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Considered a great resource by many individuals, local history materials focus on life, both past and present, in a particular community. As digitization becomes more prevalent, many libraries are exploring methods to provide electronic access to their collections. Through a series of interviews, this paper analyzes how and why public libraries are choosing to digitize their local history materials.

Headings:

Electronic data archives -- Conservation and restoration.

Information systems -- Special subjects -- Local history and records.

Internet -- Public libraries.

Preservation of library materials -- Automation.

DIGITAL NEIGHBORHOODS: AN ANALYSIS OF LOCAL HISTORY MATERIALS IN THE DIGITAL WORLD

by
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TABLE OF CONTENTS

Introduction

In a 1789 letter to future President John Adams, Jeremy Belknap, founder of the

Massachusetts Historical Society, stated that "The want of public repositories for

historical materials as well as the destruction of many valuable ones by fire, by war and

by the lapse of time has long been a subject of regret in my mind."[1] Acknowledging that

institutions should assist in providing the public access to important and significant

documents, Belknap himself aided in the development of what would become the

country's first historical society. There are repositories in every state that focus

exclusively on local history and just as preservation issues plagued Belknap and his

contemporaries, providing electronic access to modern local history collections is

becoming today's burning desire.

Local history collections exist in public libraries across the United States, most

often consisting of materials about the county or city in which the library resides. A wide

range of people passionate about learning the history of their communities use these

collections. Researchers, from academic scholars and students to ordinary citizens,

frequent local history collections for an assortment of reasons. Generally, collections

receive the greatest use from private researchers, students and genealogists. The recent

boom in genealogical interests has greatly increased the number of people who draw

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[1] Louis Leonard Tucker, "Massachusetts," in *Historical Consciousness in the Early Republic: The Origins of State Historical Societies, Museums, and Collections, 1791-1861*, ed. H.G. Jones (Chapel Hill: North Caroliniana Society, Inc., 1995), 3.

on local history collections for relevant information. This rise in patronage, coupled with issues such as preservation, is leading some libraries to consider converting their paper materials into digital formats. This paper explores why and how a selection of communities, with similar characteristics, are embracing new technologies for both the preservation of and access to local history materials.

Defining Local History

Collections of local history materials exist in a number of libraries across the United States. These collections may house anywhere from hundreds of items to hundreds of thousands, depending on the scope and mission of the library. To quote Carol Kammen from her book *On Doing Local History: Reflections on What Local Historians Do, Why, and What it Means*, local history is "the study of past events, or of people or groups, in a geographic area – a study based on a wide variety of documentary evidence and placed in a comparative context that should be both regional and national."[2]

The goals of local history collections are extensive and vary from library to library. Much of the work done by these repositories reflects the categories of users who patronize the collection. Examples of patrons range from amateur researchers and writers to genaologists, students and historians. These users seek different types of information and need a variety of materials. Formats contained in local history collections should be as broad as possible, but the core of the collection is most often published works. These works often include "County histories, municipal histories, organizational histories, church histories . . . biographies" and "City and telephone directories, guidebooks to the

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[2] Carol Kammen, *On Doing Local History: Reflections on What Local Historians Do, Why, and What it Means* (Nashville: The American Association for State and Local History, 1986), 4-5.

area, business directories, organization directories and local newspapers."[3] Other paper materials often found in local history collections consist of, but are not limited to, manuscript and archives collections, pamphlets, maps and reference works. Non-print items that make up a significant portion of local history collections include films, sound recordings and glass-plate negatives, with the bulk being photographs. When public libraries consider digitization, photos are typically what local history collections choose first to make digitally available.

Investigating local history involves the examination of materials in many of the listed formats. An accurate representation of history in a specific region requires researchers to create a depiction of that period through the available resources. For a simple inquiry about a particular city one bound volume may be sufficient, but for in depth research no single resource is likely to supply all the essential information. Collections need to focus on maintaining a broad spectrum of documentary resources to accommodate the "need for corroboration of evidence and for ancillary material."[4] In addition to maintaining an array of resources, local history managers have a duty to provide researchers access to materials and perform services crucial for the use of the collection.

Bruce Dearstyne defines the concept of researcher services as it applies to archives in four distinct categories: "(1) encouraging research use of holdings; (2) actively counseling and assisting researchers; (3) making records available; and (4)

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[3] Faye Philips, *Local History Collections in Libraries* (Englewood, CO: Libraries Unlimited, Inc., 1995), 2-3.
[4] Kammen, *On Doing Local History*, 60.

analyzing and measuring research use."[5] Although this schema may have been designed for archives with historical records holdings, the model can be applied to any collection with equivalent operations. In terms of research, local history collections function in much the same manner as a traditional manuscript based archive, the foremost difference being the nature of materials gathered and maintained.

The first three of Dearstyne's research services characterize the fundamental duties of local history collections. To assist researchers and advance the use of resources is a large part of a local history librarian's position. These require substantial knowledge of the region and the collection. Many local history managers and assistants, however, lack sufficient time to accomplish all their responsibilities. Applying digitization to a local history setting may provide better access and assist librarians with public service duties.

Context for Digitization

Libraries all over the world have become involved with digitization in an effort to have their collections accessible to anyone anywhere with an Internet connection. Many of these institutions are based at colleges and universities where appropriate funding and labor is available to pursue these projects. Collections chosen for digital projects often focus on an explicit theme specified in either a grant or by a private funding agency. For example, *Documenting the American South (DAS)*, based at the University of North Carolina at Chapel Hill, is a renowned digital collection of materials relating to the U.S. South whose goal is to provide "teachers, students, and researchers at every educational level with a wide array of titles they can use for reference, studying, teaching, and

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[5] Bruce W. Dearstyne, *Managing Historical Records Programs: A Guide for Historical Agencies* (Walnut Creek: AltaMira Press, 2000), 102.

research."[6] The majority of texts that *DAS* has placed online come from the North Carolina Collection, also found on the UNC-Chapel Hill campus. This collection houses the largest amount of materials pertaining to a specific state found anywhere in the country.[7] Without *DAS* working to turn these traditional books and documents into an electronic format they would only be available to those who can travel to Chapel Hill.

Converting traditional local history collections into online resources has become an aspiration of many public libraries. Unfortunately, most of these repositories do not enjoy the same prosperity as many large academic institutions and thus do not carry digitization through to project implementation. Currently only a handful of public libraries have taken an active role in digitization, yet many users of local history collections expect large bodies of materials to be available online. Increased researcher Internet usage has resulted in increased and often unrealistic expectations.[8] To quote Bruce Dearstyne on the use of the Internet:

> The Web may well become the first place to look for access to research information; hopefully it will not be the only place, but its importance as a source of information and a conduit to information is certain to increase dramatically. There is considerable evidence that young people, accustomed to using computers for sharing and getting information, will place their primary alliance on Web-based and mediated access. Historical records programs can be expected to respond by gravitating towards reference services on the Web via their home pages as a way of orientating researchers to their holdings and services, answering initial questions, and presenting finding aids and access tools.[9]

There is no question that producing electronic surrogates from existing paper materials takes technological familiarity and extensive resources. The truth is that a large percentage of institutions aspiring to digitize will not have the necessary resources.

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[6] Documenting the American South, "About This Digital Collection," 14 May 2002, <http://docsouth.unc.edu/aboutdas.html> (17 June 2002).
[7] Ibid.
[8] Dearstyne, *Managing Historical Records Programs*, 157.
[9] Ibid.

Conversely, local history digitization projects do exist, and can serve as models for new digital ventures.

Current Projects in Public Libraries

In 1998, the Palos Verdes Library District came to the conclusion that the digitization of their local history collection was an assignment that had to be carried out. The collection, which consists of photographs, scrapbooks, newspaper clippings, oral histories and other materials, was not receiving the attention it deserved, due largely to its location. The library had "limited ability to get this unique material to people off-site," and researchers were often "surprised at the lack of remote access, research assistance and an electronic index."[10] The value of the collection was determined to be high enough that spending the time and money on this project was justified to satisfy a need for the material by those living outside Southern California.

Providing access to the collection was not the only reason Palos Verdes sought funding for a digital project. Preservation concerns had also arisen and the library realized that they could solve both problems by digitizing portions of their collection. In the end, Palos Verdes chose 2,000 photographs for their project, depicting the area's history from the 1920's through World War II.[11]

Based in Terre Haute, Indiana, the Vigo County Public Library (VCPL) saw preservation and access as the driving motives for initiating their digital project. The library was fortunate to have a vast collection of local history resources but was challenged with providing their archives to researchers. Over time these records

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[10] Hillary Theyer, "Planning the future of history: making a digital historical resource," *Computers in Libraries,* 19, no. 9 (Oct. 1999), 17.
[11] Ibid., 20.

deteriorated, and VCPL had eventually restricted access to the collection out of the concern for further damage. Although digitization would have to rely solely on the capabilities already in place at the library, VCPL staff were "anxious to find a way to make this unique local history collection more accessible to patrons both inside and outside of the library."[12] Over the past two years VCPL has been very active in entering marriage records into their online database, aided financially by the Institute of Museums and Library Services (IMLS). According to the Vigo County Marriage Record Project, their fundamental goal is "to improve access to local original records that are historically significant and unique to Vigo County by making these records available on the Vigo County Public Library's website."[13]

External funding is essential to most significant digitization efforts in libraries today. Since an institution may not possess enough money to support the construction and maintenance of a project, outside agencies can be extremely beneficial for libraries that wish to provide digital access to their collections. To successfully apply for a grant, a library "must determine if a collection of high local priority can meet the selection criteria established by an external funding organization."[14] In the cases of Palos Verdes and Vigo County, both projects were deemed to have significant value to the public and both of these libraries applied for and received funding. These two examples show the relevance of turning local history collections into an online resource and although user

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[12] Jeanne Holba Puacz, "Bringing archives to life on the Web," *Computers in Libraries*, 20, no. 2 (Feb. 2000), 33.

[13] Vigo County Public Library, "Vigo County Marriage Index," *Vigo County Marriage Records Project*, 24 October 2002, <http://165.138.44.13/marriage/> (2 November 2002).

[14] Janet Gertz, "Selection Guidelines for Preservation," (paper for the Joint RLG and NPO Preservation Conference, 28-30 September 1998), <http://www.rlg.org/preserv/joint/gertz.html>

statistics have not been made available, since the addition of the marriage records page on the VCPL website it has received over 20,000 visitors.[15]

Other libraries have completed similar projects as VCPL and Palos Verdes, including the Charleston County Library in Charleston, South Carolina, and the Greater Cincinnati Library Consortium (GCLC), which is a conglomerate of libraries in Greater Cincinnati and areas of northern Kentucky. Similar to Palos Verdes, the GCLC focused exclusively on digitizing 6,000 photographs, slides and postcards of pre-1940's landmarks, events, structures and buildings relevant to Greater Cincinnati. The second portion of the project, which includes images of people, began in January 2001. This was initiated after evaluating the success of the pilot project, where in September 2000 the website received more than 3,000 hits.[16] Libraries most often select photographs and other visual materials for digitization, although some consider providing textual resources in digital format.

While the libraries listed above have all accomplished, to some degree, constructing and sustaining digital projects, the Denver Pubic Library is a prime example of what a public library can achieve with proper funding and direction. Begun in 1994, *The Photography Collection* built in Denver obtains funding from more than half a dozen agencies and local Colorado societies. Consisting of an enormous digital collection of photographs, the images included on the website primarily deal with the history of the West, and the "on-line database contains some 80,000 images and catalog records of

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[15] Vigo County Public Library, "Vigo County Marriage Index."

[16] Laura Tull, "Cooperative digital imaging projects: the Greater Cincinnati Memory Project," *Electronic Library*, 20, no. 1 (2002), 47.

Native Americans, pioneers, early railroads, mining, Denver and Colorado towns."[17] The

beauty of the Denver site is its comprehensiveness, which would have been impossible if

not for the funding. It was not, however, until the collection proved to be a valuable

resource that their budget grew.

Denver Public Library is a member of The Colorado Alliance for Research

Libraries (The Alliance), a "consortium of large and small academic, large public, and

specialized libraries."[18] The Alliance is composed of ten libraries in Colorado and one

from the border state of Wyoming and was originally designed to increase access

between the participants. Denver Public Library is one of only a few public libraries

involved with The Alliance, but as a constituent the institution benefits from the financial

aid granted to member organizations. These benefits include discounts on equipment,

select library databases and various modes of tech support, allowing the library to use

their budget to expand the digital photo exhibit.[19] The construction of digital libraries and

conversion of materials to electronic format was one of the significant themes in an

Alliance strategic plan written in 1998. In Section IV, part A in the outline of the strategic

plan, The Alliance makes digitization one of its priorities, pushing for "digitization of

specialized Alliance member databases," "retrospective conversion for digital access,"

and "partnerships with public and private sector organizations for digitized access."[20] The

nature of The Alliance is a key factor in the development of *The Photography Collection*

by Denver Public Library. Although a majority of institutions affiliated with The Alliance

[17] Denver Public Library, "Overview," *The Photography Collection*,
<http://gowest.coalliance.org/highlite.htm> (5 October 2002).
[18] Colorado Alliance of Research Libraries, "About…," < http://www.coalliance.org/about/allinfo.html> (6 October 2002).
[19] Colorado Alliance of Research Libraries, "Colorado Alliance of Research Libraries Financial Benefits of Membership," <http://www.coalliance.org/about/benefits.htm> (10 November 2002).
[20] Colorado Alliance of Research Libraries, "Colorado Alliance of Research Libraries Strategic Plan: 1998-1999," <http://www.coalliance.org/about/98plan.htm> (6 October 2002).

are not public libraries, this conglomeration displays how a public organization can

develop digital projects with the support of a partner or group. As this paper will later

show, a small percentage of public libraries are attempting to digitize their local history

collections through either a statewide initiative or a smaller, more elite partnership, much

like The Alliance.

The Cost of Digitization

Digitization can provide fabulous research tools to remote users. The use of photo

editing software can enhance a dull photograph or allow someone to read a first edition

Oliver Twist while sitting hundreds of miles away from the physical material. Digital files

are also used as a teaching mechanism for students without access to the originals. Abby

Smith points out why digitizing special collections materials is so beneficial to teachers

and students:

> Among the most valuable types of materials to digitize from a classroom
> perspective are those from the special collections of research institutions,
> including rare books, manuscripts, musical scores and performances, photographs
> and graphic materials, and moving images. Often these items are extremely rare,
> fragile, or, in fact, unique, and gaining access to them is very difficult. Digitizing
> these types of primary source materials offers teachers at all levels previously
> unheard-of opportunities to expose their students to the raw materials of history.[21]

Unfortunately, most libraries only digitize a small number of items, usually visual

materials, because of the high cost of digitization projects.

Cost analysis is one of the most important assessments a library must make before

starting a digital endeavor. Many economic factors must be taken into account before a

project is begun, either to ensure that the proper funding can be allocated or dissuade the

institution from getting involved. Costs associated with the digitization of images are

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[21] Abby Smith, *Why Digitize?* (Washington, D.C.: Council on Library and Information Resources, 1999),
<http://www.clir.org/pubs/reports/pub80-smith/pub80.html>

much lower than those required for creating electronic versions of printed materials. To appreciate why so many projects are based around photos and illustrations, it is important to examine texts and images separately.

Before taking on any digitization project, a library needs to be conscious of all the related financial components. It may seem as though the simple task of scanning pictures and mounting them on the Web is not very expensive, but this is very misleading. Actual costs can fluctuate considerably depending on how a digital image is created. Scanners are capable of producing digital surrogates in a wide range of color schemes, and each one of these options dictates the file's size. When creating digital images, color will result in a larger file than grayscale, while simple black and white representations will have the lowest resolution and therefore the lowest cost.[22] The larger the finished product the more space it will need for storage, whether this is done on the computer's hard drive or an external storage device such as a CD.

Digital imaging can amount to hundreds of hours spent by employees working with photos. In his article "The Costs of Digital Imaging Projects," Steven Puglia identifies several components that need to be addressed when planning a budget. These include, but are not limited to, selection and digitization of materials, metadata creation, quality control and maintenance of digital surrogates and their metadata.[23] Through the analysis of the National Archives and Records Administration's Electronic Access Project and the National Digital Library/Ameritech Competition at the Library of Congress, the average cost to digitize an individual image was $23.25 while producing an

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[22] Dan Hazen, Jeffrey Horrell and Jan Merrill-Oldham, *Selecting Research Collections for Digitization* (Washington, D.C.: Council on Library and Information Resources, 1998), <http://www.clir.org/pubs/reports/hazen/pub74.html>
[23] Steven Puglia, "The Costs of Digital Imaging Projects," *RLG DigiNews*, 3, no. 5 (15 October 1999), <http://www.rlg.org/preserv/diginews/diginews3-5.html> (13 November 2002).

average of 25 images per day.[24] At the Denver Public Library, the cost per item is on

average $18-$20 and is determined by employee salaries and daily production. This

figure includes the "preparation, research, cataloging, and scanning of the item," but

neglects "the cost of selecting photographs and making curatorial decisions, equipment

purchases and upgrades, or administrative and supervision costs."[25]

       Digital ventures have the potential to be highly advantageous to researchers. Most

of them, however, rely heavily on aesthetic materials rather than intellectual ones.

Digitized images of cities and counties, most often portraying what locations looked like

in the past, are more prominent on the Internet than written texts. This is the case for two

important reasons. First, many libraries assume that providing access to old photographs

will draw a larger number of users. It is commonly believed that what is appealing to the

eye makes for a better project and when libraries apply for grant money, they feel a

photo-based endeavor should earn higher marks. Secondly, a digital project fashioned

around a photograph collection is easier and cheaper to generate. Since public libraries

frequently find themselves both understaffed and without a sizeable budget, they need to

develop ways to carry out their jobs using only currently available resources. While a

grant may secure funds for new equipment, it is rare that money becomes available to

hire new staff that could be devoted solely to digitization. Therefore, many local history

librarians, who feel their collections warrant digital access, are learning digitization

techniques on their own. With a simple scanner and the proper software an image-based

project can be undertaken, but attempting to encode textual materials is outside their

reach.

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[24] Ibid.

[25] Denver Public Library, "FAQs about the Digitization and Cataloging process at The Denver Public Library," *The Photograph Collection*, <http://gowest.coalliance.org/faqs3.htm> (13 November 2002).

The lack of substantial digitized textual materials in local history collections can cause problem for researchers looking for specific data. In 2001, Astle and Muir conducted a study in the United Kingdom to determine what types of materials were being digitized by public libraries and archives as a follow up to a 1997 survey.[26] Along with the types of materials, the 20 institutions that returned the questionnaire also specified the number of items digitized. Not surprisingly, photographs topped the list, accounting for 77.52% of all available materials on the Web. The second highest category was art, making up over 19%, while manuscripts and serials/newspapers combined for a total of .40%. The two types of written documents put together added up to 817 items while photographs alone consisted of 160,219 objects. To quote Astle and Muir:

> Even accepting that a direct comparison between the digitization of a photograph (a single sheet), with serials/newspapers, manuscripts or monographs (multiple pages) could be misleading, the dominance of the photograph is still quite clear. If the next most significant category of Art, accounting for almost 20 per cent of the total, were omitted (as it came from just two special collections), then photographs would account for virtually 100 per cent of digitized materials.[27]

Although photos are nice to look at, a true researcher would probably be more satisfied with written accounts of city or county histories as opposed to what a particular intersection looked like at the turn of the 20th century. The current escalation in genealogical studies compounded with a greater number of people using the Internet each year adds to this concern. Locating family histories through the use of the computer has not developed as quickly as researchers would have hoped and libraries do not seem ready to initiate textual projects. This harsh reality leads many to wonder what local

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[26] Peter J. Astle and Adrienne Muir, "Digitization and preservation in public libraries and archives," *Journal of Librarianship and Information Science*, 34, no. 2 (June 2002), 72.
[27] Ibid.

history collections are trying to accomplish with current digital programs and what patrons can expect to see online in the future.

The reason for the relatively small amount of digitized text on the Internet can be attributed to the high cost of text encoding. Including text into a project can be done two ways. The first is to simply scan images of pages from a bound volume and create image files identical to those produced from reproducing photographs. The cost of this approach is slightly higher than scanning photos and depends largely on the nature of the volume. Since text can come in many forms, libraries need to consider how the original work is printed. Scanning material in good condition will cost less than something delicate or brittle, and single sheets are less expensive to digitize than bound volumes. The actual size of the resource will also dictate expenses as an oversized book will take more time to scan and therefore cost more money.[28] This approach, while the cheapest, does not contain searchable text.

The second method of digitizing textual materials is to place the full text into an HTML (or XML) document and create ways for that text to be searched for and successfully located. This is accomplished by creating an electronic version of a volume or sheet in machine-readable ASCII. This can be done in two ways. One approach is to manually key the material into an electronic document and the other requires a scanned image and an optical character recognition (OCR) program. Keying is a manual task and "can easily be ten times more expensive than scanning-plus-OCR."[29] Many factors can influence the amount of labor required to create text files. The use of OCR on a clean,

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[28] Hazen, Horrell and Merrill-Oldham, *Selecting Research Collections for Digitization*.
[29] Stephen Chapman, "Working with Printed Texts and Manuscripts," In *Handbook for Digital Projects: A Management Tool for Preservation and Access*, ed. Maxine K. Sitts, (Andover, MA: Northeast Document Conservation Center, 2000), <http://www.nedcc.org/digital/VII.htm>

clear page should generally be faster than keying, but libraries need to remember that OCR is not completely accurate and proofreading after OCR is always necessary. As the quality of the printed material decreases, labor costs escalate due to increased time spent correcting OCR errors.[30]

The most expensive method of presenting text in an electronic document is by encoding with Standard Generalized Markup Language (SGML); however it is also the most useful for researchers. Using a subset of SGML such as the Text Encoding Initiative (TEI), tags are placed around certain sections or descriptive elements in a document allowing web browsers to find and retrieve desired material.[31] SGML encoding is the most beneficial technique for supplying digitized texts to researchers because the structure of the document can mimic the physical copy. Encoding can refer to divisions within a book, such as chapters and specific names of people, dates and places. Furthermore, "when a properly configured search interface/application is coupled with an SGML database, encoding makes fielded searching possible (*e.g.,* find "slavery" in captions), and can also be used to control the presentation of the document -- including multiple representations if desired."[32]

Even though various ways of displaying textual materials are available, costs for the long-term maintenance of these documents exceeds those for image files. This is especially true for full text and encoded material, since technological advances will

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[30] Ibid.
[31] Ibid.
[32] Ibid.

ultimately require updating of the files. Libraries should also consider methods for quality control as correcting mistakes in electronic texts can be an expensive procedure.[33]

To reduce labor costs and possible hardware purchases, many libraries choose to outsource their projects. Sending items to an outside vendor can often cost much less than performing the same tasks within the library. The decision to outsource will always depend on the size of the project, and whether the staff is capable of digitizing on their own. Smaller photo based projects can usually be done in-house with the proper facilities, but for larger ventures working with an outside vendor is probably more cost-effective.[34] Since text encoding is more expensive that photo imaging, many repositories send original books or photocopies to an outsource agent for markup because vendors often have lower staff salaries than the digitizing institution. However, libraries should "only outsource that which does not require great initiative or skill, as this tends to cost more."[35] When considering a digital project, institutions should examine the most cost-effective approach. Since many options exist on varying financial levels, libraries must be sure they can afford the necessary equipment and labor hours required by digital conversion.

Who Should Digitize?

Proper planning is the backbone of any digital project. Before an institution can commit to digitization, a variety of subjects must be addressed to justify such an

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[33] Alan Morrison, Michael Popham and Karen Wikander, "Creating and Documenting Electronic Texts: A Guide to Good Practice," *AHDS Guides to Good Practice*, <http://ota.ahds.ac.uk/documents/creating/>
[34] Franziska Frey, "Working with Photographs," In *Handbook for Digital Projects: A Management Tool for Preservation and Access*, ed. Maxine K. Sitts, (Andover, MA: Northeast Document Conservation Center, 2000), <http://www.nedcc.org/digital/VII.htm>
[35] Simon Tanner and Joanne Lomax Smith, "Digitization: How much does it really cost?" (paper for the Digital Resources for the Humanities 1999 Conference, 12-15 September 1999), <http://heds.herts.ac.uk/resources/papers/drh99.pdf>

endeavor. There are many options for libraries in terms of the size of a potential digital

project, how material will be converted into digital format and the scope of the project.

To determine if digitization should be undertaken and to what degree, libraries need to

determine their goals, which can be done by "identifying institutional priorities,

determining potential users and uses of the digital images, and allocating financial

resources."[36] Many libraries today are eager to digitize for fear of falling behind other

institutions, however, digitization is not a realistic approach for every collection.

Setting the goals for a digital project involves a few components, such as clearly

identifying what materials will be digitized, how they will be digitized and what benefits

the completed project will have for the institution. Selecting materials can be difficult,

and for particularly deteriorated materials, there is the threat of further damage from

handling by the staff.[37] Libraries must remember, however, that despite the quality of a

collection, evaluation is necessary to determine whether or not digitization is a practical

objective.

Collections need to be appraised before digitization to determine if creating

digital surrogates is a worthwhile endeavor. In the case of local history collections,

librarians need to decide if providing electronic access to materials will increase use for

remote researchers. Hazen, Horrell and Merrill-Oldham state that, "If the primary

audience is local, for example, and if competition for a particular resource is not a

problem, access may already be sufficient."[38] This does not imply that all local history

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[36] Linda Serenson Colet, "Planning an Imaging Project," *RLG/DLF Guides to Quality in Visual Resource Imaging*, (2000), <http://www.rlg.org/visguides/visguide1.html>

[37] Stephen Chapman, "Considerations for Project Management," In *Handbook for Digital Projects: A Management Tool for Preservation and Access*, ed. Maxine K. Sitts, (Andover, MA: Northeast Document Conservation Center, 2000), <http://www.nedcc.org/digital/III.htm>

[38] Hazen, Horrell and Merrill-Oldham, *Selecting Research Collections for Digitization*.

materials cater to only local citizens; however, libraries must acknowledge significant use or demand by distant users in justifying digitization for access.

Libraries should also base their decision to digitize on the actual use of the collection in question. If a set of resources is underused the cost may be too great to warrant digitization. The selection of materials for digitization "must be informed by an understanding of how the product will be described for users, delivered to them, and managed over time."[39] Understandably, libraries want their local history materials to receive as much use as possible, but a comprehensive and expensive metadata and indexing program is necessary to ensure access.

The intrinsic value of a collection must also be weighed when contemplating a digital project. Materials that do not receive heavy use may contain valuable information, but this does not always justify digitization. As stated by the Society of American Archivists:

> The mere potential for increased access to a digitized collection does not add value to an underutilized collection. It is a rare collection of digital files indeed that can justify the cost of a comprehensive migration strategy without factoring in the larger intellectual context of related digital files stored elsewhere and their combined uses for research and scholarship.[40]

Although local history collections primarily collect materials specific to their region, many published works, especially broader histories, can exist at other repositories where digitization has already made these resources available. Before digitization begins, libraries should consult the Web or other institutions to determine if similar resources are already electronically accessible. If accurate representations can be found on the Web,

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[39] Ibid.

[40] The Society of American Archivists, "The Preservation of Digitized Reproductions," 9 June 1997, <http://www.archivists.org/statements/preservation-digirepros.asp> (14 November 2002).

libraries should think twice before investing large sums of money into digitization.[41]

Since budget plays such a significant role in the opportunity to digitize, collaboration

with other institutions may also be considered.

A highly debated issue is whether digitizing to provide access is the same as

creating digital surrogates for preservation. As a means of providing access, digitization

can be promising, but in terms of preservation it may not be the best instrument.

Compared to microfilm, a traditional library preservation technique, digitization becomes

a highly questionable method of preserving data. Besides the fact that digitization is more

expensive, it is impossible to tell how long a digital document will last as technology

keeps changing. Microfilm, if produced on silver halide film and stored in a stable

environment, can last for centuries and require only a light source and magnifying lens to

read.[42] On the other hand, electronic documents are at a disadvantage from their

conception. Encoded text will inevitably have to be shifted into another type of source

code to remain readable, and digital image files stored on media such as compact discs

will face the same migration concerns currently plaguing archaic storage devices such as

floppy discs. To cite Abby Smith, "Much is gained by digitizing, but permanence and

authenticity, at this juncture of technological development, are not among those gains."[43]

While the technical aspects of digital preservation may have weaknesses, there is

the belief in the digital world that preservation and access go hand in hand. Creating a

surrogate for preservation will provide digital access to that material as long as the files

are introduced on the Internet. Ultimately, preservation methods are employed to ensure

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[41] Hazen, Horrell and Merrill-Oldham, *Selecting Research Collections for Digitization.*
[42] Smith, *Why Digitize?*
[43] Ibid.

access over time. Put simply, "preservation is the action and access is the thing -- the act of preserving access."[44]

After a library assesses the value and potential of converting their paper materials into digital collections, the budget must be secured in order to finance all the work that will go into the digitization process. To devise a realistic budget, the planning phase must incorporate the proper staff required to participate in the project. Institutions need to decide on who will do the work, and if this staff is already employed or if new personnel needs to be recruited. Regardless of the size of the project, libraries should always figure that at least one new full time employee will have to be hired.[45] For new staff, a period of training may be necessary, which could add to the proposed budget.

Where digitization will occur has a large impact on the eventual price tag. If the work is preformed in-house, the budget will likely increase due to hardware purchases, hiring of new staff, training new staff and allocating physical space for the project.[46] In-house digitization can be problematic for institutions because funds can easily disappear before the project is initiated. An alternative for digitization is the hybrid approach, which combines aspects of in-house work and using an outside vendor. This can be achieved in a variety of ways. For rare or delicate materials, digitization may take place within the library and sent off-site to be processed. Another approach would be to hire an outside contractor to work at the institution. This practice is especially beneficial for repositories that wish to train staff for future projects. [47]

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[44] Paul Conway, "Overview: Rationale for Digitization and Preservation," In *Handbook for Digital Projects: A Management Tool for Preservation and Access*, ed. Maxine K. Sitts, (Andover, MA: Northeast Document Conservation Center, 2000), <http://www.nedcc.org/digital/II.htm>
[45] Chapman, "Considerations for Project Management."
[46] Colet, "Planning an Imaging Project."
[47] Ibid.

To establish what the overall budget might amount to, a small sample of materials should be digitized and the cost of this process analyzed. This is necessary for all methods of deployment, not just for in-house projects. Sampling can be accomplished with only a few items. The benefit of this procedure is that unforeseen problems or costs may arise. Scanning, saving and retrieving an image might take longer than originally thought and the budget or project size may have to be adjusted accordingly. Once the cost of digitizing materials is determined, staff salaries and equipment should be included in the projected budget.[48] It is unrealistic to believe that every library will be capable of building a digital project. Following specific guidelines on planning and evaluating resources will aid libraries in their ultimate decision to introduce a digitization project.

Goals of Study

One purpose of this study is to survey how local and county history repositories are using digital initiatives to provide electronic access to their collections. Currently there are many articles and tutorials designed to inform the public about digital projects and procedures in the academic field. While these are useful for analyzing current trends at the university level, no such literature exists for public libraries with the exception of small articles written by public librarians. Since no one has conducted a formal evaluation of local history collections and librarians' views about digitization, it is necessary to determine what public libraries with these holdings are doing to craft digitally accessible collections.

Another goal of this report is to convey to the reader why some repositories should attempt a digital project and others should not. There are definitely local history

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[48] Chapman, "Considerations for Project Management."

collections that do not possess enough relevant materials or funding to devote their time to such a tremendous responsibility. For this reason, an assessment of the daily activities of the local history departments and the resource holdings of the studied collections was also conducted. Hopefully a picture can be drawn from the data as to what combination of finances, intellectual resources and staff should be present to rationalize involvement with digitization at a local history collection. Even though a large percentage of libraries do not have projects underway, it is imperative to know why they do not exist, if there are plans to construct a digital environment in the future, and what measures are being taken to accomplish such an assignment.

Methodology

In order to gauge the digitization intentions of local history collections, an interview was conducted at various public libraries. Having hundreds in the United States to choose from, a sampling of repositories was hand picked using specific criteria. While no two libraries have the same priorities or identical holdings, it was important to select libraries that had certain geographical similarities. The scope of location was restricted to the East Coast, with a breakdown as follows: one library from Connecticut, two from New York, two from New Jersey, one in Maryland, two in Virginia and two in North Carolina. This geographic boundary was fashioned to permit travel between Chapel Hill and the library sites for the purpose of conducting interviews in person and viewing the collections. All ten of the city or county libraries chosen are within close proximity to a major city or are major cities themselves. They have been established towns or counties for centuries, with the oldest being founded in the late 17th century and the youngest in the mid-19th century. Of the ten libraries selected, nine are city libraries and one is a

county library. These criteria were used to help increase the amount of materials the collection would hopefully have available.

Figure 1. Libraries by City Population

Library by Number

* Represents the total county population
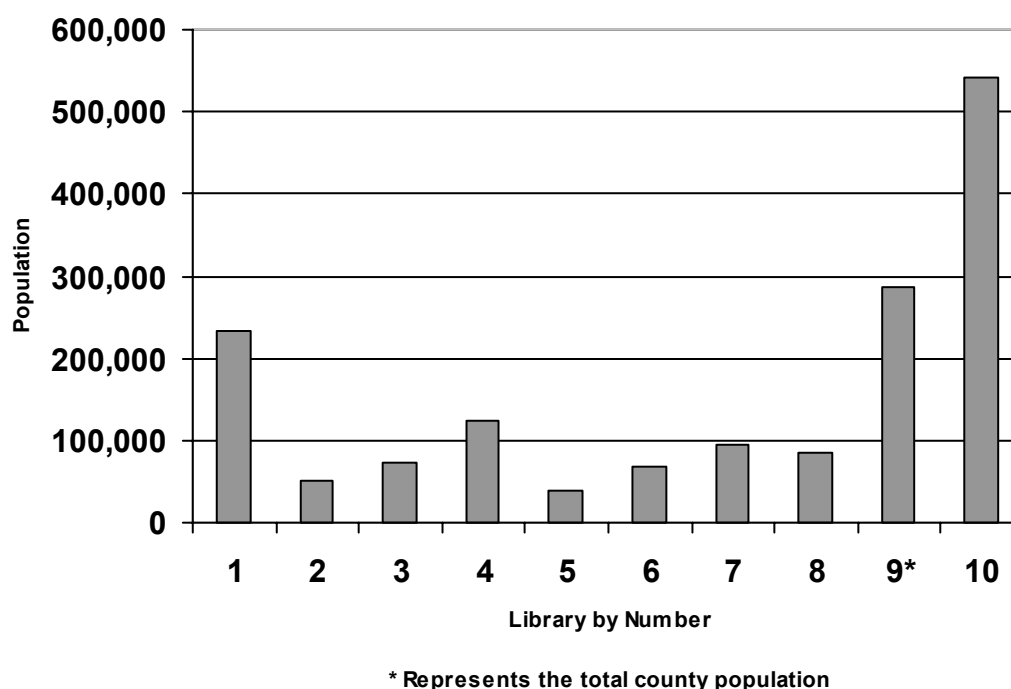
Another criterion that was used in the selection of the libraries was population. It was determined that having comparable populations would be beneficial to the outcome of the study to minimize possible biases such as budget. For example, if a library in Chicago were to be compared with a small, rural public library in western Georgia, the findings would no doubt be vastly different. For this study, eight cities and one county with similar populations were contrasted with one much larger city. This was done in order to demonstrate how population may dictate certain advantages such as funding and collection size. To further illustrate the population comparisons, the eight comparable city libraries exist in communities that fall between 38,977 and 234,403 residents. Six of these cities have populations under 100,000 and two are between 100,000 and 250,000.

The one county selected has a total population of 286,753, and the largest city is home to 540,828 inhabitants.[49] Since the objective of library selection was not to include only local history collections with current digital projects, no information regarding digitization was acknowledged prior to contacting the libraries.

The research for this study was conducted in the form of an interview, which can be found in Appendix A. Nine of the interviews took place in person, which was highly advantageous for a variety of reasons (the tenth interview was done by telephone due to travel constraints). By viewing the collections there was a better understanding of the holdings in terms of breadth. For example, to describe a series of vertical files in a written questionnaire does not convey to the researcher the genuine amount of materials contained in each drawer. However, when issues regarding space deficiency in a local history room can be viewed firsthand, the information received becomes much clearer. A face to face interview is also beneficial because the interviewee can be asked follow-up questions based on the answers received which cannot be done through a paper or email questionnaire.

All of the interviews were conducted with the local historian or collection manager at the library. In some cases other employees were present, such as the library director or web designer. Inclusion of the latter was not mandatory and only occurred in instances where the primary interviewee believed they could not answer all the questions sufficiently or felt that other staff opinions would be helpful. Permission to conduct the interviews was granted by signing a consent form, which can be found in Appendix B,

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[49] U.S. Census Bureau, "Your Gateway to Census 2000," *United States Census 2000*, 11 October 2002, <http://www.census.gov/main/www/cen2000.html> (21 October 2002). The link provided will guide the user to a generic webpage where a specific state can be chosen for statistical information. Since the interviews were conducted under a confidentiality clause, no information can be made available which could identify one of the participating libraries.

and the libraries were promised full confidentiality. For the library that was interviewed over the telephone, a copy of the consent form was emailed to the participant and consent was given orally.

Significance

This study will show what steps, if any, public libraries with local history collections are taking to make their materials more accessible via the Web. The information collected in this study will benefit both the overall library and archival communities by giving a better perspective about what types of local history materials are being digitized and why certain libraries are more eager or capable of carrying out these projects. This report will hopefully aid other libraries in the development of new digital endeavors. Since there are currently access problems for researchers and preservation and digitization issues for repositories, it the fundamental goal of this study to inform these groups about what this sampling of local history collections has done to create digital resources. It is the researcher's hope that this analysis will offer new information concerning local history collections and be a helpful resource to libraries seeking to create digitization projects.

Study Findings

The findings are presented in segments reflecting the interview questions. The first sections deal with the local history collections themselves, including such topics as size, usage and scope. The second portion of the interview results concentrate on the libraries' efforts to digitize their local history materials.

Collection Size and Composition

With a principal objective to serve the immediate residents of a community, local history collections generally house materials containing information about their specific locality. Since diverse formats are abundant, collections strive to make all these resources available. Of the ten libraries studied, bound volumes (e.g., books and directories), photographs, pamphlets, newspaper clippings and postcards comprised most of the materials in the local history collections. Manuscript collections exist in small numbers as well.

Bound volumes make up the majority of items at five of the local history collections, accounting for more than 70% of materials at three of these repositories. These items mainly include histories of the city and counties with some books containing greater information about the state as a whole. These volumes range in quantity from a few thousand to over 40,000. Library 10[50] displays the greatest amount of books and other bound resources with approximately 42,000 items, and the collection at Library 7 has over 17,000 volumes. In addition to historical accounts, many of the libraries have been building a solid collection of genealogical reference materials. Over the past decade genealogy has grown into a thriving enterprise and local history collections are fast becoming places of research. City directories, phonebooks both past and present, cemetery guides and census records are also grouped into the bound materials category, although a few of the collections keep their census records on microfilm instead of paper.

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[50] Due to the confidentiality clause, library names, locations and persons interviewed cannot be named in this paper. For this reason all libraries have been assigned a number between 1 and 10. Libraries 1 through 8 represent the cities with comparable populations, Library 9 refers to the county library and Library 10 has been designated as the large city institution. Through the remainder of this report libraries will be referred to as "Library #."

Books may be the bulk of many local history collections, but the ten libraries included in this study pride themselves on the quality of the images they possess. This may explain why a majority of digitization projects in public libraries are focusing on electronic access of pictures over print. Photographs and postcards are an alluring component of local history, and there is no question that local residents find these illustrations appealing since the images often contain depictions with a high nostalgic value. Still, half the interviewed libraries have photograph collections that make up less than 20% of their total holdings. Of these repositories, two have digitized a dozen photographs for electronic access and two others are leaning towards the construction of an online photo gallery. The fifth library has the most comprehensive digital project out of all ten repositories, and their photo collection accounts for less than 10% of all their analog materials.

Table 1. Total Number of Select Items in Local History Collections

Owned by Interviewed Libraries

	Bound Volumes	Photographs	Postcards	Manuscript Collections
Library 1	16,000	20,000	1,300	0
Library 2	600	600	1,600	1
Library 3	n/a	n/a	n/a	n/a
Library 4	3,000	n/a	n/a	0
Library 5	600	10,000	n/a	8
Library 6	7,500	9,800	3,000	95
Library 7	17,000	n/a	n/a	90
Library 8	3,600	150,000	n/a	3
Library 9	4,500	n/a	n/a	0
Library 10	42,000	2,000	200	5

Photographs account for the greater part of four collections where books do not comprise the highest percentage of materials. Two of these collections are roughly 50% photographs, while the local history managers at Library 5 and Library 8 estimate that

image based resources account for more than 75% of their total holdings. A third format, postcards, makes up approximately 57% of all materials at Library 2. This is the only institution where neither photos nor written texts are the most bountiful resource.

Six libraries in four different states have at least one true manuscript collection. Four of these have fewer than ten while the remaining two have over 90. Library 7 has 70 processed collections and approximately 20 unprocessed. Once a manuscript collection is successfully appraised and organized, a paper finding aid is created and placed in a binder. Processed collections are also indexed in a card catalog exclusive to the local history room. Library 6 has 95 collections, excluding materials by a renowned author housed at the library.[51] The manuscripts in this local history collection have been receiving more use lately and the collection manager recognizes digitization as a method of unifying these scattered manuscripts.

Local history collections also have property unique to their libraries. These include such items as school yearbooks, military records or other special collections materials. At one library in North Carolina, 40 years worth of blueprints from a local architectural firm, totaling several thousand, are kept in the local history department. Business and organizational records, city archives and the mayor's papers are all found in another library in New Jersey.

Intended Audience

The location and size of the collection dictates the targeted audience. For most of the libraries, the focus of the collection is the city occupied by the library and materials relating to surrounding cities and counties. Broader resources do not usually comprise a

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[51] Manuscripts relating to this individual are grouped together by various subjects. It is impossible for the library to consider all these materials one large collection; therefore they excluded all reference to this individual in their manuscript calculation for this study.

large portion of the local history collection although they should exist in some capacity, essentially for reference purposes. Two libraries in this study carry materials associated predominantly with the county, and one of them has a new written policy stating that in the future only items relevant to the town will be acquired (neither of these repositories are the designated county library).

Three other sampled collections realize the importance of expanding their scope for research intentions. In Virginia, Library 1 has done a superb job compiling a microfilm collection of census records from 1800 through 1920 for Virginia, North Carolina, South Carolina, Kentucky, Maryland, West Virginia and the District of Columbia. The local history collection has acknowledged that people from Virginia have ancestry in surrounding states and have acted to accumulate resources necessary for the study of genealogy. Resembling Library 1, a local history collection in New York recently expanded their genealogical resources to include counties up to 200 miles away, and has also added censuses and family records from New Jersey and Massachusetts. Intermingled with these resources are a few volumes from Europe and assorted British islands, and the International Genealogical Index is available on microfiche.

In North Carolina, the local history collection at Library 10 is robust with materials about the Southeastern United States and the original 13 colonies. There is a heavy focus on migration, including "all the areas people migrated from to reach the Carolinas and migrated to if they left." Long range goals for this collection are to "have some primary resource material for all 50 states plus information on migration areas of origin outside the U.S."

Genealogists make up the highest percentage of patrons in a majority of local history collections as research of family history has increased in the last decade. This can in part be attributed to a higher proportion of individuals having Internet access. When the Internet fails to provide accurate information, genealogists visit local history collections to gather more data. As the genealogical trend grows, local history collections aim to accumulate broader resources to assist their patrons. There would be no rationale for Library 1 to possess census records from six states if researchers were not in need of the microfilm's information. Just three libraries specified groups other than genealogists as their primary users. Two of these claimed private researchers as their principal audience and the third indicated students. Genealogists are the second dominant group at two of these libraries.

Students of all ages visit local history collections. Three collections in New York and New Jersey accommodate students who are given assignments to learn about their towns. Two local history collections also sponsor tours of the collection for the older grades. Those libraries within close proximity to universities generally serve more undergraduate and graduate researchers than younger students.

Private research is consistently used as a vague term encompassing all patrons who do not fit any structured category. All local history collections have users deemed as private researchers and their studies differ in each location. A number of collections identified people in this group as authors, writing on topics such as botany, architecture and the historical role of women in the region. Lawyers, businesses and journalists are other workforces who depend on local history collections for authoritative information. One library even mentioned a large number of engineers using old phonebooks to

determine who owned particular houses. Without the presence of local history collections many such questions would go unanswered.

User Numbers and Locations

Statistics are kept at some libraries on the number of patrons who visit the local history collection. Usually organized by month, these totals can be useful when a collection appeals to the library for more funding. Half of the local history collections indicated they receive an average between 200 and 400 in-house patrons per month. In this category, Library 8 counted 325 users in August and 228 in September, and Library 1 saw 253 patrons during the month of July. During the summer months most libraries indicated that usage drops, and Library 1 stated that they receive more patrons when school is in session. However, this is not always the case, as demonstrated by the statistics of Library 8. Another collection entertains an average of 344 users per month, and saw 4,128 patrons in 2001. Speculation was used to determine the numbers at the two other libraries, ranging from 10 visitors per day to approximately 400 per month. A sixth library has documented a monthly average of 870 patrons. This happens to be the largest local history collection interviewed, both in collection size and physical space.

The remaining four institutions see less than 100 visitors during a single month. Without a sign-in sheet or a centralized local history room, Library 3 estimates that 10-15 people request local history materials each month. This number is nearly tripled for another collection; however this includes patrons who exploit the local history area as a "quiet room" and not necessarily for its resources. A third collection receives two or three users during a given week, but this number is actually higher since the collection manager only records researchers if they request materials from inside an explicit

research room. The fourth library assists an average of one person each day. This library directs many patrons to the historical society down the street and would probably see even less visitors if the society did not charge for admission.

Figure 2. Average Number of In House Users by Month
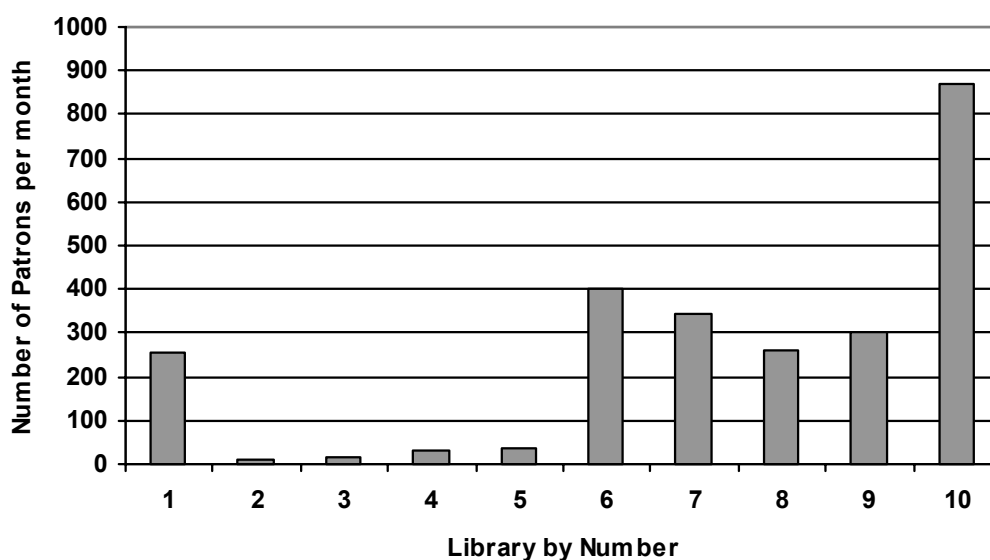
It can be inferred that in-house use of a collection is directly related to the population of the community and the size of the physical collection. Library 10 sees more than double the amount of patrons in a single month than the local history collection with the second highest usage statistics. Excluding the county library, the city in which Library 10 resides has more than double the population of the second largest city. Library 10 also has the highest amount of bound volumes in their collection, and the physical dimensions of the local history room are superior to the other nine repositories. To contrast Library 10, three libraries with the lowest number of in-house researchers also have the three smallest populations. Two of these libraries also house the most insignificant collections.

Aside from users coming to local history collections in person there is a large number of requests made from distant researchers. Contact with collections is typically made via email, telephone or written letter, and each library has different strategies for approaching these inquiries. Email volume has grown in the past year and all the interviewed collections now cite email as the most frequent communication method. Telephone calls are still received on a regular basis, and three libraries stipulate that callers send their questions in a written letter or electronically. Eight collections estimate they acquire nearly ten out-of-state submissions per month, while a ninth did not hesitate to claim 150 inquiries. The remaining institution, Library 8, is the only repository to record remote numbers. In July, 82 telephone calls and 147 emails and letters arrived, and in August there were 114 emails and letters and 77 telephone requests.

Remote patrons send questions from a variety of countries. The collection manager at Library 6 has had ongoing correspondence for months with someone from England looking for information on historical figures. While foreign requests are not so prevalent, inside the United States queries come from all over the country. Distribution of the heaviest inquiry types received at the ten collections is split evenly between obituaries and genealogy. Other minor requests include information on nearby military bases and records from city directories. In the case of Library 5, an author has been obtaining detailed information about the city to include in an upcoming novel.

Depending on the depth of a request, local history collections may charge for services. Three libraries conduct research for free, while seven others evaluate costs based on either the employee's time spent on a question or the number of photocopies if applicable. Charges for paper fall between 15 cents per page and one dollar for the first

page with 25 cents for each additional copy. Other libraries prefer to charge remote patrons by the services conducted, with Library 10 asking 15 dollars per half hour and granting up to two hours of research. Two collections ask a flat rate for requests, both seeking five dollars for each assignment. Library 8 places all money accrued from remote inquiries into a private account and uses this investment to purchase new materials for the collection.

Online Library Catalogs

To locate material in a library, patrons use the online catalog, successor of the now outdated card catalog. These databases store information about the library's collection, allowing someone to enter search terms (keywords) and retrieve significant matches. For local history, much of the collection is not entered in the catalog, driving individuals to reference librarians or away from the library empty handed. While bound volumes are likely to be included in the catalog, other materials and formats are entirely disregarded. For these materials, digitization can prove to be indispensable.

OCLC Online Computer Library Center is an organization that supplies member libraries access to the world's largest bibliographic database of over 48 million electronic records.[52] Seventy percent of the interviewed libraries are directly affiliated with OCLC while two libraries have no connection at all with the databases. At the county library, the online catalog is essentially one large database which incorporates the holdings of all 53 libraries in the four counties included in the regional library system. This catalog has integrated OCLC into the organization. All of this library's local history materials, with the exception of maps and photographs, are available in the library's OPAC directory.

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[52] OCLC Online Computer Library Center, Inc., "Services and Databases home," *Services and Databases*, <http://www.oclc.org/services> (27 October 2002).

The map collection at the county library has recently been indexed and will soon be added to this database as demand for these items has grown significantly. This library has recognized user needs and is evaluating methods to nurture them. While not searchable, their local history website is also being updated with a topical overview of the collection.

The cost of OCLC has dissuaded one library from purchasing its services. Although acknowledged as a useful resource, membership would only take place if permitted by the budget. Local history materials integrated with the local online catalog are presently restricted to books and tax records. The other collection without OCLC has most of their books entered in the online index. However, they would not be detected by searching an OCLC database. Implementation of an OCLC database such as FirstSearch would aid in the retrieval of documents relating to local history. FirstSearch can provide libraries a link to the interlibrary loan database and "supports research in a wide range of subject areas with well-known bibliographic and full-text databases in addition to ready-reference tools such as directories, almanacs and encyclopedias."[53]

For a researcher, a library's online catalog only supplies access to a portion of available resources. The fundamental problem lies in the actual cataloging of materials, which is why in most scenarios only books are incorporated into the database. Most local history collections with OCLC will only introduce new materials if an OCLC record already exists. Only two studied collections do original cataloging for books not found in OCLC. Library 7 has a manual card catalog for vertical files and manuscripts, but none of the interviewed depositories' manuscript collections are found in the online directories.

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[53] OCLC Online Computer Library Center, Inc., "Overview," *OCLC FirstSearch*, <http://www.oclc.org/firstsearch> (28 October 2002).

To further complicate research, two libraries' online catalogs are not updated to include all bound volumes. At Library 4 just 70% of local history books are cataloged electronically. Seven years ago, as a result of understaffing, the cataloging department began to neglect local history. Since then, no records have been added to the online index and no attempts are being made to remedy the situation. The catalog at Library 8 also fails to include many local history materials. Since the online service was activated in 1983, only books acquired after this date have had created records. All holdings prior to 1983 have never been entered and although there has been talk about retroactively adding older reserves, action has never been taken.

One collection manager made a great point when he said, "The more unique the material the less likely it is to be cataloged." Clearly local history collections contain exceptional research materials. The responsibility now falls on the collections to place these resources within reach of all who desire them.

Current and Existing Projects

Three of the local history collections have digitization projects underway and an additional three have completed projects online with nothing currently in development. Two of the libraries with previous projects have only a small amount of resources mounted on the Web. Whether or not these can even be deemed digital projects is debatable, since each of them only contain around a dozen images. Library 3's digital photos are purely for aesthetic purposes and lack captions. They are only relevant to local history if the user can identify what the images portray; otherwise they are simply floating on the library's website. No metadata exists for these images and they are not searchable in any way. Digitization has been considered at this library and one employee

was sent to a workshop. However, the techniques learned at the workshop were never utilized and it seems as though the library is not prepared to tackle a project of any substance.

The second library with only a handful of images completed digitization over a year ago and no substantial plans are on the horizon. Also consisting of photographs the images used in this library came from the local historical society, which gave the library permission to display them on the library's webpage. Captions and other information, such as photographer, exist under each thumbnail if the documentation is available. There is currently speculation about a new, similar project, but no official considerations have been made. Copyright is a concern for this library and they fear materials will be illegally printed off the Internet should they add more images. There is also no photo archivist at the nearby historical society to select new material and any future project will probably be based on the local history collection's small photograph and postcard collection.

In 1999 and 2000, Library 5 successfully digitized more than 10,000 photographs relating to local history. Also available at the library on CD-ROM, this collection is used quite heavily and includes every image the library owned at the time. Eventually materials acquired since 2000 will be added to the site, but other conceived projects may take precedence. The entire collection was outsourced and as a result the 10,000 image database is not mounted on the library website, but rather by the outsource company. This project was developed by the previous local history archivist and was funded with grant money. Potential projects are currently being discussed but no action has been taken to secure funds.

The three libraries with dynamic digitization projects have taken diverse approaches to online construction and maintenance. Situated in North Carolina, Virginia and Maryland, digitization at these local history collections has been active for more than three years. Library 1 is currently in the third year of a six year grant to digitize and provide access to the 20,000 image photo collection. A private citizen, angry about being left out of a library exhibit some years ago, is supplying this money. This individual approached the library about digitizing photos, partially for his own recognition, and offered to donate funds for a project, allowing the library to choose between a set sum of $10,000 per year or $7,000 for each of the patron's grandchildren. The library did not hesitate to opt for the latter.

Funds at the beginning of the project were used to purchase equipment and software needed to create the digital images. One person was designated to do the bulk of the scanning and she now spends all her time at the library on this task. Once images have been scanned all master files are burned to CD for storage and preservation. The chosen projects stemmed from presentations displayed in the lobby of the building, which solves part of the selection dilemma since materials are already sorted into specific topics and categories. Of the three local history collections with active digital projects this is the smallest.

As a library in a large county with a rich history, Library 2 saw the need for electronic access to their local history collection and began digitizing their photograph collection in 1997 with grant funding. Not limited to this particular library, the grant called for a project embracing materials owned by other branch libraries in the same county. The project was established in the information services department of Library 2

and according to the grant, each branch library was to supply 200 photographs for digitization. When the grant came to a close a few years ago the library realized the success of the project, and funding continues today provided solely by the library and organizations affiliated with the library. New equipment is also donated as needed.

Both the library director and the head of information services have no intention of halting production of the project. As of November 1, 2002, over 11,300 searchable records can be found on the website.[54] Work is done year round with the library supporting one full time position, who also serves as the webmaster. The rest of the work is executed by volunteers, who focus mainly on scanning the original prints. All images are produced at 600 dpi and archived in TIFF format. Representations found on the site are cleaned using imaging software and displayed as JPEGs. The display of textual materials is not a priority of the library, therefore the only text found online is a magazine series spanning 20 years of the first half of the 20th century. It does not contain searchable text. The content of this project can best be compared to that of Palos Verdes. With historical images "free from the restrictive physical limits imposed by format," these libraries have provided a great service to off-site clients.[55]

With similar funding as Library 2, the third local history collection also sponsors their online exhibits with library money. Backed by a private foundation in 1996, materials relating to African-American history were digitally created and stored on CD; however this physical product proved to be quite limiting for users. This realization led Library 10 to place the material online. In 1998, the electronic collections that had been stored on CD-ROM were transferred to the Web for better accessibility.

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[54] This number comes directly from the project homepage and is updated regularly.
[55] Theyer, "Planning the Future of History," 18.

With the exception of the web design, all digital conversion was done in-house. This includes the original creation of CD-ROMs and their subsequent placement on the Internet. Like the other libraries in this study, the majority of local history materials on the Web are photographs or other visual resources. The library also holds manuscript collections, and the collection manager stated that approximately five large collections are kept at the library. The local history manager was getting ready to attend a workshop on Encoded Archival Description (EAD) soon after this interview took place. By staying on top of new technologies such as EAD, the local history collection ensures that two or three new projects can be digitized per year.

Digitization is used at this particular local history collection to provide access for distant researchers, not for preservation. During the interview the collection manager made this point clear. When asked what the goals of creating these projects were, the collection manager responded, "We hope to reach more patrons by allowing remote access to our collections. We also would like to encourage online users to make site visits. We have an overall goal to assist users remotely through system wide projects that are a part of our family of Web sites."

Attempted Projects

Two of the five libraries where photographs or postcards make up the highest percentage of their collections have previously applied for grants and demonstrate contrasting results. Library 6 and Library 8, located respectively in North Carolina and New Jersey, felt that their image collections deserved to be on the Web. Library 6 has approximately 9,800 photographs while Library 8 estimates that between actual photos, slides and glass-plate negatives the numbers reach near 150,000 objects.

Successful in receiving a grant in collaboration with three other institutions, which included a university, the North Carolina based library was attempting a build a digital project focusing on African-American collections. The dominant ingredient of the project was supposed to be photographs, although some textual materials were to be offered by the local university. Another component of the grant was to construct online finding aids for manuscript collections using EAD. This would allow remote users to examine the contents of manuscript collections without first making a trip to the repository. Unfortunately the time frame allotted for the completion of the project was too tight and the venture failed before it hardly got off the ground. In the spring of 2002 another grant was obtained for a six month endeavor, the same time frame approved for the initial grant. Two more partners joined the same four institutions involved in the preliminary grant with hopes that this time they would be able to utilize the resources made available through the endowment. Not only did the granting organization donate money, they were also to provide for an intern to work 50 hours a week scanning images using technology contributed by the grant. This hired help did not appear until one week before the grant expired, and again the project failed.

During the interview the collection manager stated that the only positive to come from these experiences was the scanning equipment which was received. Since the scanner is available for the library staff, digital surrogates of many photographs have been created. Nevertheless, Library 6 lacks employees with the skills to build a website or database; hence the images have yet to be placed online.

When asked about her thoughts on creating a digital repository, the local history collection manager at Library 8 stated, "Digitization is a dream." The current situation in

this collection differs from many of the interviewed libraries on a variety of levels. A majority of the establishments in this study are blessed with several employees working with local history, and most of them hold degrees in Library Science or a related field. The collection manager at Library 8 had no prior training before she assumed control of the collection four years ago, and most of her time spent in the collection is done without any assistance. Time is her greatest enemy, and throughout the interview she repeatedly referred to a number of her materials as "dying." Since the greater part of her day revolves around helping patrons, she cannot devote enough time to other essential matters, specifically preservation issues.

Library 8 has applied for one grant and made an effort to try for another. The grant application was completed and submitted intended to obtain money for the digitization of glass-plate slides. These slides have been deteriorating rapidly and are one of the manager's chief preservation concerns. After being denied for the grant, which she says took too much time away from her other responsibilities in the collection, she discovered that much of the money went to fund projects by large corporations. The library tried once more to get involved with a statewide digitization project, but filling out the initial forms was rather time consuming and was never accomplished. Turned off from funding agencies, the collection manager has no intention of applying for further financial support from any organization.

Instead, the collection manager at Library 8 is striving to craft a digital project out of existing resources, or those which can be purchased by the library. Anxious about the glass-plate slides, preservation of the images contained in this format is her first priority. A scanner has been purchased by the library and the manager is hoping to begin creating

digital copies once the scanner is suitably calibrated with the computer. Although no current staff members have the capability to design a webpage to mount these images the immediate focus is salvaging the depictions on the slides. The local history manager has also enrolled in classes about preservation and at this juncture, the publication of electronic documents is less important than preservation. As digital surrogates are produced at Library 8, it is hoped that the bridge between these two philosophies will be developed so users can examine what should be spectacular resources.

No Anticipated Projects

Most local history collections have begun to notice a growing trend in the use of their materials, headed by the surge in genealogy. Collection managers, combined with other library employees interviewed, stressed how a digital presence on the Web would help their institutions. Eight of the ten libraries selected for this study had already built an online collection or at least had plans for securing money and staff to begin a project. The only two libraries with no future strategies were Library 3 and Library 4, the two repositories that had the minute online photograph collections.

Both of these collections are not in the dark about digitization. They are aware of the process and the benefits it can have, but no steps have been taken to write a grant or truly visualize a project's capabilities. These libraries have their own reasons for not getting involved, but both stated that the library directors have mentioned digitization in the past. In the case of one library, there is clearly not enough staff to provide the necessary work hours. This is the same institution that worries about copyright and fears material could easily be stolen from the Internet. At this particular library, extra money is collected by charging for copies. This applies to patrons who visit the collection in person

and remote users soliciting information from the local history room. If requested materials were made available electronically, the library would lose this source of income. While it would not amount to a sizeable loss, it is a concern.

Even though this collection is comprised of roughly 3,000 books and 1,500 city documents, there is not a significant quantity of material they consider rare or distinctive. Overshadowed by the city's historical society, found on the same block as the library, it is commonly believed that the society is a better functioning repository.[56]

Although visitors have appealed for online materials, the second library in this category has a more impending crisis to concentrate on before any digital preparations can be made. Library 3 is the only establishment that fails to have a centralized local history room. All items related to local history are behind glass shelves, some with broken locks, stretching across one floor. The city's library foundation is funding the construction of a new local history room, but as of this interview no blueprints or solid outlines had been formulated. The local history collection is optimistic that the foundation will sponsor a digital project in the future; however nothing will be done until all the materials are organized in one location.

When digitization is finally conceived, the labor will most likely be done by current personnel. One staff member has attended workshops on digitization thus far, and they hope to place the contents of the inventory binder online soon. Any catalog that goes on the Web would not be searchable, but it would ease the work of the reference librarian who has the chore of locating the scattered resources.

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[56] For example, no manuscript collections are housed in the local history room because the historical society often takes precedence when acquiring unique materials.

Projects in Development

Between those libraries that have attempted to forge an online existence and those that view the possibility of digitization as a distant accomplishment, there are the local history collections that are enthusiastic about the concept and are trying to gather enough steam to push their libraries ahead. Two interviewed libraries that have not yet been mentioned see the value of digitization and are working to put together relevant projects. Another has one completed project and aspires to create others, while a fourth is pushing to change the direction of a current project.

For two years Library 7 has struggled to design a digital project. More than a year ago the library lost staff and money set aside for digitization and since that time the local history manager has been searching through other methods of funding. Discussions have been held with private citizens in addition to applying for an IMLS grant. Presently the local history collection only receives funds from the local library foundation, and this money is designated for the purchase of books. The foundation has made clear that no extra resources are available to support a digitization project. The local history collection will use grant money to purchase new equipment but no additional staff will be hired. The first batch of materials will presumably be outsourced until the library is capable of taking over. Although outsourcing might be a more efficient way for some libraries to create electronic materials, there is not enough funding at Library 7 to consistently pay an outside vendor. Therefore, the current local history manager will be trained to use equipment so that digitization can take place within the library.

If a project is undertaken, this library faces the problem of having their website hosted through the city's government webpage. This does not allocate the proper amount

of web space to maintain an undertaking of any significance. Before a project can be commenced they will have to obtain their own website, which they optimistically expect will happen in the next year.

The initial project is set to revolve around the 3,000 item postcard collection, one of the most utilized portions of the local history department. Other considerations for digitization include the city directories and rare or highly requested printed materials in poor condition. Allowing electronic retrieval of the directories would increase access and limit the amount of physical damage to the volumes, indicating that digitization would be done to serve as both a research and preservation mechanism. Full text local history books would also be considered for a project.

The county library included in the study is developing a digitization project geared towards the entire region. Working with the county library association, Library 9 is in the planning stages of what is hoped to become a large countywide digital local history project. The county boasts more than two dozen public libraries, many which possess local history materials relating to their specific cities and towns. Library 9 acts as the county's primary repository for resources about the county as a whole and has been interested in digitization for some time. Plans for the project emerged after one county library allowed a stranger to enter their local history room and "digitize" maps and photographs with a personal camera, intending to mount the images on a private website. The library association then decided to assume control of any potential project.

An inventory of materials at various libraries has begun, and an assessment of which libraries would like to contribute has been underway for months. Participation will be decided by each library. One library has expressed that they will not donate their

materials for free and do not want their photo collection mixed with those from other local history collections. The county project is still in the beginning stages and a digital committee is being established to oversee all activity relating to digitization.

On its own, Library 9 had originally proposed the online indexing of their newspaper holdings but this was soon cancelled. Since lots of private research is conducted, especially relating to regional architecture, there was also a proposed digitization project highlighting the history of houses. Lately there has been an interest in digitizing segments of the microfilm collection, but the library hesitates to begin any ventures until a local digitization committee is formed. When funding becomes available for the enterprise, online resources will mainly consist of photographs, postcards and other visual materials. Text encoding would only be adapted for one special collection; however, legal issues plague the library. Regarding a 62 volume reference work on the history of the county, the rights and original copies were sold to an outside institution. Repeated attempts by Library 9 to assume ownership of these works has been denied and only a set of copies are present in the local history room. There is great doubt that permission to digitize these copyrighted materials would be approved.

Libraries 2 and 5 have demonstrated their willingness to provide remote users electronic access to photograph collections. The differences lie in their current activity, as Library 5 has not updated the 10,000 item website since its construction more than two years ago. Numerous new projects in varying formats are being considered at this library, the fate of which lie on grant providers. Future digitization may include microfilm holdings of the local newspaper, information and pictures of significant area buildings, microfilmed city directories and a 109 year span of tax records. For preservation reasons,

newspaper clippings contained in the vertical files may also be digitized as the paper rapidly deteriorates from being highly acidic. All prospective projects will be seeking aid from grant agencies at the state level. If rejected, Library 5 will turn to federal grants and finally private donations. Unless enough money is secured to acquire new equipment and additional staff, all further digitization will be outsourced.

"Public consumption" is the objective of the expansive digital repository created by Library 2. Fortunately the website continues to expand the diversity of images it contains, but there are no structured boundaries to the contents. New material is simply added to the database, requiring patrons to use a keyword search to located desired illustrations.

To create a digital project with a solid foundation, the local history administrator has suggested a new exhibit separate from the current operation. An historical road markers project is now in development and the eventual product will have three distinct components. Photos of the markers, information regarding the site's history and an image of how the location looks today will present viewers with a complete history of each locality. While technically independent of the larger project, the historical markers display will be hosted by the same Web server.

Conclusion

There is definite enthusiasm in local history collections about digitization; however, many of the interviewed libraries are unclear about many aspects related to a project. The notion of future maintenance and potential problems arising from new technologies was not addressed by any institutions. For a library to spend time and money on digitization without considering the consequences that might lie ahead is

careless and problematic. Before local history collections initiate a project they need to weigh how their holdings will benefit from being digitized against the price of taking action.

Based on a collection's overall use, it is clear that some of these local history collections should not attempt to digitize their materials. Judged by the number of in-house patrons per month, Library 3 and Library 4 do not see enough use of their resources to warrant a digital project. In addition, Library 4 does not own a large number of unique materials, so spending the time and money to digitize will not provide local or remote users information that cannot be found in other repositories. The local history manager had stated that her first choice for a project would be the digitization of newspaper clippings, which are already on microfilm. This is not recommended since microfilm is a stable preservation medium and the library does not have the staff or funding to potentially migrate digital files in the future.

Library 3 is currently struggling to help in-house users because they do not have a centralized local history room. Through their small online photo collection, they have also demonstrated a lack in knowledge about secondary imaging costs such as maintenance and metadata creation. This repository also believes their newspaper clippings should be online, but they overlook the costs and relevance of such a monumental chore.

A collection valuable to local patrons does not automatically rationalize digitization. The county library definitely has a high-quality collection with materials that cannot be found in other nearby libraries. The value of their resources is high among county residents, but the small amount of remote inquiries signifies there is small demand

for information outside this area. Since most of their materials are bound volumes, and since these have all been entered into the regional system online catalog, those living in nearby counties have the means to access the collection with only a short drive. The intended collaborative effort at the county library shows determination to get involved with digitization, and the anticipated goals of a countywide project are more reasonable than individual branch library projects. As separate entities, most local history collections fail to generate the necessary value to justify digitization. By working together and reducing individual library expenses, a project can become more feasible.

Another conclusion that can be drawn from this study is that libraries need to understand that although they possess materials worthy of digitization, sometimes the costs are too high. Linda Colet states that, "Managers may also want to consider factors that could restrict a project, such as a lack of staff resources, a lukewarm or negative response to technology, copyright law, and budget."[57] For example, Library 8 is facing a crucial problem with fading images on glass plate negatives. Since the staff is comprised of only one full time position, the time that would have to be devoted to scanning is simply non-existent. Even with a new scanner purchased by the library, without another capable employee to alleviate some pressure, the conversion of the slides to digital files may unfortunately never happen. Library 8 exemplifies the notion that wanting and even warranting digitization does not always lead to a project.

So what does it take to create a successful digital project? There are a variety of factors local history collections need to consider. Library 1 seems to be on the right track, although when their grant ends it is questionable whether they will be able to continue digitization unless they secure funds through other means. Before the money is gone this

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[57] Colet, "Planning an Imaging Project."

institution should focus on creating metadata for their images to allow searchability by researchers unfamiliar with the library's scope of material.

Library 5 and Library 10 demonstrate how digital projects can be produced by institutions of varying size. The local history collection at Library 10 has the composition of a perfect candidate for digitization. Not only is this library located in the largest city, they receive an enormous amount of in-house users and off site requests. Their collection is the largest and broadest of all interviewed libraries, and because they focus on specific issues such as migration, they have developed a highly valuable collection. Reiterating the claim that preservation is access, they try and make materials that cannot be physically handled available online. For their initial project they employed a contractor to perform digitization within the library, thereby teaching the employees how to create a successful digitization project. This illustrates the concept of the hybrid approach discussed earlier, and proves how an institution committed to future digital endeavors can "gain technical experience in quality control while also rapidly getting the project under way."[58] Library 10 now does all their work in-house with library money, which may explain why only a small amount of texts have been digitized and why they do not appear to be heavily encoded.

For local history managers interested in outsourcing materials, Library 5 presents a good example. By supplying a vendor with only images in relatively good condition, this library greatly reduced their costs. No equipment needed to be purchased and staff did not require training. In the future this library will likely produce more projects through outsourcing, although the selection of material needs to be evaluated. Similar to Library 4, Library 5 has debated digitizing their newspaper microfilm collection. While

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[58] Ibid.

this collection may receive heavy use, the subject matter is local and probably does not get handled by distant researchers. The expense of transferring this information to an electronic format may be better spent on a project with larger applications.

Two libraries with comparable collections, Library 6 and Library 7, have the potential to develop worthy online collections if resources become available. Through previous failed grant opportunities Library 6 is in possession of a scanner and has already created digital images. However, they face the problem of employing staff with the knowledge to mount these files on the Web. Library 7 is applying for an IMLS grant to help with funding, but they should probably consider outsourcing their entire postcard collection instead of spending more money to achieve these goals in-house. With their large manuscript collections, these two institutions may consider using funds to create EAD structured finding aids rather than photograph collections. If library objectives are to increase awareness and use of materials, presenting researchers with access to manuscripts could be more beneficial.

The findings of this study indicate that the size of a collection may not always influence the potential for digitization. Library 2, with one of the smallest collections visited, has spent the last five years developing a comprehensive online photo gallery. Success has been maintained by keeping costs at a minimum. The employment of only one staff member and the donation of equipment when needed allow this local history collection to set an example for smaller institutions that can operate on a similar budget.

In general, local history collections appear to be over zealous when contemplating digitization. While many understand that they do not possess the proper resources to digitize, there seems to be the notion that all collections deserve digital access. Libraries

fear that if they do not digitize they will fall behind other repositories in the digital world. Since libraries can expect to see no reimbursement from such a large investment, digitization should only be executed by local history collections that have worthwhile materials and enough funding to support an electronic collection.

Appendix A.

Interview Protocol

1. How large is your local history collection? Approximately what percentage are books, photographs, manuscripts, etc…?

2. How large a geographical area is this collection designed to serve?

3. What audience (student, teacher, private researcher, genealogist) does your local history collection most often serve?

4. On average, how many researchers use the collection daily? Weekly? Monthly?

5. Are inquiries about the collection made from researchers in other parts of the state or country? If so, what types of materials are they looking for?

6. Is your local history collection accessible via your online library catalog? Is the library affiliated with OCLC?

7. Do you think having local history collections available online would be a helpful resource?

8. Are there currently any online exhibits on this library's website? Are they relevant to local history?

9. Have requests ever been made by users of the collection or outside researchers to develop a digital local history project?

10. Has the library ever considered digitizing parts or all of the local history collection?

    10a. Has action been taken to engage in a particular project?

    10b. How far along in the digitization process is the library?

    10c. How did this project come into existence? Who (donor, Friends of the Library, director) sponsored it and/or had the vision to pursue it?

    10d. What portion of the collection is being digitized? What types of materials (manuscripts, photos, etc…) are involved with the project?

    10e. What models (other libraries, academic institutions) has this library looked to for direction?

    10f. What goals does the library hope to satisfy by digitizing this collection?

10g. How is the library funding this project?

10h. Are materials being digitized in-house or are they being outsourced?

Appendix B.

Consent Form

Introduction
This research study is being conducted to gather information for a Master's Paper by Matthew Kern at the School of Information and Library Science at the University of North Carolina at Chapel Hill. This project concerns the use of local and county history collections and the application of digital preservation techniques to allow the collections to be accessed online.

Purpose
The purpose of this study is to analyze local history collections and determine what measures are being taken to make these collections digitally accessible via the Web. While local history collections can be a valuable resource to investigators, they are often times difficult to find and obtain due to the proximity of the researcher and preservation issues which may inhibit the use of the collections by the library.

For this project 10 libraries, all along the East Coast, have been specially selected due to similarities in population, regional history and age. These criteria were used in order to exclude any biases that may occur from libraries of different sizes and patronage.

Participation
By participating in this study you will be helping the field of library science by providing information about your library's practices in regard to your local history collections. This information will be beneficial because of the recent demand of researchers to locate both rare and educational materials on the Internet. This interview will take close to an hour to complete for each participant.

Privacy
Your privacy will be respected throughout this study and the subsequent Master's Paper. Neither your name nor the name of your library will be used in the written product without your prior consent. All notes recorded during your interview will also be kept confidential.

Your Rights
You have the right to decide whether or not to participate in this study. If you choose not to participate you will be treated no differently. If you consent to the interview, you have the right to not answer specific questions, and to stop the interview at any point.

Institutional Review Board Approval
This study has been approved by the Academic Affairs Institutional Review Board (AA-IRB). For questions regarding your rights in this study, please contact Barbara Goldman, Chair, AA-IRB, at aa-irb@unc.edu, or by phone at 919-962-7761.

For other questions concerning this study, you can contact me at kernm@email.unc.edu, and/or my Master's Paper advisor, Dr. Helen Tibbo, at tibbo@ils.unc.edu.

I have been given the chance to ask any questions I have about this study, and they have been answered for me.

I have read the information in this consent form and I agree to be interviewed for the purposes of this study. I am aware that there are two copies of this form. I will retain one copy and return the other to the investigator.

_____   _____

    (Signature of Participant)   (Date)

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