping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speedmatters.org</td>
<td>5.904</td>
<td>4.649</td>
<td></td>
</tr>
<tr>
<td>Speedtest.net</td>
<td>9.87</td>
<td>6.14</td>
<td>33</td>
</tr>
</tbody>
</table>

Total 60698 0 60698

1317 1571 63566
This institution’s network speed is not bad. They are using a network line which based on the University of Illinois network, since this airport is owned by U of I.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>Intel x86</td>
</tr>
<tr>
<td>RAM</td>
<td>2G</td>
</tr>
<tr>
<td>HDD</td>
<td>200GB</td>
</tr>
<tr>
<td>OS</td>
<td>Windows XP</td>
</tr>
<tr>
<td>Quantity</td>
<td>15</td>
</tr>
</tbody>
</table>

The computers in this airport are using Windows XP as their operating software. Overall performance is not so bad, but it is obvious that these computers will need an upgrade in recent future. There are many other devices in this building, but the tech manager couldn’t list them for me because of security rules.

### 7 Analysis

People tend to think of an airport as a huge, high-tech institution. But Willard Airport is a part of a university department and there are only three staff people to manage it. That said, broadband is very important to this small organization because they must cooperate with many organizations both locally and nationally.

Many of the anchor social institutions in the Champaign-Urbana expect that the UC2B project will provide high-speed internet for their staffs and patrons. But in this airport’s view, connectivity will be a more important issue. The main customer group of Willard Airport is passengers. Since travelers are not an easy target to define and classify, personalized service which depends on high-speed Internet will be a very important goal for this airport.

The UC2B project will make possible interactive real-time data communication between Willard Airport and other anchor social institutions. It will be very helpful to this airport because they require a high level of information. For example, connection with the local weather broadcasting system will provide faster and more accurate weather information. Local transportation companies such as CUMTD or LEX will provide real-time bus schedules.

Of course, there are several obstacles to be overcome. First of all, the scale of Willard Airport is not big, so adapting new digital skills will not be easy for this small group. To cooperate with other institutions, many discussions and consultations are needed. Secondly, the airport must follow some special regulations, especially security rules and national airport standards. These rules can limit information sharing by Willard Airport. Lastly, the economic crisis represents a problem. One interviewee said that the economic crisis had decreased the number of passengers: people were using other cheap transportation or have stopped travelling. As a result, the airport’s income is down and they cannot afford to purchase new technology for their work area.

It is not easy to solve these problems, because they are based on a social phenomenon. Forming and running well-organized UC2B committee will help cooperation between
anchor social institutions. Additional local network projects that provide not only physical infrastructure but also systemic software solutions are needed as well.

**Webliography**


1 Executive summary

According to its mission statement,

The Champaign Public Library connects our community with the power of knowledge, the world of culture and ideas, and the joy of reading. We support the essential role of reading for success in life and work, the need for easy and equal access to lifelong learning, and the value of enriching and inspiring experiences.

The library utilizes many technologies to aid in this mission, including for example self-check-out stations; fully automated security and system updates for computers that are controlled by group policy; an automated sorting system for new materials; room- and event-booking software that is available online; and a new and effective website. Because of its success in other areas of IT and the continuing demand from patrons, the library has had to increase its bandwidth several times in the recent past. CPL is unsure whether UC2B will be faster and/or cheaper than the connection they have currently, but they are open to the possibility of switching over to UC2B service should it offer faster speeds at a lower price.
The Champaign Public Library on Green Street in downtown Champaign
Map from CPL website showing locations of Main Library and Douglass Branch
3 Photographs

Champaign Public Library, Main Branch.

Staff computer
Adult Computer Lab

Catalog terminals
4 Demographics of patrons or clients


Total population of City of Champaign: 81,055
Percent White: 67.8%
Percent Black: 15.6%
Percent Asian: 10.6%
Percent Latino: 6.3%
Percent of persons age 25+ High School Graduates: 92.8%
Percent of persons age 25+ Bachelor’s Degree or higher: 48.1%
Median household income: $36,498
Per capita income: $22,321
Families below poverty level: 12.3%
Individuals below poverty level: 27.2%

Library card holders: 37,710
Visits to the library per day: 2,700
Items checked out at CPL per day: 7,000
Number of people who use a computer at CPL per day: 466

5 History

The library’s history begins with a small private reading room created in 1868. About 300 books and some periodicals were housed at No. 7 Main Street in Champaign, with 40 members paying dues to the private Champaign Library Association. The association dissolved in 1876, donating its resources to the City of Champaign in order to create a public library. The City Council accepted the gift and created a budget, and on July 21, 1876, the Champaign Public Library and Reading Room was born. It soon moved to a new location, No. 24 Main Street, and accumulated 750 volumes. During this time, there was one librarian for the collection, and anyone over the age of 10 could borrow books.

In 1889 the collection moved to the city building at the corner of University and Neil. Five years later, A. C. Burnham, a banker from Champaign, donated money for a new library, which opened on December 17, 1896. Burnham also created a $10,000 book endowment, and when the new library opened the collection reached 5,593 books. The collection grew to over 100,000 items, requiring a staff of 40 and a new building. A new
library was built with funds from a referendum and dedicated in November of 1977 at 505 S. Randolph Street, where it remained until 2008.

In 1965, the Friends of the Champaign Public Library was founded in order to support the library through volunteering and funding opportunities. Another support organization, the Champaign Public Library Foundation, was established in 1993 to solicit private gifts in order to safeguard the mission of the library.

In 1970, the Douglass Center Library was organized as the first branch library in Champaign-Urbana, as a joint project of the two libraries, the Lincoln Trail Libraries System, and the Champaign Park District. In 1972, it began to operate as a branch of the Champaign Public Library (for more on the history and technology use of this library, please see its report).

Since the opening of the library’s Randolph Street facility, the size of the collection has doubled, and library use has tripled. Just a few years after it opened, the collection and use outgrew the building, and plans were developed to construct a new building to house the collection and meet the growing community demand for both resources and space. The current library building opened in January 2008; it has three times the space and four times as many computers as the previous facility, and it’s original collection of 285,000 items has grown to about 400,000.

In terms of technology, much has happened in the last several years. In 2005, when the existing Technology Services Manager began working at CPL (which was still in in the old building), the library had 19 public computer stations and very little of the network was automated. The number of public computers has since grown to almost 90 and all of the updates and daily tasks are automated for the entire network; these represent snapshots of the dramatic technological changes that have occurred in the past few years.

### 6 Technology inventory of the Champaign Public Library Main Branch

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>88 public desktops</td>
<td>Evanced for events, booking, and summer reading clubs</td>
</tr>
<tr>
<td>120 staff desktops</td>
<td>Microsoft Office Suite 2007 (moving to 2010)</td>
</tr>
<tr>
<td>2 public laptops (may be checked out for library use)</td>
<td>Self-Checkout software—Tech Logic CircIT 2010</td>
</tr>
<tr>
<td>Scanners</td>
<td>PC reservation, printing, and eCommerce: EnvisionWare</td>
</tr>
<tr>
<td>Cameras</td>
<td>MySQL</td>
</tr>
<tr>
<td>Fax machines</td>
<td>SteadyState</td>
</tr>
<tr>
<td>Copy machines</td>
<td>Comodo Time Machine</td>
</tr>
<tr>
<td>9 digital projectors (can distribute same signal to the entire first floor)</td>
<td>Subscriptions and online resources</td>
</tr>
<tr>
<td>2 large-screen TVs</td>
<td>Testing and Education Reference Center</td>
</tr>
<tr>
<td>Carousel: slide making from the Promotions Department</td>
<td>Gale Student Resources in Context</td>
</tr>
<tr>
<td>WolfVision projector in the Children’s Department</td>
<td></td>
</tr>
</tbody>
</table>
60 security cameras and other security technologies | Grolier Online
---|---
2 Wiis | Auto Repair Reference Center
Sound systems with microphones and mixers | Gale Virtual Reference Library
2 Kindles (may be checked out for library use) | Illinois Public Records
AT&T broadband | Consumer Reports
| General Reference Center Gold
| Newsstand
| Wall Street Journal Online
| Morningstar Investment Research Center
| Standard & Poor’s
| WorldCat
| Mango Languages
| Children’s Literature Database
| Literature Resource Center
| Career Transitions
| ReferenceUSA
| Brands & Their Companies
| Encyclopedia of Associations
| Gale Directory of Publications and Broadcast Media
| Downloadable Audio and E-Books
| Texting, email, phone, and IM Reference
| Facebook page
| Twitter account
| Blog

| Speedmatters.org | 17792 Kbps | 35949 Kbps |
| Speedtest.net | 35.13 Mbps | 34.08 Mbps |

### 7 Analysis

The Champaign Public Library is an amazing example of what can be accomplished through the use of technology. The organization’s leaders deeply understand the fast-paced nature of digital technologies and their potential to ease the burdens of economic difficulties and budget cuts. Though the library puts together an annual Technology Plan, often the pace of change is so fast that many new developments are implemented that are not included in an official plan. CPL continues to operate and grow even in an economic reality that necessitates 14 position vacancies, which is no small feat with a full-time equivalent staff of about 76.

Indeed, CPL is on the forefront of the digital revolution. All staff use e-mail to communicate, and digital literacy is generally high. The library utilizes many technologies that ease the burden of fewer staff, including self-check-out stations; fully
automated security and system updates for computers that are controlled by group policy; an automated sorting system for new materials; room- and event-booking software that is available online; and a new and effective website (funded by a LSTA grant). In December 2011, CPL and Urbana Free Library moved to a new automation system independent from the other libraries in the Illinois Heartland Library System (for more about IHLS, see this organization’s report). These technologies make patron use of the library easier as well, as do other technologies such as text messaging, call-in, and IM reference. There are even plans to implement in-stack checkout, the result of a new app developed for smartphones and tablets.

The library has had to increase its bandwidth several times in the recent past, and demand continues to increase. They have a 10 Mb connection right now through AT&T with fiber already installed. CPL is unsure whether UC2B will be faster and/or cheaper than the connection they have currently, but they are open to the possibility of switching over to UC2B service should it offer faster speeds at a lower price.

However, even if this anchor social institution decides not to go with UC2B service, its leaders know that it will be affected in numerous indirect ways. For example, many CPL patrons live in the “yellow zones” receiving fiber to the premise; this could change demand for services dramatically, affecting not only use of the library’s public computer labs, but also online services and programming.
79: Douglass Branch Library

Abigail Sackmann
Master’s student, GSLIS

1 Executive Summary
The Douglass Library, a branch of the Champaign Public Library (CPL), was formed originally for the purpose of providing library services to previously underserved neighborhoods, as “A Black Library for a Black Community.” (Crowe et al, 1972) Its story reflects both the tensions and cooperation that have marked the history of Champaign-Urbana, ultimately providing inspiration for our community and for libraries in other areas.

The branch recently underwent a renovation that allowed them to double the number of computers available to the public. They also provided computer classes from September 2011 through May of 2012, which raised their profile as a public computing center and increased the number of patrons coming to the library for instruction and computer access. With the Douglass Branch situated in the middle of a UC2B yellow zone where every household has the opportunity to receive inexpensive and fast internet connection, staff expect many more patrons to visit the library for instruction on how to use computers and the Internet.
The Douglass Branch, at 504 E Grove Street in Champaign, is in a UC2B yellow zone, where under 40% of households have access to broadband in their homes.
3 Photographs

The entrance to the Douglass Branch Library, from Douglass Park.
The library, stacks to the left and computer lab to the right behind the circulation desk.
Computer lab
4 Demographics

<table>
<thead>
<tr>
<th></th>
<th>Douglass Branch Census Tract</th>
<th>Champaign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1,693</td>
<td>81,005</td>
</tr>
<tr>
<td>White</td>
<td>7%</td>
<td>67.8%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>86.5%</td>
<td>15.6%</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>0.1%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Asian</td>
<td>0.6%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Persons reporting two or more races</td>
<td>3.3%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Persons of Hispanic or Latino origin</td>
<td>4%</td>
<td>6.3%</td>
</tr>
<tr>
<td>High school graduates, age 25+</td>
<td>44.5%</td>
<td>92.8%</td>
</tr>
<tr>
<td>Bachelor's degree or higher, age 25+</td>
<td>6.1%</td>
<td>48.1%</td>
</tr>
<tr>
<td>Median household income</td>
<td>$26,269</td>
<td>$36,498</td>
</tr>
<tr>
<td>Persons below poverty level</td>
<td>34.7%</td>
<td>27.2%</td>
</tr>
</tbody>
</table>

5 History

Prior to 1970, when the Douglass Library was formed, neither the Champaign Public Library (CPL) nor the Urbana Free Library (UFL) provided much service to the primarily Black north side of town, except for an occasional bookmobile from CPL. (Crowe et al, 1972) In the early part of that year, though, grassroots leaders in the Black community picked up an idea from a University of Illinois Library School class to start a library for this underserved community. After receiving good response from both libraries, the leaders appointed a Community Advisory Board which prepared a proposal for the Douglass Center Library. This Proposal was titled "A Black Library for a Black Community," emphasizing services to youth and "self-awareness," and was submitted to both the Champaign and Urbana Library Boards on April 8, 1970. (Crose et al, 1972) The proposal was then submitted to the Illinois State Library for LSCA grant funds. On June 15 a contract was signed between the State and the two libraries, and the Douglass Center Library opened in November in the Hartwell Howard Room of the Douglass Community Center.

In December of 1971 the State of Illinois stipulated that the library was to be placed under direct administration of the Champaign Public Library, operating as a branch, and the Advisory Board was to be dissolved. The board was replaced with a community advisory committee, and the Urbana Free Library continued proportionate joint funding until 1975 when it declined to continue because of financial reasons.

On June 8, 1976, the Douglass Branch moved to 310 E Bradley Avenue, a property given as a gift in memory of Sarah O-Neill. In 1985 the library was closed several months for renovations, funded with assistance from the Black Ministerial Alliance, empty tomb inc., the City of Champaign, and several neighborhood churches.
The first computer system at Douglass Branch was dedicated in March 1994, a result of a cooperative effort between the City of Champaign and the Champaign Public Library. In 1996, the branch became a separate department of CPL, a division of the Library's Outreach Services Department, after which the branch manager became a member of the library's management team.

Around the same time in the mid-1990s, a Joint Committee to Develop a New Douglass Branch Library at Douglass Park was formed and organized funds for a new building from a Community Development Block Grant, Illinois State Library Construction Grant, the Champaign Public Library, Champaign Park District, and the Champaign Public Library Foundation. The new building was dedicated on June 17, 1997. The new facility, where the branch remains currently, provided three times more space than the building on Bradley Avenue, and included a large room for community meetings.

In 2011 the library received funding for building renovations, which were focused on increasing the number of public computers from 10 to 20. The grand re-opening celebration was in September. They also received a grant to hire a computer skills instructor for one-on-one help and computer classes, which ran from September 2011 through May 2012.
6 Technology Inventory

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 public desktop PCs</td>
<td>Windows 7</td>
</tr>
<tr>
<td>10 staff desktops including 2 for circulation</td>
<td>Microsoft Office 2010</td>
</tr>
<tr>
<td>Scanner/Printer/Fax</td>
<td>iTunes and Windows Media Player</td>
</tr>
<tr>
<td>Fax and copy machine</td>
<td>Internet browsers</td>
</tr>
<tr>
<td>2 Projectors</td>
<td>Specialized circulation software</td>
</tr>
<tr>
<td>Circulation Hardware, including scanners and security pads</td>
<td>Adobe Suite and other editing software for Project Next Generation</td>
</tr>
<tr>
<td>Laptops devoted to Project Next Generation</td>
<td></td>
</tr>
<tr>
<td>Digital cameras and video cameras for Project Next Generation</td>
<td></td>
</tr>
<tr>
<td>Scanners for Project Next Generation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speed Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Download (Mbps)</strong></td>
</tr>
<tr>
<td>Speedtest.net</td>
</tr>
<tr>
<td>Speedmatters.org</td>
</tr>
</tbody>
</table>

7 Analysis

The Douglass Branch Library is the only branch library in Champaign-Urbana, located in Douglass Park in north Champaign. The building is owned by the Champaign Park District, which helps maintain the building and grounds. In addition to their collection of books and public computer lab, the library has a large meeting room for community groups and offers events such as story time for children. In 2011 the building was renovated to include space for 20 computers, responding to increasing demand from patrons. The library also received a grant to hire a computer instructor, who taught classes from September 2011 through May of 2012. For the last several years they have offered a program for middle school students called Project Next Generation, in which a student enrolls for the fall, spring, or summer and attends two 1.5-hour sessions per week. Four mentors introduce them to digital media technologies including video, photography, and editing software like Adobe Photoshop, and using these tools they work on real media projects throughout the course of the semester.

As with many organizations, particularly ones that are publicly funded and thus rely on property taxes, the library is operating with severe budget constraints. This means access to fewer resources in general, but most significantly that the size of the staff has been cut in half, from eight in 2006 to four currently. Still, they continue to play a vital role in the
community at a time when more and more people are using the library both because of the economic recession and the increased necessity of using the Internet for many tasks.

All of the branch's information technologies are provided and updated by the main library's IT staff, who do a great job at maintaining, troubleshooting, and offering assistance and instruction in software when needed. Because of this, the library has effective technology resources; the biggest issue for them is meeting demand from patrons for instruction. In the past few years, companies, agencies, and schools have been shifting their processes from paper to online at an amazing rate. For people with computer access and know-how this is mostly a convenience, but the digital divide in society means that there are many people who need to use public computers and who need guidance in doing so. More and more these people are showing up at public libraries, and the Douglass Branch is no exception.

Despite a smaller staff and increasing demands, the library welcomes their important role in ensuring access and instruction; as one librarian said, “We want to be known as the place to go for help with computers.” The computer classes offered in the fall, winter, and spring aided with this image because the library made special effort to get the word out that they were offering instruction on computers and technology. This included billboards, business cards, and advertising in the News-Gazette. At a time when school work, banking, job applications, social security and other government forms are all online, it is critical that people who need help know where to go.

Though the grant that funded daily computer classes has ended, they do offer classes occasionally; for example, they recently had one on e-readers during the Juneteenth celebration in Douglass Park, showing patrons how to download library books. Librarians also offer one-on-one help with patrons on a regular basis, both as issues arise in the computer lab and by scheduling times for more lengthy instruction sessions. A security guard who works in the evenings even helps out occasionally when patrons need assistance in the lab. However, there is always a bigger need, especially for beginner training, than they have time to do with such a small staff. Library administration is looking into coordinating a volunteer program to help with this.

The biggest change the library envisions with UC2B is another surge in demand for computer instruction. If more people are able to afford Internet connections and computers, many will turn to the library for knowledge about how to use these tools. Librarians have experienced this with e-readers; instead of keeping patrons away from the library, it has brought more through the doors for assistance with using them. At a time when the fast-changing pace of everyday technology impacts the lives of everyone regardless of choice or ability, the library offers a necessary space for access and instruction, a need that is only going to grow.
Bibliography

Champaign Public Library, Douglass Branch Library Factsheet


80: Urbana Free Library

Zhao Kang
Ph.D. student, Peking University, and visiting student, GSLIS

1 Executive summary

The Urbana Free Library is a very important organization in the Urbana community, providing access to a wide variety of information resources free of charge. In addition to abundant use of IT for staff and administrative purposes, the library makes IT resources available to the public. One of the most important of these resources in the digital age is a computer lab that anyone can use regardless of residency. The policies they have in place for computer use highlight their privileging of patron needs; the reservation system ensures that all patrons have access to a computer quickly, and for as much time as they need so long as no one else is waiting for access. The library has plans in the near future to reorganize and upgrade their computer lab in order to respond to increasing demand and the comfort of patrons. The library also provides one of the fastest public Internet connections, both in the computer lab and through WiFi. The state subsidizes 8Mbps, and the library supplements this with an additional 25 Mbps.

2 Maps

![Location of the Urbana Free Library](image-url)
3 Photographs

Adult services area on the second floor.
Computer lab on the second floor. The existing computer lab layout dates to May 2005, when the expanded library building officially opened. The picture shows that almost every computer is in use.

Learning room on the second floor, near the computer lab. Patrons can use their own laptops to access the Internet and have group discussions.

4 Demographics of patrons or clients

Because of privacy issues, the library does not have demographic data concerning its patrons. But the composition of the patrons to a large extent reflects the residents of the local community. Generally, the patrons of the library are what one would expect in a city with a university, where a large number of people have a high level of education and are knowledgeable about computers. However, there are also patrons with lower education and income levels.

The community members who come to the computer lab range in age from sixth graders to senior citizens. Plans are in process to conduct surveys for a computer lab redesign, but no data is available as of summer 2012. Anecdotally, the librarians see a high rate of use by African Americans; low-income people with no or limited access to computers and Internet service; teens who arrive at the end of the school day; job seekers who are increasingly required to apply for positions online; and a core group of daily users whom the computer lab librarians know on a first-name basis.

5 History

Early founding and expansion of the building. Founded in 1874, The Urbana Free Library is one of the oldest public libraries in the U.S. Prior of 1874, the Urbana Library
Association depended on annual membership fees and citizen donations to operate a reading room, renting a second-story room on Main Street. Then it donated its books to the City of Urbana, and they founded The Urbana Free Library. It was so named to emphasize the fact that it was open to all city residents regardless of ability to pay.

The current landmark library building opened on July 18, 1918. It was built with a $35,000 gift from Mary E. Busey as a memorial to her late husband, Samuel T. Busey.

The library was first expanded in 1975 with a contemporary addition. The second expansion, started in 2002 and completed in 2005, doubled the library’s size and represented a complete renovation and greatly improved the building’s technology (Urbana Free Library, History).

Later developments in technology. In 1984, the Urbana Free Library offered the first off-campus public-access terminal to the University of Illinois LCS online catalog. Ten years later it installed the first public-access terminal to Champaign County’s CCNet, and the same year began to offer public Internet access through Prairienet.

The library has been a participant in the Lincoln Trail Libraries System automation system and online public access catalog from its inception in 1981 with CLSI. The system migrated to Dynix in 1993, installed a major Dynix upgrade in 1998, and migrated to the company’s Horizon product in 2004. In 2011, Lincoln Trail Libraries System merged with three other systems to become Illinois Heartland Library System, with the eventual plan to merge their automation systems. In December 2011, The Urbana Free Library and the Champaign Public Library left the LTLS automation system and migrated to a joint online CU Catalog utilizing the automation software of Polaris Library Systems.

The library has experienced all stages of the explosion in public use of computers, the Internet, and online resources, from the early days with just a few public Internet computers and a few electronic resources available on CD-ROM to the present, when it has over seventy-five public computers providing service in all departments and over fifty databases available in-house and remotely, and the circulation of downloadable materials.

The library’s Local History Online database went online in 2004, greatly expanding the library’s provision of its unique resources to any individual with Internet access. At the end of December 2011, Local History Online contained 623,593 documents and 3,515,132 indexing attributes. In March 2012, Local History Online migrated to a new platform, the Fusion digital collection software by Polaris Library Systems.

In 2006–2008, the library began to focus on telecommunications and infrastructure upgrades, including bandwidth adequacy, network structure and equipment, wireless hot-spot service, and efficient and consistent configuration of public computers through ghosting and volume licensing. The library moved from T1 to fiber access in September 2009 when the City of Urbana added a fiber optic line to connect the library to their facilities and the Illinois Century Network (Urbana Free Library, Tech Plan).
6 Technology inventory

Second Floor PC Center areas and access. The main computer lab on the second floor is divided into specific user areas, containing a total of 39 PCs. One flatbed scanner and two printers, one color and one black and white, are also available. Each user area features distinct colored screens and different log-in access:

<table>
<thead>
<tr>
<th>PC areas</th>
<th>Numbers of devices</th>
<th>Log-in access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main lab (pink)</td>
<td>Internet 1–20</td>
<td>Name only, any age</td>
</tr>
<tr>
<td>Team stations (yellow)</td>
<td>Team 1–3</td>
<td>Library card, 18+</td>
</tr>
<tr>
<td>Adult stations (orange)</td>
<td>Adult 1–10</td>
<td>Library card, 18+</td>
</tr>
<tr>
<td>Senior stations (green)</td>
<td>Senior 1–2</td>
<td>Library card, 55+</td>
</tr>
<tr>
<td>Express stations (black)</td>
<td>Express 1–2</td>
<td>Name only, any age (15 mins.)</td>
</tr>
<tr>
<td>Scanner station (white)</td>
<td>Scanner 1</td>
<td>Staff reservation</td>
</tr>
<tr>
<td>MyMediaMall</td>
<td>n/a</td>
<td>Library card for downloads</td>
</tr>
</tbody>
</table>

Hardware and software (Fall 2011)

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>39 Public Dell Computers on second floor</td>
<td>Internet Explorer</td>
</tr>
<tr>
<td>10 PCs in Archives</td>
<td>Mozilla Firefox</td>
</tr>
<tr>
<td>8 Child and 4 Parent PCs in Children’s Department</td>
<td>MS Office 2007 (Word, Excel, PowerPoint, Publisher, Access)</td>
</tr>
<tr>
<td>2 Express PCs on the first floor</td>
<td>OpenOffice</td>
</tr>
<tr>
<td>Headphones, Mice, Keyboards</td>
<td>Adobe Reader X</td>
</tr>
<tr>
<td>Canon DR-1210c scanner</td>
<td>CDBurnerXP</td>
</tr>
<tr>
<td>HP LaserJet 2420</td>
<td>iTunes</td>
</tr>
<tr>
<td>HP Color LaserJet 2600n</td>
<td>Audacity</td>
</tr>
<tr>
<td></td>
<td>VLC Media Player</td>
</tr>
<tr>
<td></td>
<td>QuickTime Player</td>
</tr>
<tr>
<td></td>
<td>Windows Media Player</td>
</tr>
<tr>
<td></td>
<td>Real Player</td>
</tr>
<tr>
<td></td>
<td>IrfanView Image Viewer</td>
</tr>
<tr>
<td></td>
<td>Windows Movie Maker</td>
</tr>
<tr>
<td></td>
<td>Adobe Photoshop Elements 9</td>
</tr>
<tr>
<td></td>
<td>CapturePerfect 3.0 (for scanning documents and images)</td>
</tr>
<tr>
<td></td>
<td>OmniPage SE 4 (optical-character recognition for document scanning)</td>
</tr>
</tbody>
</table>

The Internet speed tested at the computer lab was the following: (16 October 2011)

<table>
<thead>
<tr>
<th>Upload speed</th>
<th>8.43 Mbps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Download speed</td>
<td>41.31 Mbps</td>
</tr>
</tbody>
</table>
7 Analysis

Policy for computer use. In the library, each department has computers available to the public. The adult services department has a public computer lab that operates at maximum capacity almost every day. The archive department makes computers available as well, as does the children’s department. Users may log in for as many sessions as they wish and stay for as long as they like, so long as there are no other patrons waiting for a terminal. The base time for sessions is 30 minutes, with extensions granted either automatically or manually by staff.

Patrons can make a reservation if there is no PC available. When the digital timer on each PC counts down to three minutes remaining, the Envisionware PC Reservation (PCRes) system searches for reservations made on that PC. If no reservation is present, PCRes automatically extends the user session for 30 minutes. If a reservation has been assigned, the user’s session ends in three minutes and the PC is locked for the next patron.

Digital trends of resources. In the age of computers and access to the Internet, the library acts as an information center. The library began to add audio books to its holdings several years ago, beginning with Books-on-Tape in the early 1990s and moving to Books-on-CD around 2001. At that time, people could borrow CDs, but could not download audio materials from the website. Download services were started five years ago. E-books have just recently been added.

One problem has arisen with electronic content. The library provides Internet download service, but some people do not have the money to buy the devices for reading digital content, so they cannot access this electronic content at home. New models need to be created to serve patrons in terms of digital content.

There is also a problem with digital-resource sharing. An interviewee thought electronic resources were one of the biggest challenges for the library, because it is losing control of the content:

Libraries are avenues for people using information. But now we don’t have control. In the past, we could use the digital content as we wanted. Now e-books are archived and provided by publishers. We pay the money for the content, but we don’t own it. The digital content can only serve one patron at one time because of the digital copyright issue.

UC2B in the library. Some librarians at The Urbana Free Library have heard about the UC2B project and that it will provide broadband connections to the Internet. One of the interviewees said it will help the library provide Internet access to people who do not have computers at home. Broadband will allow the library to add more computers, and provide high-quality web services.

As patrons use computers a great deal to watch videos and listen to music, faster broadband will provide better service for them. Currently the library receives a broadband connection through the Illinois Century Network, a “a telecommunications backbone providing high speed access to data, video, and audio communication in schools and libraries, at colleges and universities, to public libraries and museums, and for local government and state agencies.” (http://www.illinois.net/about). The government currently subsidizes an 8 Mbps connection for libraries and schools;
unfortunately, this speed is not high enough for the massive demand both in the computer lab and from patron laptops and mobile devices, and is not set to change until summer 2014. At this time the subsidy limit is projected to increase to about 50 Mbps; in the meantime, The Urbana Free Library has decided to purchase bandwidth to increase their connection to 25 Mbps.

Having access to computers and the Internet does not necessarily mean that everyone is able to successfully use it. Helping people with digital skills is thus a task for the libraries. It is especially important for libraries to provide service to people at lower income and education levels.

One interviewee said that the library had lots of lower-income users. This is typical in a college town, which has both extremely well-educated and knowledgeable residents and a segment of residents who are not. In Urbana, 63% of the high school students are considered by the federal government to be poor. As the university needs skilled workers, digital literacy instruction is a very important task. If the library intends to benefit from broadband, its training program must also be strengthened.

To sum up, The Urbana Free Library is an important public computing site. It has an open-access policy for patrons to access the Internet for free. Many patrons use the computer lab for work, educational, or other purposes. The current facilities are good; however, the limited space and funding restrict the expansion of the computer lab and the ability to keep up with the fast development of technology. From the IT Plan, it can be seen that next year will be an important one for the library in terms of meeting its technological goals.

Webliography


Appendix A: Research Instruments

Case Study Field Handbook / August 31, 2011

These pages constitute a guide to carrying out the case studies that are the course project for the semester. The case studies are a collective project to profile the “anchor social institutions” across Champaign, Urbana, and Savoy. This term arose from the 2009-2012 federal stimulus project building broadband and providing support for broadband use. It refers to the non-profit and public institutions that do in fact anchor a community. The local broadband project serving the three cities, UC2B (Urbana Champaign Big Broadband), has identified 143 anchor social institutions.

GSLIS helped design UC2B and is helping to guide it (Alkalimat on Policy Committee) and study it (Alkalimat, Gant, Williams). So this semester’s Digital Divide and Community Informatics classes are participating alongside the Community Informatics Research Lab directed by Drs. Alkalimat and Williams in building a community-wide portrait of how these institutions use and might use technology. The community portrait we are constructing with these case studies is part of answering the question: **What difference will big broadband make in this town?** Breaking that question down, subsidiary questions include:

- What are the anchor social institutions doing?
- How do they use information technology, past, present, projected, and possible?
- Who are the people leading these institutions, and what are their technology uses and interests?

There are three important benefits of this project to your LIS, informatics, or general education.

1. You will learn how to learn about a wide range of important institutions in a local community. The case study method includes using secondary sources, carrying out interviews, transcribing them, fielding questionnaires, using photographic methods. You will be able to reuse and adapt these in your work as an information specialist.
2. You will take away a current portrait of a typical (and atypical) US community and how it uses and might use information technologies; this is baseline knowledge for information work in communities and in such institutions.
3. You will juxtapose this empirical knowledge with knowledge of community informatics theory, so that you can apply this knowledge wherever you go.

**Case allocation**

Each student will do three case studies, except those taking Digital Divide for 2 credits will do 2.

**Case outline**
In order to be comparable, the cases are structured. The final product is a 19 page document that has a template and a structure. Much of it is material to assemble, some is to write:

- Maps (2 on 2 pages)
- Photographs (4 on 4 pages)
- Demographics of patrons/clients (1/2 page)
- History (2)
- Technology inventory (1)
- Analysis (2)
- Appendix 1: Bibliography and Webliography (1+)
- Appendix 2: Administrator interview (2)
- Appendix 3: Tech specialist interview (2)
- Appendix 4: Board member interview (2)

Accompanying each report will be the sound files of the interviews and the photo files.

**Maps.** One of these is a google map locating the institution in the city. The other is a map you make or find (can be hand drawn and scanned in) that locates the institution relative to other businesses, organizations, residences in the immediate neighborhood.

**Photographs.** One of these is the outside of the facility. Another is of the computing resources for staff. Another is the public computing resources, if any. A fourth is up to you. Use your imagination to create a set of four photographs that portray the organization and the unique role it plays locally. People do make photos come to life; just get permission before photographing anyone. Use the written form.

**Demographics.** This section uses the best data you can collect from the institution. Aim for such information as total population served, percent Black, percent Latino, average income levels, % below poverty (schools systems know their — percent of students getting free lunch” which is an indicator of poverty), educational attainment, and occupation. Then profile the staff, the board, and the patrons or clients along these dimensions as best you can as well. Relying on the institution or on data they may be able to point you to.

**History.** Search the web, the media, and the library, especially the newspaper and other databases. Search in Dissertation Abstracts. Ask a librarian! Look at the organization’s annual reports. Develop a chronology of the institution that includes key events and turning points. Use numbers, tables, and exact years in your writeup, to the fullest extent possible.

**Technology.** This is an inventory of the institution’s technology resources: desktops and laptops, software, other digital equipment, staff, budget, information systems in use, and other online or electronic resources, even any organizational entries on social network sites. Include the telephone system, online or paper forms, and any databases or data management systems for
managing their patron/client contact, committee minutes or other work processes. Use at least one table to present this information.

**Analysis.** Put all your information together and make sense of it as you see fit. Be sure to make intelligent use of ideas from class.

**Bibliography and webliography.** There will always be relevant material to include here. If you are doing a small organization that is not in the literature or well documented online, think big. Collect the literature and web sources that treat the field that the organization works in. Work in concentric circles from the organizations itself, to others like it, to the field broadly.

**Field work staff**

In addition to the two course instructors (mcworter@illinois.edu, katewill@illinois.edu) and teaching assistant Shameem Ahmed in 518 (ahmed9@illinois.edu), Abbie Sackmann (sackmn2@illinois.edu) is a research assistant in the Community Informatics Research Lab. She is doing case studies herself and serving as field coordinator for the two classes. All four of these people can answer questions and help problem solve.

**Field work process**

**Post a short update every week** to the moodle discussion mentioning what you got done and raising any questions.

**Don’t work in isolation.** Post to the moodle anytime you have a question, we monitor it for quick replies. Email any of the four staff. Call us in the CI Lab at 244-9128.

**Finish one case study before you start the next.**

- **Week 1.** Make appointments for interviews. Do offsite/library research.
- **Week 2.** Interviews. Onsite data collection. Photography.
- **Week 3/4.** Transcribe. Assemble and write up report.

**Sites**

A list of sites is appended and contact names/information for each will be available as needed.

**Three interviews**
You’ll interview the administrative head, the lead IT person, and a key board member or leading volunteer.

The interview has several parts, some questions to ask, a one page questionnaire, and a speed study (this last is for one of the interviews, not all three).
Introduction letter to anchor social institutions

<on GSLIS letterhead, also emailed>
<date>

<name and address>

Dear <Mr/Ms> <last name>,

As we hope you have heard, Champaign-Urbana is breaking ground next week on a large high-speed internet project, UC2B (Urbana Champaign Big Broadband). This has a lot of potential for Champaign, Urbana, and Savoy, especially through the opportunities it can bring to institutions like yours.

We at the Community Informatics Research Lab are conducting a study to ask the question: "What difference will big broadband make in this town?" We would really like to get your input. Together we will create a collective portrait of the non-profit and public institutions that we all hope will benefit from UC2B. This portrait, focusing on everyone’s technology use, should help big broadband serve you and all of us.

The study will involve a short interview with you and with two others in your organization (an IT person and an involved board member or volunteer, upon your recommendation), reading any relevant documents you can share about your institution, and taking a few photos to portray <insert the name of the org here>. We will share a draft report with you for any corrections and additions.

We will be in touch with you by phone and email very soon to see if we can include your organization. If you have any questions, please contact any of us three at 244-9128 or via email.

Thank you,

Abdul Alkalimat  Kate Williams   Abigail Sackmann
Professor   Assistant Professor  Field Coordinator
mcworter@illinois.edu  katewill@illinois.edu  sackmnn2@illinois.edu
Interview protocol.

Remember in your various conversationos to explain all parts of your field work with the sites:
1. To read annual reports and any other publications they can share. This can be done in their office; you won’t need to take anything away.
2. To take a few photos: of your typical computing facilities for staff and, if any, for the public, and some photo that captures the unique work they do.
3. To ask questions (about half an hour of your time) and get recommendation for two others to interview as well, an IT person and an involved board member or volunteer. To measure internet speed.
4. To share their draft report with the director for corrections and additions.

Research question and subquestions: What difference will big broadband make in this town?"
What are the local non-profit and public institutions doing and planning to do?
What role does information technology play in that—past, present, projected, and possible?
Who is leading these institutions and what are their technology uses and interests?

Thank you for your time. This should take about 20-30 minutes. I have questions to talk over with you, a one page questionnaire, and a speed test to do on a nearby computer. First, this is a consent form explaining the study as in the letter we sent and letting you know your rights as a participant. The most important right is that although our questions are not high risk in any way, you don’t have to answer every question and you can stop our conversation at any time. Also, I will share my draft write up with you for your corrections and additions before it’s final.

[Give them time to read and sign. Give them a second copy to keep.]

[Explain about the photos and the annual report/document review, you may have already done this.]

My class is part of a study of UC2B, Big Broadband, and what difference it may make. I’m helping creating a portrait of the local area’s nonprofit and public institutions and their leaders, focusing on information technology. This covers what you do and how you use technology, past, present, and projected. So, thanks.

1. What are the main general issues <site> is facing now – opportunities and challenges?
2. What are the main technology issues <site> is facing now – opportunities and challenges?
[2a. For IT person: can you describe to me all the technology resources you have now? Let them know what you have in mind: number of desktops and laptops, software, other digital equipment, staff, budget, information systems in use, and other online or electronic resources, even any organizational entries on social network sites. Include the telephone system, online or paper forms, and any databases or data management systems for managing their patron/client contact, committee minutes or other work processes.]

3. What year did you start with <site> and how did <site> use information technology then?

4. How has this changed over time? Any key events or turning points? When were those?

5. How does <site> use information technology now?

6. What plans does <site> have for future technology uses, if any?

7. What have you heard so far about UC2B, the local big broadband project?

8. How many staff do you have and what or who is your tech support for them? (number of staff, number of tech support, in house or not, job titles)

9. Describe the digital skills of <site’s> staff.

10. Describe the digital skills of <site’s> clients/patrons.

Could you point me to who in your organization is the most involved with technology and who is the most involved board member or key volunteer. [Write down names/contact information]

OK, last things. This is our one page survey [hand to them]. And can I check your internet speed while you do it?

Speedmatters.org down _____________ up _______________

Speedtest.net down _____________ up _______________

[work that out, give them time to do the survey, and if they are pressed then say you could stop back to pick it up, or they can mail it in, or do it online (not yet worked out)]
Case Study Sites / August 31 2011

Round 1 /2
1  Champaign Public Library - Douglass Branch
2  Bethel A.M.E. Church
3  Bristol Place Metanoia Center Inc.
4  Catholic Worker House
5  Center for Women in Transition
6  Champaign County - Champaign Head Start
7  Champaign County - Savoy Head Start
8  Church of the Brethren
9  City of Urbana - Urbana Neighborhood Connections Center
10 Developmental Services Center
11 First United Methodist Church
12 Muslim American Center
13 New Hope Church of Christ
14 Restoration Urban Ministries
15 Salem Baptist Church
16 Salt & Light
17 Salvation Army – Main Office
18 United Way of Champaign County
19 Urbana-Champaign Independent Media Center
20 Canaan Baptist Church
21 Holy Cross Catholic Church
22 St John's Lutheran Church
23 St. Matthew's Catholic Church
24 Alpha and Omega Church of Jesus Christ
25 Center of Hope Church
26 Empty Tomb, Inc.
27 Garden Hills Baptist Church
28 Grove Street Church of God in Christ
29 Lighthouse World Ministries
30 Macedonia Baptist Church
31 Mt Olive Baptist Church
32 New Birth Missionary Baptist Church
33 New Free Will Baptist Church
34 Park Avenue Seventh Day Adventist Church
35 Pilgrim Missionary Baptist Church
36 Servants of Holy Heart Mary
37 St Luke Christian Methodist Episcopal Church
38 St. Mary’s Catholic Church
39 The Church of the Living God / Love Corner Worship Center
40 Crisis Nursery
41 Cunningham Children’s Home
42 Don Moyer Boy's & Girl's Club

Round 2/3
43 Church of Jesus Christ of Latter-Day Saints / Stake Family History Center
44 Amber Glen Alzheimer's Special Care Center
45 Canterbury Ridge
46 Clark-Lindsay Village
47 Florida House
48 Illini Heritage Rehab & Health
49 Inman Plaza
50 Prairie Winds of Urbana
51 Round Barn Manor
52 Stevick Senior Center
53 Sunnycrest Manor
54 Urbana Senior Residence (Edge of Mall Senior Residence)
55 Windsor of Savoy
56 Girl Scouts
57 Orpheum Children's Science Museum
58 YMCA

Round 3
59 Champaign Township
60 Carle Clinic
62 Champaign County - Sheriff's Office
63 Champaign Park District
65 Champaign Unit 4 Schools
66 Christie Clinic
67 Champaign Public Library - Main Branch
68 City of Champaign
69 City of Champaign - Fire Department
70 City of Champaign - Police Department
71 City of Urbana
72 City of Urbana - Fire Department
73 City of Urbana - Police Department
74 Cunningham Township
75 The Urbana Free Library
76 Urbana Township
77 Champaign-Urbana Mass Transit District
78 Federal Aviation Administration
79 U.S. Army EDRC-CERL
80 United States Courthouse
81 United States Postal Service - Downtown Urbana Station
82 United States Geological Survey – Illinois Water Science Center
83 Housing Authority of Champaign County
84 Champaign-Urbana Public Health District
86 Frances Nelson Health Center
87 Provena Covenant Medical Center
88 Regional Health Resources Center / Community Blood Services of Illinois
89 The Pavilion Behavioral Health System
90 Women’s Health Practice
91 Mental Health Center of Champaign County
92 40 North 88 West: Champaign County Arts, Culture and Entertainment Council
93 Catholic Charities Diocese of Peoria
94 Champaign County Chamber of Commerce
95 Habitat for Humanity of Champaign County
96 Junior Achievement of Champaign County
97 Land of Lincoln Legal Assistance
98 Planned Parenthood of East Central Illinois
99 Lincoln Trail Libraries System
100 Parkland College
101 Parkland College on Mattis - Job Training Center / Champaign Consortium
102 Parkland College Police
103 Countryside School
104 Judah Christian School
105 Kingswood School
106 Next Generation School
107 St. Thomas More High School
108 Carroll Fire Protection District
109 Eastern Prairie Fire Protection District
110 Edge-Scott Fire Protection District
111 Pro Ambulance
112 State of Illinois Emergency Mgmt. Agency
113 University of Illinois Willard Airport
114 Illinois State Police
115 State of Illinois Regional Offices
116 UC Sanitary District
118 Urbana School District 116
119 Urbana Park District
120 Village of Savoy
121 Village of Savoy - Police & Fire Department
Anchor Social Institutions study / University of Illinois / Consent form

In accord with rules about informed consent, this document explains what research we’re doing, informs you of your rights, and asks for your voluntary consent to participate.

We are studying broadband in Champaign, Urbana and Savoy, specifically the current rollout of high speed internet. We want to know what difference it will make. Part of that is understanding the local “anchor social institutions” like yours, especially your use of technology. The research is led by Drs. Kate Williams and Abdul Alkalimat of the University of Illinois at Urbana Champaign Graduate School of Library and Information Science.

By participating in this research, you are helping to create a better understanding of how this town and the nation are entering the digital age, at the community level. This document is to ask if I can interview you, audio record the interview with your permission, give you a short survey afterwards, measure local internet speed and then later show my draft report to your director for his or her corrections/additions.

The materials from this research will be used for research presentation/publication. Your identity, participation, and answers will all be kept confidential by the research team, safeguarding your privacy. Any information that is obtained in connection with this research that can be identified with you or any individual will remain confidential. The only document that will be retained with your name on it will be the signed consent form, and that will be part of the data kept confidential by the researchers.

No risks to this research are foreseen beyond those of daily life. Benefits of the research include the chance to share your knowledge and experience and contribute to knowledge on the subject. At any point, you may choose not to answer any questions from the researcher. You also may discontinue participation in the research at any time without prejudice. The decision to participate, decline, or withdraw from participation will have no effect on your or anyone’s grades at, status at, or future relations with the University of Illinois.

If you have any questions regarding the research, please ask. You can email or call the lead researchers collect at any time (katewill@illinois.edu or 217-244-9128). If you have any questions about your rights as a participant in this study or any concerns or complaints, please contact the University of Illinois Institutional Review Board at 217-333-2670 (collect calls will be accepted if you identify yourself as a research participant) or via email at irb@illinois.edu. A copy of this document will be given to you.

☐ I understand the above and voluntarily agree to participate in this research.

☐ I consent to the audio recording of the interview.

Signature: ________________________________________________________________

Printed name: ____________________________________________________________

Email: _________________________________________________________________

Date: _________________________________________________________________

Name/email of field researcher: ____________________________________________
Questionnaire

Do you consider yourself a “netizen” (someone who uses the internet as part of their life)? Y N

If not, would you like to be one? Y N

In the past week, what did three to five things did you use a computer/the internet/digital tools for? Mention some more basic and some more unusual.

1 2 3

4 5

Check anything that you do:

talk on a cellphone ............................................. □
text on a cellphone ............................................. □
send/receive email on a cellphone ...................... □
browse the web on a cellphone ........................... □
create documents on a computer ....................... □
use a spreadsheet ............................................. □
use bookkeeping software ............................... □
send/receive e-mail as part of a group activity .... □
take digital photos .......................................... □
record digital audio ........................................ □
record digital video ........................................ □
share photos, audio or video or that you have made ................................................ □
look for information on the Web ....................... □
use social network sites ................................... □
create or maintain web pages ............................ □
read an online bulletin board ............................ □
belong to an electronic discussion list ............... □
post to a discussion list or bulletin board .......... □
host or edit a discussion list or bulletin board .... □
post information on the Web in some other way, blogging for instance .......................... □
use Wikipedia .................................................. □
add to or change a Wikipedia entry .................... □
talk over the Internet as you would on a telephone (like Skype) .................................. □
use Linux or any open-source software .............. □
write a program ............................................... □
use online chat ............................................... □
use instant messaging ..................................... □
use wireless to connect to the Internet ............. □

Circle any of the places you’ve used a computer in the last few months:

My own home Public library computer Wireless spots (which)?
A friend’s home Cybercafé computer
A relative’s home Community computer lab
My workplace

Anywhere else (where)?

______________________
______________________
If you get IT help from other people, think of three of them and describe them according to the questions below.

Helpers initials 1__________ 2__________ 3__________

Is he/she Family, Friend, Workmate, or Acquaintance: 

FA FR W A FA FR W A FA FR W A

Do you see each other Daily, Weekly, Monthly, or Less than monthly? 

D W M L D W M L D W M L

Do they help you as part of their Job, or Voluntarily? 

J V J V J V

What is your occupation? ______________________________________________________________________

Are you male or female? Male Female

How old are you? 20-29 30-39 40-49 50-59 60-69 70-plus

Do you have children at home? Yes No

What is your ethnicity? ______________________________________________________________________

How far did you go in school? (highest degree) ______________________________________________________________________

What field(s) did you study? ______________________________________________________________________

What schools did you graduate from (high school/town and all after)? ______________________________________________________________________

Mark roughly where your household income sits on this range of US household incomes (not to scale):

<------------------------------------------->$12,120 $20,453 $49,777 $100,000 $137,632 $180,001

Are you originally from the local area, elsewhere in Illinois, or where? ________________________________

Thank you!
For IRB #12174 - The Anchor social institutions...

Updated list of researchers / all have completed CITI and UIUC IRB trainings

Two Faculty:
Abdul Alkalimat
Kate Williams

30 Students:
Ashley E. Booth
Julianne L. Breck
Haixia Cao
I-Ju Chen
Lauren Graham
Lily Grant
Ivy Green
Claire E. Griebler
Afton L. Hallauer
Jennifer M. Hebel
Anna K. Holland
Sunny Kim
Lela Kretzer
Yueh-Mei Lin
Qiyuan Liu
Mary E. Looby
Rachel A. Lux
Colleen McClowry
Samantha L. Millsap
John Newcomer
Liz Osisek
Andrei Rosulescu
Abigail E. Sackmann
Jane A. Sandberg
Becca Sorgert
Claire H. Strillacci
Pawel Szponar
Emilie K. Vrbancic
Emily J. Williams
Kang Zhao

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Appendix B: UC2B Archive

UC2B Documentation: Vision and Product

July 2, 2012
Prepared by Noah Lenstra, Community Informatics Research Lab,
University of Illinois Graduate School of Library & Information Science

Thanks to Abigail Sackmann, who served as student worker on this project, and the Community Informatics Initiative, which provided funding for this effort.

==

In FY 2012 we developed an experimental project to actively document the UC2B Big Broadband Initiative. We organized this effort around the archival principle of "documentation strategy." According to the Society of American Archivists: "Documentation strategies are typically undertaken by collaborating records creators, archives, and users. A key element is the analysis of the subject to be documented; how that subject is documented in existing records, and information about the subject that is lacking in those records; and the development of a plan to capture adequate documentation of that subject, including the creation of records, if necessary." In discussing this effort, it is important to differentiate between documentation and records. Documentation focuses on collecting to ensure that particular topics are represented in archives, which are institutions not bodies of material. Records naturally derive from natural social processes. Documentation is information about a topic. Records are evidence of processes. This paper reports on the products of this documentation experiment, with an assessment of how future projects could improve upon this methodology.

Central to the success of documentation strategies is "collaboration." These types of initiatives require firm policy commitments from all agencies and individuals to participate in the archiving initiative that have a stake in the topic being documented. In the absence of this firm mandate, this project aggregated public documentation on UC2B from multiple sources. To find these public documentation we looked primarily at governmental and media outlets. In addition, the project ingested ephemeral documentation on UC2B collected by members of the Community Informatics Research Lab.

All print files have been digitized. The combination of print and digital files produces 259 gigabyte of digital documentation of UC2B. The draft finding aid explains the file organization of this documentation initiative. Both the digital documentation and the original print files will be preserved and made accessible in perpetuity at the University of Illinois Archives.

Limitations and Recommendations

This project has some limitations that impair the completeness of this documentation. UC2B constantly generates an enormous amount of information at multiple-levels: within specific agencies, locally, state-wide and nationally. Owing to staff limitations we could not keep up with this documentation as it was produced. As such, our efforts focused on grabbing what we could
when we could rather than a more systematic documentation effort. We have snapshots of
UC2B from multiple perspectives (including official perspectives), but cannot say that we have
the definitive documentation of UC2B.

From this experience we make the following recommendations for future digital documentation
initiatives:

- **Policy and Mandate** - For documentation strategies to be successful they require a clear
mandate from all parties. We struggled to secure this clear mandate in this initiative. For
example, we never really secured access to the City of Champaign’s data center. After
our staff’s email to their staff we were told that the City of Champaign makes
accessible on their website all that they can, implying that the only way to secure this
documentation would be to laboriously go through folder-by-folder and download
individually all files relating to UC2B. This labor clearly represents a failure of
collaboration. Success would require a record-keeping strategy that reflects the inter-
governmental nature of UC2B in which authorized agents from the three governmental
agencies would have raw, unmediated access to data servers housing documentation on
UC2B in order to harvest and preserve this data with some regularity.

- **Active Monitoring** - This project also did achieve full transparency in its documentation
efforts. One way to reach success in documentation strategy is to actively report back to
all collaborating agencies and individuals on the status of the initiative. Owing to staff
limitations, this goal was not reached. Future work to reach this goal could do things like:
a) create a dynamic finding aid: as new documentation is collected by the initiative the
finding aid could dynamically reflect new accessions, even if raw files could not be made
available online; b) create a participatory appraisal model wherein all stakeholders in
government, media, education and civil society are empowered to document UC2B as it
develops, from both official and unofficial perspectives. Both models are possible.
However, each has strong requirements for staffing, policy and institutional will.

**Next steps**

In early Fall 2012 the print and digital documentation will be deposited at the University of
Illinois Archives. The Community Informatics Research Lab will retain a complete digital copy of
the documentation for research, teaching and service.

The Lab will also continue to document UC2B in a low-level, mostly passive way. The Lab has
no intentions to become the official record-keeper for UC2B, however we recognize the
importance of this initiative and the need to proactively create means by which those impacted
by UC2B can document themselves. Specific activities will include:

- Preserving official UC2B communications sent out by the City of Champaign (e.g. policy
and technical board meeting minutes)
- Enabling anyone to submit digital documentation on UC2B through the eBlackCU.net
portal and CUWiki at http://eblackcu.net/portal/contribution and http://cuwiki.net/
- Enabling anyone to submit print documentation on UC2B by contacting the lab at 217-
Finding Aid

Title: UC2B Documentation Project
Primary Creator: Community Informatics Research Lab,
University of Illinois Graduate School of Library & Information Science

Extent: 259 Terabytes + 5 cubic feet of non-digital documentation

Arrangement: Documentation organized into three series, which are further organized based on names of institutions and topical categories. The documentation within folders can be arranged dynamically by title, date and size.

Date acquired: Fall 2011 - Spring 2012

Forms of material: Documentation

Media: Documents, Videos, Websites

Scope and Contents of the Materials:
Documentation of the UC2B Big Broadband Initiative amassed in FY 2012 by the Community Informatics Research Lab. Includes journalistic representations, official governmental records, publicity, community commentary, videos, websites and photographs that document the development of UC2B in Urbana-Champaign, Illinois. A detailed, digital file-level inventory is available.

Biographical Note:
The UC2B Big Broadband Initiative is a federally-funded broadband deployment project funded by the NTIA. The University of Illinois served as lead agency on the grant. As of Summer 2012, the City of Champaign is lead agency on this inter-governmental effort. UC2B exists to build high-speed broadband in Champaign-Urbana, with subsidized connections to low-income neighborhoods, anchor social institutions, and governmental institutions.

Series 1: Governmental Documentation
Contains documentation from the University of Illinois, City of Champaign, City of Urbana, State of Illinois and U.S. Federal government. Documentation organized by governmental unit.

Series 2: Media Documentation
Contains documentation from multiple local media outlets in the Champaign-Urbana region. Document organized by media outlet.

Series 3: Community Informatics Research Lab Documentation
Contains documentation on UC2B collected by members of the Community Informatics Research Lab as part of ongoing research. Includes documentation amassed by Professor Abdul
Alkalimat, co-P.I. on the original NTIA UC2B application; documentation from eBlackCU; and documentation of other lab activities, including activities specifically oriented towards actively documenting UC2B.

Series 1: Governmental Documentation
File Folders:
1) City of Champaign
2) City of Urbana
3) NTIA
4) State of Illinois (illinois.gov)
5) UC2B on Facebook
6) UC2B.net
7) University of Illinois CITES
8) University of Illinois (illinois.edu)
9) University of Illinois Trustees

Series 2: Media Documentation
File folders:
1) Big Broadband - Undergrad Media Project (University of Illinois College of Media)
2) CU- Citizen Access (University of Illinois College of Media / Illinois Public Media)
3) C-U Open Access Coalition
4) Daily Illini
5) Illinois Homepage (WCIA)
6) News-Gazette
7) UCIMC
8) Volo (Volo Connections)
9) YouTube (UC2B on YouTube)
10) WILL - Illinois Public Media
11) Other media

Series 3: Community Informatics Research Lab Documentation
File folders:
1) eBlackCU Collection - Contains documentation on UC2B from the eBlackCU digital portal
2) Paper Archive (digital surrogates of ephemera and documentation collected by the Community Informatics Research Lab)
3) Video documentation from Fall 2011 produced by Community Informatics Research Lab
4) Web-crawls (of sites containing UC2B documentation)

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ii Cook, T. 2011. "'We Are What We Keep; We Keep What We Are': Archival Appraisal Past, Present and Future 'We Are What We Keep; We Keep What We Are': Archival Appraisal Past, Present and Future," Journal of the Society of Archivists 32, 2: 173-189.
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