2003 IMLS National Leadership Grants

Face Sheet

1. Applicant Organization
   University of Utah Marriott Library

2. Institutional Mailing Address
   295 S. 1500 East

3. City
   Salt Lake City

4. State
   UT

5. Zip Code
   84112

6. Web Address
   www.library.utah.edu

7. Name of Project Director/Principal Investigator
   John Herbert

8. Business Phone of Project Director
   (801) 585-6019

9. Project Director Mailing Address
   295 S. 1500 East, Room 418

10. City
    Salt Lake City

11. State
    UT

12. Zip Code
    84112

13. Fax Number of Project Director
    (801) 585-5549

14. E-mail Address of Project Director
    john.herbert@library.utah.edu

15. Name and Title of Authorizing Official
    Vincent A. Bogdanski - Co-Director OSP

16. Business Phone of Authorizing Official
    (801) 581-3008

17. Sponsoring institution if applicable (e.g., municipality, state, or university)
   ☐ check if this entity will manage funds if an award is made. Name and address:
   University of Utah - Office of Sponsored Projects, 1471 E. Federal Way, Salt Lake City, UT 84102-1821

18. Is the applicant organization university controlled? ☐ yes ☐ no

19. For museum applicants, Non-Federal operating budget for the most recently completed fiscal year $ __________

20. Project Title
    Utah Historical Newspapers

21. AMOUNT REQUESTED
    $ 469,514

22. Amount of Matching Funds
    $ 565,857

23. Grant Period
    (Starting Date) 10 / 01 / 03 — 09 / 30 / 05 (Ending Date)

24. In the space below, include names of any organizations that are official partners of the project.

   Harold B. Lee Library, Brigham Young University, Provo, UT
25. Check governing control of applicant (select one)  
☑ State  ☐ County  ☐ Private Non-Profit
☐ Municipal  ☐ Tribal Government  ☐ Other, please specify _______________________________________________________________________

26. Check Type of Organization (select one)
☐ Public Library
☑ Academic Library
☐ School library or school district applying on behalf of a school library or libraries
☐ Special library
☐ Private non-profit library
☐ Archives
☐ Library consortium
☐ Library association
☐ State library agency
☐ Planetarium
☐ State museum agency
☐ Aquarium
☐ Institution of Higher Education
☐ Arboretum
☐ Art museum
☐ Children’s/youth museum
☐ General museum*
☐ Museum library
☐ Historic house/site
☐ History Museum
☐ Natural history museum
☐ Nature center
☐ Museum organization
☐ Science/technology museum
☐ Zoo
☐ Specialized**
☐ Other, please specify _______________________________________________________________________

27. Employer identification number/tax ID number  876000525

28. Check Type of Project (select one)

For Libraries:
☐ Continuing Education,
Curriculum Development, and Training
☐ Research and Demonstration
☑ Preservation or Digitization

For Museums:
☐ Museums Online
☐ Museums in the Community
☐ Professional Practices

For Library and Museum Collaborations:
☐ Library and Museum Collaborations

*A museum with collections representing two or more disciplines equally (e.g., art and history).

**A museum with collections limited to one narrowly defined discipline (e.g., textiles, stamps, maritime, ethnic group).
Application Checklist

Use this checklist to help you arrange the sections of the application in the correct order. This form is available as a fill-in form on the IMLS web site (see information on electronic forms, page 4.2).

- Face Sheet
- Application Checklist
- Abstract
- Narrative
- Schedule of Completion
- Project Budget
  - Detailed Budget
  - Summary Budget
  - Budget Justification
- Current, Federally Negotiated Rate for Indirect Costs, if applicable
- Specifications for Projects Involving Digitization, if applicable
- Partnership Statement, if applicable
- Proof of Non-Profit Status, if applicable
- Applicant(s) Organizational Profile
- Assurances/Certification of Authorizing Official
- Resumes of Key Personnel (no longer than two pages per person)

- Attachments, as appropriate
  - Report from Planning Activities (e.g., Needs Assessments, Digitization Plans)
  - Products or Evaluations from Previously Completed or Ongoing Projects of a Similar Nature
  - Other Appendices A - E
ABSTRACT

Utah Historical Newspapers

Led by the University of Utah and Brigham Young University, the Utah Academic Library Consortium (UALC) proposes a newspaper digitization project that will engage the lifelong learner and provide an alternative to existing newspaper digitization methods. Based on a prototype created at the University of Utah, the new project plans to perfect and expand the technology and process in three main ways: further develop the model to integrate into a statewide, distributed historical newspaper collection; develop greater understanding of the project’s constituents; and disseminate the project throughout the Intermountain West so that others can implement a similar design.

With grants from the Library Services and Technology Act (LSTA), the University of Utah has built an initial collection of 30,000 pages from three newspapers and will continue to slowly expand the collection during 2003. With this grant proposal to the IMLS, we will accelerate the expansion of the collection, distribute the content across four different locations in Utah, and aggregate them into a single connected collection. In so doing we will make the collection a viable research and learning tool to the general public. This promises to be the first of its kind - a distributed collection of historical newspapers, not only of great interest to historians and professional researchers, but also with broad appeal to the average citizen.

The technology we have developed is working well with the volumes we have processed to date, and we believe that it will continue to scale well as we expand the collection. The technology platform we have developed with our partners is unique, delivering high quality images from microfilm and print, a robust database, and a powerful search engine at a cost that enables collections to be built incrementally. This proposal will distribute the expanded collection across the four universities of the Mountain West Digital Library - a cooperative initiative of the Utah Academic Library Consortium that links digitization centers at the four largest universities in the state. The collections of the four centers are aggregated at the University of Utah, allowing all digital collections in the state to be searched from a single website. The innovative and cooperative nature of the Mountain West Digital Library keeps Utah in the forefront of creating digital collections with broad appeal.

The promise of online historical newspaper research is here. Now is the time to develop the model for building large, distributed collections, using state-of-the-art tools to open up historical newspapers to everyone, and to create lifelong learners. The Utah Historical Newspapers Project will be the model to create a large-scale, distributed, digital collection of historical newspapers, and will demonstrate its value to other potential participants.
NARRATIVE

NATIONAL IMPACT

Newspapers are a primary source of historical information and are useful to scholarly researchers and laypeople alike. They are a major publishing source, representing a wide variety of national, regional, and local voices. Historical newspapers are immensely popular, particularly with genealogists and historians, but they are only accessible in central locations to those diligent enough to browse reels of microfilm or read aged print copies. The collections are usually organized by date, and indexes are rare; where indexes do exist they are neither standardized nor searchable in an expedient way. With time and effort, these research methods can be effective, but they are never efficient. Traditional search methods simply are too slow and difficult.

There are digital collections of large daily newspapers available online today, but they usually hold only the most recent issues whose original form was digital. The recently completed digitization of the New York Times and Wall Street Journal in the ProQuest Historical Newspapers product has brought easy, though fee-based access to two of the nation’s most important historical resources. Discussions with ProQuest representatives have confirmed that small regional newspapers are unlikely to be digitized because of their low commercial return. This is unfortunate because regional newspapers contain an enormous amount of local news and information, as well as unique perspectives on larger, national issues. They reflect local conditions and are the only place where local issues are covered. There are a handful of digitized small newspaper collections, but they are operated by subscription services, so access comes at a price.

Numerous non-commercial attempts at digitizing newspapers have been made over the past ten years, mostly at academic institutions around the world. In most efforts processing and storage costs, and the lack of good optical character recognition (OCR) technology have outweighed the achievements. Another major newspaper digitization process has been developed by Olive Software Inc. and is being marketed by OCLC. But a new process and technology recently prototyped by the University of Utah present a viable and affordable digitization alternative to cultural heritage institutions nationwide, and an efficient method of searching and browsing historical newspapers. In particular, the process developed in Utah can be used incrementally, making it affordable for both small and large collections alike, and the technology supports many different digital formats, not just newspapers. We believe that with our new process and its broad implementation “citizen historians” will utilize our website and others like it as their own in-home research tool. In this way we will bring to life the 21st Century Learner.

21ST CENTURY LEARNER INITIATIVE

This project delivers results aligned with the 21st Century Learner Initiative, one of IMLS’ highest priorities. In reviewing Beverly Sheppard’s (Deputy Director - IMLS) discussion of this initiative (http://www.imls.gov/pubs/pdf/pub21cl.pdf), we find that our project supports the initiative in two fundamental ways.

1. Our collection’s content will be based upon needs of a wide variety of library patrons.
2. Access to our collection is via the Internet, and we utilize keyword searching.

The general public can become “lifelong learners” through this easy-to-use service. Important topics that appeal to a large number of library patrons include history of all kinds (national and local news, politics, business, culture, sports, advertising), and genealogy (births, marriages, deaths), a topic of special interest in Utah. We believe the number of people engaged in historical newspaper research will increase significantly as a result of this project.

In summary, the current conditions are:

1) Traditional historical newspaper formats (microfilm, print) have limited research to those who have the time, energy, and proximity to work with them.
2) Digital newspaper collections are slowly becoming available online, are immensely popular, but are limited to large dailies.
3) The small number of digitized regional newspapers is run by subscription services.
4) Large regional historical collections have not yet been developed because of the high cost of processing.

Conclusions:

1) There is a tremendous demand for large digital collections of historical newspapers.
2) Cultural heritage institutions are seeking an affordable, flexible process and the technology to digitize their own newspaper collections.
3) Now is the time to leverage the prototype developed by the University of Utah, and develop it into the model for a large digital collection of historical newspapers.

ADAPTABILITY

The newspaper digitization method developed at the University of Utah offers an affordable and incremental process that is adaptable to other institutions and other regions. It utilizes a two-pronged approach that may be adopted as a complete solution, or can be split to integrate with other systems.

1. A vendor that produces open source image files and XML-tagged metadata performs the scanning and processing of microfilm and print newspapers in the Utah model. Other vendors across the nation could just as easily produce similar data for import into a variety of databases.

2. A relatively inexpensive digital collections database, already in use at nearly 100 institutions across the nation, is utilized for managing and presenting the newspapers. This database handles a variety of other formats, including: photographs, books, maps, documents, 3D objects, and streaming media.

The newspaper digitization method is also adaptable in size. Libraries and other cultural heritage institutions generally do not have funding to digitize large runs of newspapers. The method developed in our model can be implemented in an incremental manner, i.e., small institutions can digitize only a few years of a local newspaper, with a very small investment.

We expect this project to integrate well with the Mountain West Digital Library (MWDL), created by the Utah Academic Library Consortium (UALC). The MWDL is a cooperative digital library designed to support the digital efforts of all cultural heritage institutions in Utah and Nevada. Implemented in early 2002, the MWDL currently consists of digitization centers at the libraries of the four largest universities in Utah:

University of Utah (Salt Lake City)  Brigham Young University (Provo)
Utah State University (Logan)       Southern Utah University (Cedar City)

The mission of the centers is to create their own digital collections, and to support partner institutions by providing scanning and hosting services. An aggregating server installed at the U of U harvests metadata from the four centers, providing searching capability across all the digital collections in the state from a single website. At this moment more than 50 collections from academic libraries, public libraries, museums, and historical societies are aggregated for a total of nearly 90,000 objects. UALC membership extends to the state of Nevada, and during 2003 we expect to add the two main campuses of the University of Nevada (Las Vegas and Reno) as digitization centers, and will aggregate their
collections as well. For an overview of the Utah Academic Library Consortium and the Mountain West Digital Library, please see the Organizational Profile below.

DETERMINE

BACKGROUND AND NEED

In the 1980's the Marriott Library at the University of Utah received a grant from the National Endowment of the Humanities (NEH) United States Newspapers Program to collect, catalog, and microfilm Utah newspapers. The project was successful and identified over 920 newspapers\(^3\) in the state. More than a decade later the idea of digitizing the newspapers arose, prompted in large part by inquiries from community libraries around the state that were responding to increased use of their collections and the desires of their patrons. Increased expertise with other digital formats at the University of Utah and at BYU began to make newspaper digitization seem possible.

In 2001, the Marriott Library at the University of Utah was awarded a $93,000 Library Services and Technology Act (LSTA) grant to digitize thirty years of three weekly newspapers. The goals of the grant were to develop a newspaper digitization method utilizing existing digital presentation and management technologies, and to post a significant portion of digital newspapers on a website. Issues of cost, server space, and file format were to be addressed during this year-long project.

We worked with two commercial partners to create a new process for digitizing historical newspapers. Excellent optical character recognition (OCR) software was brought to the project by iArchives Inc. of Orem, Utah. The company has also developed XML-tagging processes especially for newspapers. DiMeMa Inc., a University of Washington spin-off, developed the CONTENTdm digital collections software suite that has been used at the Marriott Library for over three years. It manages practically all types of media: books, maps\(^4\), photographs, documents, 3D objects, streaming media, and, as a result of the partnership with the University of Utah, newspaper collections. Its architecture includes server software that runs on Windows®, Linux, and UNIX Solaris operating systems, and workstation software that may be used within the same institution or remotely. The four digitization centers of the Mountain West Digital Library each run CONTENTdm servers and are successfully supporting the digital collection creation of remote partner institutions.

Microfilm newspapers were scanned and processed by iArchives Inc. Full text was OCR’d, articles were zoned and certain data were re-keyed, based on specifications requested by the University of Utah. PDF image files and XML-tagged metadata files were delivered to DiMeMa Inc., where they were batch-imported into the CONTENTdm database format, and XML wrapper files were automatically generated to tie together the pages of discrete newspaper issues. Entire collections were then shipped to the Marriott Library, where they were mounted on the university’s server by library staff. (Please see the Specifications for Digitization Projects for further technical details.)

The project resulted in a publicly-accessible website comprising thirty thousand pages from approximately thirty years of three newspapers. They are searchable by full text keyword, and by article titles, dates, weddings, engagements, and death notices. Newspapers may also be browsed by year and issue date. Both the search and browse methods result in the articles or full pages shown in context to the other articles and pages of the issue. Because the PDF images contain hidden text, secondary searching is available from the Acrobat toolbar, and found words are highlighted. To view the

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The initial collection was launched in December 2002, and has yet to be publicly announced. Nevertheless, word of our website has spread to the state’s library community and the responses we’ve received have been immediate and positive. Librarians from the communities of the three newspapers have written to say how delighted they are with the improved access, and are asking when they can expect to see more of their newspapers digitized. Other communities, upon hearing that we are now digitizing from hard copy, have begun finding those very rare issues. The Weber County Library, for instance, produced a paper run of the Ogden Standard-Examiner (one of the primary papers in the state) from 1879-1956. Dixie College in southern Utah located a paper run of the Washington County News from 1908-1970. We estimate that there are a potential 3-5 million pages of historical newspapers in the state that await digitization.

In November 2002 the Utah Academic Library Consortium, led by the Marriott Library, was awarded a second LSTA grant to continue digitizing newspapers. This phase of the project has recently hired a project director who will seek additional funding, and conducts a formal survey to update the NEH-funded inventory of Utah’s historical newspapers. Cooperative support was unprecedented for the state’s LSTA program, with nearly $100,000 in matching funds raised from the UALC, Weber County Library, Murray City Library, and the Grand County Library. This grant period runs from January – September 2003.

GOALS AND OBJECTIVES

We have organized our IMLS project around three overall goals and further defined them with a number of objectives under each.

GOAL 1: DEVELOP THE MODEL FOR A STATEWIDE, DISTRIBUTED HISTORICAL NEWSPAPER COLLECTION.

Objective: Perfect our technological solution by testing its scalability and improving the user interface.
The technological solution we have developed for digitizing newspapers is an excellent working prototype. With it we have achieved our goal of digitizing a significant collection of newspapers, making them accessible to the state and beyond in a manner that is efficient and effective. But we must further develop and perfect the prototype. The sheer size of the IMLS proposal will seriously test the scalability of our technology. While we anticipate no serious problems with this expansion, we know of no precedent for a large-scale newspaper collection distributed across academic institutions. We intend to improve the design of the user interface, in particular developing a second-generation viewer that may eliminate the need for any plug-in software. We also hope to improve the filters used on the OCR text to reduce the size of the searchable text file.

Objective: Integrate the project with the Mountain West Digital Library
The current Utah Digital Newspapers project resides on the servers of the Marriott Library. With BYU’s involvement in this proposal, some of the newspapers will be loaded on their servers, giving us a chance to develop a newspaper interface for the Mountain West Digital Library (MWDL). While the MWDL already aggregates collections from the four sites in Utah, the sheer size of newspapers will probably require the development of a new interface so that the search results do not simply overwhelm the user. Newspaper collections will eventually be loaded on each of the distributed servers of the MWDL.

Objective: Explore participation in OAI metadata harvesting projects
The CONTENTdm technology installed for the Mountain West Digital Library is effective for the goals of the consortium: large and small cultural heritage institutions are able to build digital collections with minimal investment; all institutions retain control and identity of their collections; and the aggregating server harvests metadata for a single point of search without precluding the ability of each institution to create their own project designs and search interfaces. However, we are well aware of the importance of interoperability with other digital projects. CONTENTdm servers, and consequently our aggregator, can now function as OAI data providers, and we intend to become involved
with established OAI projects such as the universities at Illinois and Michigan.

The MWDL is already utilizing metadata standards recently developed by the Western States Digital Standards Group, a working group of the IMLS-funded Western Trails Project. The working group consists of representatives from academic and historical institutions in eight states (Utah, Colorado, Nebraska, Minnesota, Kansas, Arizona, New Mexico, and Wyoming), so this set of data is in place on a region-wide basis. The full report on the metadata best practices can be viewed at http://www.cdpheritage.org/resource/metadata/documents/WSDCMBP_v1-2_2003-01-20.pdf.

Objective: Expand the current collection by adding content to each of the distributed sites
Utah has a unique place in the 19th century history of the American West. It played an important role in the country’s westward expansion, fought for and won its own statehood, was settled through the “pioneer experience,” and faced unique religious issues. Indeed, as exemplified by the Golden Spike, it was the Crossroads of the West - travelers in all directions passed through Utah and made history here. Numerous ethnic groups settled in Utah, and they often published newspapers in their native languages, including Danish, Dutch, Greek, Japanese, Norwegian, Swedish, German, and Spanish. Utah also had unique perspectives on the early 20th century. During WWII, Utah played a large role in the war effort, including housing fourteen military bases because they needed to be moved inland from the West Coast. Utah’s west desert also served as the home of the Topaz Japanese internment camp, and the crew of the Enola Gay trained in Wendover. All these issues are of great importance to both historians and Utahans in general. Moreover, Utah is a fairly small state with a relatively small number of newspapers published during these times. To develop a digital collection of our historical papers is not a far-fetched goal; it’s a distinct possibility with today’s technology.

An important part of this historical collection will be the Deseret News, which began publishing in 1850 only three years after pioneers first settled the Salt Lake Valley, and which is still one of the two major daily newspapers in Salt Lake City. In the late 19th century, East Coast newspapers gathered much of their information about Utah from the Deseret News. As part of this grant, BYU will be digitizing the first fifty years of the Deseret News, a major addition to our collection that will certainly create a sharp increase in the general public’s interest.

GOAL 2: DEVELOP GREATER UNDERSTANDING OF THE PROJECT’S CONSTITUENTS TO BEST LEVERAGE THE MODEL AND ITS CONTENT

Objective: Gather “customer-related” information about newspaper researchers and how our new tools will benefit them.
This research will include investigating the needs of traditional newspaper researchers, and new researchers drawn to historical newspapers by our tools and website. We know very little about these new “citizen historians” because until now their involvement in newspaper research has been very limited. Research tools have been too difficult to use to generate a lot of interest for them.

Objective: Gather “client-related” information about other institutions and their newspaper collections.
Coordinate the project’s activities with newspaper publishers throughout the state.
The creation of the Mountain West Digital Library has helped academic libraries to forge closer ties with other cultural heritage institutions around the state. By providing scanning, training, and hosting services we have developed professional relationships with librarians, archivists, and curators, and the trust built through those relationships will help us to gather information about those institutions and their newspaper collections.

On March 22, 2003 we are scheduled to give a presentation to the Utah Press Association at their annual conference in Mesquite, Arizona. Our presentation will outline the newspaper digitization project and solicit their support for our efforts. We want to be sure that today’s publishers are involved with us and buy into our vision of integrating Utah’s newspapers into a viable collection. This annual meeting will provide an excellent venue for our project to stay in touch with publishers and insure our efforts on digital collections are well coordinated.
Objective: Prepare an “Impact Report” on the project’s impact on all its constituencies.
In addition to the required reporting, we will also produce an Impact Report of the project on its constituencies. This will combine the inputs from the various surveys in the prior two objectives in such a way as to give a greater understanding of the project’s impacts and drawing new conclusions considering all parties involved. The need for this combined report stems from the analysis we will do of each of the three constituent groups: patrons, libraries, and publishers.

GOAL 3: DISSEMINATE THE PROJECT THROUGHOUT THE INTERMOUNTAIN WEST SO THAT OTHERS CAN IMPLEMENT CUSTOMIZED VERSIONS OF OUR MODEL.

Objective: Develop and publish a Project Handbook.
During 2004, we will develop a handbook of the processes we’ve followed to develop the collection. It will contain details on our approach, rationale, methodologies, systems, technology, fund raising, costs, project management, lessons learned, and other topics of interest. This handbook will be disseminated to any and all interested parties during 2005. We will also add a link to a PDF file of the Handbook on our website.

Objective: Develop and administer a Training Program
Thirteen institutions around the Intermountain West have committed to participate in a three-day training program that will be held in Salt Lake City at the end of the grant period. The names of these institutions and their letters of commitment may be found in Appendix D.

Objective: Provide technical support and project management advice.
The University of Utah and Brigham Young University will commit to providing support and advice for at least one year following the completion of the IMLS project. This support will come in the form of telephone and email correspondence to any of the institutions who have participated in the training program. This will help insure that “satellite” projects are completed successfully.

IMLS PRIORITIES FOR PRESERVATION AND DIGITIZATION PROJECTS
Our project aligns well with the IMLS priorities for Preservation and Digitization Projects.

- “Take a leadership role in developing learning communities. Preserve and enhance access to valuable library resources.”
  - We will transform under-utilized newspapers, on microfilm or in hard copy, into a new, viable, and easily accessed online collection, and provide an easy-to-use research and learning tool. The collection will have very broad appeal to newspaper researchers of all kinds, and will be instantly available to anyone with Internet access.

- “Develop model projects and best practices for digitization. Exemplify or help to develop standards and best practices for the creation and management of digital collections.”
  - Our technology and processes have been proven to work, and are in use today. We have high quality images processed at a low cost, and a small collection is available online. Now we need to leverage this into a collection that has value to a wide variety of patrons. It is easily transportable to other institutions, easily expandable to accommodate practically any size of collection, and easily linked together to create “virtual” regional and national collections.

- “Build on successes of other projects.”
  - Two previous LSTA grants have allowed us to develop this technology platform and launch the website. However, this prototype alone is not enough. We must further leverage it to develop a collection of real value to the library community as a whole. This grant would expand the project’s scope and allow us to apply the technology in a very valuable way.

- “Enhance integration and seamless access to digital resources.”
  - The Mountain West Digital Library was created to link together the large academic libraries in Utah. Our Advisory Board has been created to insure that the best possible content is added to the collection,
other libraries throughout the state are involved in the collection’s development, and links and interfaces are created to supply broad access to the collection. These deliverables are a part of the long-term vision of UALC.

**MANAGEMENT PLAN**

During the first three months of the grant, we will organize the project. We will construct a complete inventory of the historical newspaper collections in Utah by surveying libraries and historical institutions across the state. We will also conduct customer and client surveys to better understand the needs of the project’s constituencies. With this input, we will convene meetings with the Advisory Board and the Mountain West Digital Library in the third month to prioritize the additions to the digital collection. This prioritized list will be the working schedule for the processing that will follow over the next twenty months.

The general guidelines we will be using for adding content are:

- Published in Utah during late 19th – mid-20th centuries
- Show Utah’s unique place in the history of the American West
- Have an unique local/ regional perspective
- Report on important events of the day
  - Settlements, statehood, railroads, mining, water rights, religion, pioneer history, etc
- Show Utah’s geographic role in the development of the West
- Describe Utah’s role in growing the national economy.

These guidelines are detailed in Appendix C.

Beginning in January, 2004, we will begin loading the prioritized volumes onto the website at a rate of 12,000 pages per month so that we can load a total of 240,000 pages by the end of the August, 2005. By that time we will have a total of 370,000 pages loaded, a large enough volume to gauge our success at building a collection that appeals to the general public and creating a new generation of newspaper researchers.

Given the additional volume that will be loaded onto the website by early 2005, we anticipate needing an additional server and storage space at the University of Utah. Hardware and software components will be added to accommodate this increased volume.

In the last month of the grant period (September, 2005) we will conduct a three-day training program for the other members of the Mountain West Digital Library and other libraries and historical agencies across the West. This will wrap up the project and will insure that the knowledge we’ve gained is disseminated widely and that the collection of historical newspapers will continue to grow going forward.

**ADVISORY COMMITTEE**

We have formed an Advisory Committee that will advise the project team on content decisions, assist in disseminating information to the library community, both in Utah and throughout the Intermountain region, and assist in integrating our website into libraries throughout Utah. The members are distinguished in their careers as either historians, archivists, or librarians, and represent academic institutions, state and public libraries, and historical societies. We will convene the Advisory Board meetings twice each year. The Board members are:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution</th>
</tr>
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<tbody>
<tr>
<td>David Lewis</td>
<td>Professor of History</td>
<td>Utah State University</td>
</tr>
<tr>
<td>Dean May</td>
<td>Professor of History</td>
<td>University of Utah</td>
</tr>
<tr>
<td>Philip Notarianni</td>
<td>Director</td>
<td>Utah State Historical Society</td>
</tr>
<tr>
<td>Randy Olsen</td>
<td>Director</td>
<td>Lee Library, Brigham Young University</td>
</tr>
</tbody>
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Throughout the grant period, we will report to IMLS as needed and as required on the project’s status: progress vs. the schedule, production statistics, problem reporting and resolution, expense reporting, and library and user feedback. We will also submit these reports to the Utah Academic Library Consortium Council. The Council is made up of library directors from each of the UALC member institutions. UALC has an excellent record of cooperation and achievement with consortial efforts, including the Pioneer Online Library, a portal to educational databases purchased cooperatively for public and academic libraries. Pioneer will benefit from newspaper digitization and is very supportive of this proposal. Details of the UALC and its members can be found in the Organizational Profile section below.

Finally, the University of Utah’s Office of Sponsored Projects will handle financial management of the grant.

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**BUDGET**

The project’s budget for the two-year grant period totals $1,035,372. Of this total, we are asking IMLS to supply 45%, or $469,514. We have raised matching funds totaling $565,858 from three different sources: the University of Utah’s Marriott Library and Office of Research, and BYU’s Lee Library.

**EXPENSES FOR THE TWO YEARS:**

- **Salaries and benefits total $332,064.** The project staff consists of a full-time Project Director, full-time Digitization Coordinator (both fully funded by the grant), and part-time regular library staff funded as in-kind contributions by each school’s library.
- **Travel of $12,000.** We anticipate $6,000 per year: $2,000 for the required IMLS travel, $2,000 for the semi-annual Advisory Board meetings, and $2,000 for statewide and regional travel to gather customer input and disseminate our results.
- **Training Program of $8,081.** This will provide for all expenses (travel, lodging and meals) for thirteen participants in the three-day dissemination training we will provide in September, 2005.
- **Equipment and software of $40,672.** In 2005 we anticipate needing additional hardware and software to support the increased volume of images we will have captured by that time. This provides for a new server and storage hardware, costing $16,672, and a new software license for this server, of $24,000.
- **Digitization processing costs of $419,240.** We are providing $10,000 per year for Outcome Based Evaluations (OBE) and the remainder of $399,240 is for processing and loading pages onto the website.
- **Indirect costs of $223,316.** This is calculated at the University of Utah’s federally negotiated rate of 27.5%.

A detailed discussion of these categories is presented in the Budget Justification below.

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**CONTRIBUTIONS**

As mentioned above, matching funds totaling $565,858 will contribute 55% of the project’s budget, and will come from three sources:

1. University of Utah Marriott Library total of $121,243. This includes $20,621 per year in-kind services for two
permanent staff: Head of Digital Technologies (10% of time); and a Systems Administrator (30% of time). It also includes an $80,000 cash contribution in Year 2.

2. University of Utah Office of Research total of $345,086. Cash contributions of $156,392 in Year 1, and $188,694 in Year 2.

3. BYU Lee Library total of $99,529, including a cash contribution of $55,770 and an in-kind contribution of $43,759 for part-time staff, both in Year 1.

PERSONNEL

The project staff consists of two full-time members from the University of Utah, and five part-time members: two from the U of U and three from BYU.

Full-time personnel:
• John Herbert - Project Director, 100% grant-funded.
• Karen Edge - Digitization Coordinator, 100% grant-funded.

Part-time personnel:
• Kenning Arlitsch - Head of Digital Technologies – U of U, 10%.
• Jeff Jonsson - Digitization Systems Analyst - U of U, 30%.
• Susan Fales – Curator, Digital Historical Collections - BYU, 15%.
• Brandon McArthur – Project Manager – BYU, 15%.
• Amy Stucki – Programmer – BYU, 15%.

Position descriptions for each are in the Organizational Profile section and selected resumes of the team members are in the Resume section below.

EVALUATION

Our project will use Outcome-Based Evaluations (OBE). We have developed outcomes and outputs for each goal and objective listed above. Details are presented in Appendix A, showing exactly how the outputs tie to outcomes and ultimately back to the three overall goals of the project.

During 2003, before this grant period begins, we will also establish baseline satisfaction levels that we will compare against the satisfaction we measure during the grant period. In this way we will be able to determine more exactly the impact of our larger collection with online searching. Some of the data we will gather includes:
• Marriott, Lee, and Salt Lake City Libraries statistics on microfilm usage of dailies and weeklies
• Salt Lake Tribune and Deseret News hit rates on their website for newspaper research
• Level of satisfaction with and level of usage of currently available research tools within each of the three categories of users: historians, researchers, and the general public.

We will use a variety of instruments and assessment techniques to derive our measurements. These include surveys, focus group interviews, library staff interviews, and case studies. We will also assess statistics from our website, gathered with WebTrends® software.
DISSEMINATION AND TRAINING

During 2004, the project staff will develop a handbook of the processes and technology we've deployed to develop the collection. It will contain details on our approach, rationale, methodologies, systems, technology, processes, fund raising, expenses, project management, lessons learned, and other topics of interest. This handbook will be disseminated to interested parties during 2005 by presenting it at appropriate conferences and meetings, including: Utah Library Association; UALC, ALA; CNI; Pioneer, etc. In addition, we will link to a PDF-file of the handbook from various project websites. This will allow anyone who browses the site to gather information immediately about our history and findings.

During September 2005, at the end of this grant period, we will conduct a three-day training session at the University of Utah in Salt Lake City for other institutions to learn in detail how to launch and operate a digital collection similar to ours. The participants in this training will be from the other host members of the Mountain West Digital Library (BYU, Utah State University, and Southern Utah University), and several other institutions in nearby states. (See the list below.) Closely following the content of our handbook, this will provide hands-on training to those who will be responsible for expanding the scope of our collection across the state and the region. The training will be fully funded by the project to allow participants to attend without having to raise other funds.

TRAINING PARTICIPANTS

Brigham Young University
Idaho State Historical Society
Idaho State University
Mohave Library Alliance
New Mexico State Library
Pioneer Online Library
Southern Oregon University

Southern Utah University
University of Montana
University of Nevada – Las Vegas
University of Wyoming
Utah State University
Wyoming State Archives

SUSTAINABILITY

Group IV TIFF files of the raw, scanned newspapers will be stored on two copies of DVD for archival purposes. One copy will be maintained in the University of Utah’s Archives and Records Management center, and the institution that holds the paper or microfilm copy of the original newspaper will house the other. BYU will house DVD copies of the Deseret News. Files on all DVDs will be refreshed and migrated to new media on a 3-5 year cycle.

All collections on the CONTENTdm server (including display images and indexing) at the University of Utah are backed up to rotating LTO Ultrium digital tapes on a weekly basis. A copy of tapes containing the newspaper collections will be stored at the Archives and Records Management center. Collections housed on the distributed servers of the Mountain West Digital Library will be stored and maintained in a similar manner by the individual institutions.

The Marriott Library and the Lee Library have committed funding and resources to the long-term sustainability of the collections and website. The UALC has committed to lead the Mountain West Digital Library. These commitments have been built into the base budgets of these organizations, and consequently will insure the ongoing leadership support for our efforts on this project. When the time does arise for new hardware or software to be purchased to continue the collection, these organizations have committed to do so.
### SCHEDULE OF COMPLETION

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Cost Basis</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ORGANIZE PROJECT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey historical institutions</td>
<td>$3,600 1/3 time, 2 mo.</td>
<td>J</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>Survey library patrons</td>
<td>$3,600 1/3 time, 2 mo.</td>
<td>J</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>Compile inventory of materials</td>
<td>$3,600 1/3 time, 2 mo.</td>
<td>M</td>
<td>J</td>
<td>A</td>
</tr>
<tr>
<td>Planning conf. to prioritize materials</td>
<td>$2,700 1/2 time, 1 mo.</td>
<td>J</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td><strong>EXPAND COLLECTION</strong></td>
<td>$209,620 processing budget</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add 12,000 images per month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DOCUMENT FINDINGS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop Project Handbook</td>
<td>$8,100 1/2 time, 3 mo.</td>
<td>J</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>Make available online</td>
<td>$- in-kind</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INSURE PERFORMANCE</strong></td>
<td>$20,336 h/w, s/w budget</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add new hardware</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DISSEMINATE KNOWLEDGE</strong></td>
<td>$4,050 1/4 time, 3 mo.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publish in D-Lib Journal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct training program</td>
<td>$4,040 training budget</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ONGOING MANAGEMENT</strong></td>
<td>as needed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General project admin</td>
<td>$2,000 travel budget</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-annual Advisory Board mtgs</td>
<td></td>
<td>J</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td><strong>REPORT RESULTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-annual customer survey</td>
<td>$5,400 1/4 time, 4 mo.</td>
<td>J</td>
<td>F</td>
<td>A</td>
</tr>
<tr>
<td>Semi-annual reports</td>
<td>$5,400 1/4 time, 4 mo.</td>
<td>A</td>
<td>S</td>
<td>J</td>
</tr>
</tbody>
</table>

**NOTE 1:** For dedicated project staff (Project Director and Project Coordinator) the monthly rate for salary is $8,000 and for benefits is $2,800. The combined monthly rate, then, is $10,800, and IMLS is allocated 50% of these costs. This rate is what is used in the cost allocation to the various tasks above, as described in the "Cost Basis" column.
## Project Budget Form

### SECTION 1: DETAILED BUDGET

**Year 1 - Budget Period from 10/01/03 to 09/30/04**

Name of Applicant Organization: University of Utah Marriott Library

**IMPORTANT! READ INSTRUCTIONS ON PAGES 4.4-4.5 BEFORE PROCEEDING.**

### SALARIES AND WAGES (PERMANENT STAFF)

<table>
<thead>
<tr>
<th>Name/Title</th>
<th>No.</th>
<th>Method of Cost Computation</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s) (if applicable)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arlitsch - Hd Dig Tech</td>
<td>(1)</td>
<td>10% of salary</td>
<td>4,775</td>
<td></td>
<td></td>
<td>4,775</td>
</tr>
<tr>
<td>Jonsson - System Anal</td>
<td>(2)</td>
<td>30% of salary</td>
<td>10,500</td>
<td></td>
<td></td>
<td>10,500</td>
</tr>
<tr>
<td>BYU staff</td>
<td>(3)</td>
<td>15% of salary</td>
<td>25,609</td>
<td></td>
<td></td>
<td>25,609</td>
</tr>
<tr>
<td><strong>TOTAL SALARIES AND WAGES</strong></td>
<td>$0</td>
<td></td>
<td>15,275</td>
<td></td>
<td></td>
<td>40,884</td>
</tr>
</tbody>
</table>

### SALARIES AND WAGES (TEMPORARY STAFF HIRED FOR PROJECT)

<table>
<thead>
<tr>
<th>Name/Title</th>
<th>No.</th>
<th>Method of Cost Computation</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s) (if applicable)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herbert - Proj Director</td>
<td>(1)</td>
<td>100% salary</td>
<td>30,000</td>
<td></td>
<td></td>
<td>60,000</td>
</tr>
<tr>
<td>Edge - Proj Coord</td>
<td>(2)</td>
<td>100% salary</td>
<td>17,500</td>
<td></td>
<td></td>
<td>35,000</td>
</tr>
<tr>
<td><strong>TOTAL SALARIES AND WAGES</strong></td>
<td>$47,500</td>
<td></td>
<td>47,500</td>
<td></td>
<td></td>
<td>95,000</td>
</tr>
</tbody>
</table>

### FRINGE BENEFITS

<table>
<thead>
<tr>
<th>Rate</th>
<th>Salary Base</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s) (if applicable)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.00%</td>
<td>$95,000</td>
<td>16,625</td>
<td>16,625</td>
<td></td>
<td>33,250</td>
</tr>
<tr>
<td>35.00%</td>
<td>$15,275</td>
<td>5,346</td>
<td></td>
<td></td>
<td>5,346</td>
</tr>
<tr>
<td>34.02%</td>
<td>$25,609</td>
<td>8,712</td>
<td></td>
<td></td>
<td>8,712</td>
</tr>
<tr>
<td><strong>TOTAL FRINGE BENEFITS</strong></td>
<td>$16,625</td>
<td>21,971</td>
<td>8,712</td>
<td></td>
<td>47,308</td>
</tr>
</tbody>
</table>

### CONSULTANT FEES

<table>
<thead>
<tr>
<th>Name/Type of Consultant</th>
<th>Rate of Compensation (Daily or Hourly)</th>
<th>No. of Days (or Hours) on Project</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s) (if applicable)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CONSULTANT FEES</strong></td>
<td>$0</td>
<td></td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

### TRAVEL

<table>
<thead>
<tr>
<th>From/To</th>
<th>Number of Persons</th>
<th>Subsistence Costs</th>
<th>Transportation Costs</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s) (if applicable)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMLS</td>
<td>1</td>
<td>1,000</td>
<td>1,000</td>
<td></td>
<td>1,000</td>
<td></td>
<td>2,000</td>
</tr>
<tr>
<td>Adv Bd mtgs</td>
<td>(7) (2)</td>
<td>1,000</td>
<td>1,000</td>
<td></td>
<td>1,000</td>
<td></td>
<td>2,000</td>
</tr>
<tr>
<td>as needed</td>
<td>(2) (2)</td>
<td>1,000</td>
<td>1,000</td>
<td></td>
<td>1,000</td>
<td></td>
<td>2,000</td>
</tr>
<tr>
<td><strong>TOTAL TRAVEL COSTS</strong></td>
<td>$3,000</td>
<td>3,000</td>
<td>0</td>
<td>6,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Project Budget Form

### SECTION 1: DETAILED BUDGET CONTINUED

**Year 1**

<table>
<thead>
<tr>
<th>MATERIALS, SUPPLIES AND EQUIPMENT</th>
<th>Method of Cost Computation</th>
<th>IMLS</th>
<th>APPLICANT</th>
<th>PARTNER(S) (IF APPLICABLE)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL COST OF MATERIALS, SUPPLIES, &amp; EQUIPMENT</td>
<td>$0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SERVICES</th>
<th>Method of Cost Computation</th>
<th>IMLS</th>
<th>APPLICANT</th>
<th>PARTNER(S) (IF APPLICABLE)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image processing</td>
<td>108,000 images</td>
<td>89,829</td>
<td>34,059</td>
<td>55,770</td>
<td>179,658</td>
</tr>
<tr>
<td>OBE measurements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>TOTAL SERVICES COSTS</td>
<td>$94,829</td>
<td>39,059</td>
<td>55,770</td>
<td>189,658</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER</th>
<th>Method of Cost Computation</th>
<th>IMLS</th>
<th>APPLICANT</th>
<th>PARTNER(S) (IF APPLICABLE)</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL OTHER COSTS</td>
<td>$0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL DIRECT PROJECT COSTS** | $161,954 | 126,805 | 90,091 | 378,850 |

### INDIRECT COSTS

Check either item A or B and complete C. (See section on Indirect Costs, page 4.4.)

Applicant organization is using:

□ A. an indirect cost rate which does not exceed 20% of modified total direct costs — may be listed only as cost sharing.

□ B. Federally negotiated Indirect Cost Rate (see page 4.4).

Department of Health and Human Services

Name of Federal Agency

Expiration Date of Agreement

June 30, 2003

#### C. Rate base(s) Amount(s)

<table>
<thead>
<tr>
<th>Rate base(s)</th>
<th>Amount(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.5% of</td>
<td>$378,850</td>
</tr>
<tr>
<td></td>
<td>$104,183</td>
</tr>
</tbody>
</table>

**TOTAL INDIRECT COSTS CHARGED TO** | $44,537 | 50,208 | 9,438 | 104,183 |
# Project Budget Form

**SECTION 1: DETAILED BUDGET**

**Year 2 (if applicable) - Budget Period from 10/01/04 to 09/30/05**

Name of Applicant Organization: University of Utah Marriott Library

**IMPORTANT! READ INSTRUCTIONS ON PAGES 4.4–4.5 BEFORE PROCEEDING.**

## Salaries and Wages (Permanent Staff)

<table>
<thead>
<tr>
<th>Name/Title</th>
<th>Method of Cost Calculation</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s) (if applicable)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arlitsch - Hd Dig Tech</td>
<td>10% of salary</td>
<td></td>
<td>4,775</td>
<td></td>
<td>4,775</td>
</tr>
<tr>
<td>Jonsson - System Anal</td>
<td>30% of salary</td>
<td></td>
<td>10,500</td>
<td></td>
<td>10,500</td>
</tr>
</tbody>
</table>

**TOTAL SALARIES AND WAGES: $15,275**

## Salaries and Wages (Temporary Staff)

<table>
<thead>
<tr>
<th>Name/Title</th>
<th>Method of Cost Calculation</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s) (if applicable)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herbert - Proj Dir</td>
<td>100% of salary</td>
<td>30,000</td>
<td>30,000</td>
<td></td>
<td>60,000</td>
</tr>
<tr>
<td>Edge - Proj Coord</td>
<td>100% of salary</td>
<td>17,500</td>
<td>17,500</td>
<td></td>
<td>35,000</td>
</tr>
</tbody>
</table>

**TOTAL SALARIES AND WAGES: $47,500**

## Fringe Benefits

<table>
<thead>
<tr>
<th>Rate</th>
<th>Salary Base</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s) (if applicable)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.00% of $95,000</td>
<td></td>
<td>16,625</td>
<td>16,625</td>
<td></td>
<td>33,250</td>
</tr>
<tr>
<td>35.00% of $15,275</td>
<td></td>
<td>0</td>
<td>5,346</td>
<td></td>
<td>5,346</td>
</tr>
<tr>
<td>% of $</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL FRINGE BENEFITS: $38,596**

## Consultant Fees

<table>
<thead>
<tr>
<th>Name/Type of Consultant</th>
<th>Rate of Compensation (Daily or Hourly)</th>
<th>No. of Days (or hours) on Project</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s) (if applicable)</th>
<th>Total</th>
</tr>
</thead>
</table>

**TOTAL CONSULTANT FEES: $0**

## Travel

<table>
<thead>
<tr>
<th>From/To</th>
<th>Number of Persons</th>
<th>Number of Days</th>
<th>Subsistence Costs</th>
<th>Transportation Costs</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s) (if applicable)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMLS required</td>
<td>( ) ( )</td>
<td></td>
<td>1,000</td>
<td>1,000</td>
<td>2,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adv Bd mtas</td>
<td>(7) (2)</td>
<td></td>
<td>1,000</td>
<td>1,000</td>
<td>2,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>as needed</td>
<td>( ) ( )</td>
<td></td>
<td>1,000</td>
<td>1,000</td>
<td>2,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL TRAVEL COSTS: $6,000**
### Project Budget Form

**SECTION 1: DETAILED BUDGET CONTINUED**

**Year 2**

#### MATERIALS, SUPPLIES AND EQUIPMENT

<table>
<thead>
<tr>
<th>Item</th>
<th>Method of Cost Computation</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server and storage</td>
<td></td>
<td>8,336</td>
<td>8,336</td>
<td></td>
<td>16,672</td>
</tr>
<tr>
<td>Software license</td>
<td></td>
<td>12,000</td>
<td>12,000</td>
<td></td>
<td>24,000</td>
</tr>
</tbody>
</table>

**TOTAL COST OF MATERIALS, SUPPLIES, & EQUIPMENT $**

<table>
<thead>
<tr>
<th></th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20,336</td>
<td>20,336</td>
<td></td>
<td>40,672</td>
</tr>
</tbody>
</table>

#### SERVICES

<table>
<thead>
<tr>
<th>Item</th>
<th>Method of Cost Computation</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image processing</td>
<td>132,000 images</td>
<td>109,791</td>
<td>109,791</td>
<td></td>
<td>219,582</td>
</tr>
<tr>
<td>OBE measurements</td>
<td></td>
<td>5,000</td>
<td>5,000</td>
<td></td>
<td>10,000</td>
</tr>
</tbody>
</table>

**TOTAL SERVICES COSTS $**

<table>
<thead>
<tr>
<th></th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>114,791</td>
<td>114,791</td>
<td></td>
<td>229,582</td>
</tr>
</tbody>
</table>

#### OTHER

<table>
<thead>
<tr>
<th>Item</th>
<th>Method of Cost Computation</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training program</td>
<td></td>
<td>4,040</td>
<td>4,041</td>
<td></td>
<td>8,081</td>
</tr>
</tbody>
</table>

**TOTAL OTHER COSTS $**

<table>
<thead>
<tr>
<th></th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4,040</td>
<td>4,041</td>
<td></td>
<td>8,081</td>
</tr>
</tbody>
</table>

**TOTAL DIRECT PROJECT COSTS $**

<table>
<thead>
<tr>
<th></th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s)</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>206,292</td>
<td>226,914</td>
<td>0</td>
<td>433,206</td>
</tr>
</tbody>
</table>

#### INDIRECT COSTS

Check either item A or B and complete C. (See section on Indirect Costs, page 4.4.)

**Applicant organization is using:**

- **A.** an indirect cost rate which does not exceed 20% of modified total direct costs - may be listed only as cost sharing
- **B.** Federally Negotiated Indirect Cost Rate (see page 4.4).

**Department of Health and Human Services**

**Name of Federal Agency**

**June 30, 2003**

**Expiration Date of Agreement**

**Expenses Adjusted to Cost Base:**

<table>
<thead>
<tr>
<th>Rate base(s)</th>
<th>Amount(s)</th>
<th>27.5% of $433,206</th>
<th>= $119,132</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL INDIRECT COSTS CHARGED TO $**

<table>
<thead>
<tr>
<th></th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56,730</td>
<td>62,402</td>
<td>0</td>
<td>119,132</td>
</tr>
</tbody>
</table>
## Project Budget Form
### SECTION 2: SUMMARY BUDGET

Name of Applicant Organization: University of Utah Marriott Library

**IMPORTANT! Read instructions on pages 4.4–4.5 before proceeding.**

<table>
<thead>
<tr>
<th>DIRECT COSTS</th>
<th>IMLS</th>
<th>Applicant</th>
<th>Partner(s) (if applicable)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries &amp; Wages</td>
<td>95,000</td>
<td>125,550</td>
<td>25,609</td>
<td>246,159</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>33,250</td>
<td>43,942</td>
<td>8,712</td>
<td>85,904</td>
</tr>
<tr>
<td>Consultant Fees</td>
<td>6,000</td>
<td></td>
<td></td>
<td>12,000</td>
</tr>
<tr>
<td>Travel</td>
<td>20,336</td>
<td>20,336</td>
<td>0</td>
<td>40,672</td>
</tr>
<tr>
<td>Materials, Supplies &amp; Equipment</td>
<td>209,620</td>
<td>153,850</td>
<td>55,770</td>
<td>419,240</td>
</tr>
<tr>
<td>Other</td>
<td>4,040</td>
<td>4,041</td>
<td>0</td>
<td>8,081</td>
</tr>
<tr>
<td><strong>TOTAL DIRECT COSTS</strong></td>
<td>$368,246</td>
<td>$353,719</td>
<td>$90,091</td>
<td>$812,056</td>
</tr>
</tbody>
</table>

**INDIRECT COSTS**

- If you do not have a current Federally negotiated rate, your indirect costs must appear in the Applicant or Partner columns only.
- If you have a current Federally negotiated rate, you may request indirect costs from IMLS only on the direct project costs requested from IMLS.

| INDIRECT COSTS* | $101,268 | $112,609 | $9,438 | $223,315 |

**TOTAL PROJECT COSTS**

- $1,035,371

<table>
<thead>
<tr>
<th>AMOUNT OF CASH-MATCH</th>
<th>$425,086</th>
<th>$55,770</th>
</tr>
</thead>
</table>

| AMOUNT OF IN-KIND CONTRIBUTIONS | $41,242 | $43,759 |

| TOTAL AMOUNT OF MATCH (CASH & IN-KIND CONTRIBUTIONS) | $565,857 |
| AMOUNT REQUESTED FROM IMLS, INCLUDING INDIRECT COSTS | $469,514 |

| PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS | 45.35% |

(MAY NOT EXCEED 50% IF REQUEST EXCEEDS $250,000 – RESEARCH PROJECTS EXCEPTED, SEE COST SHARING ON PAGE 1.7)

Have you received or requested funds for any of these project activities from another Federal agency? (Please check one) ☐ Yes ☑ No

If yes, name of agency: ___________________________________________

Date of application ____ or award ____ Amount requested or received $ _________
Budget Justification

In general terms, we are requesting support from IMLS for 45% of the total expense budget for the project. The methodology we applied was to first deduct the in-kind contributions of the U of U and BYU, and then allocate 50% of the remaining direct expenses to IMLS. We computed the IMLS portion of indirect costs by applying the University of Utah’s federally negotiated rate of 27.5% against the total direct expenses for IMLS.

Salaries and Wages – Permanent Staff
There are five members of the project team who are permanent employees of the U of U and BYU, and who will be assigned on a part-time basis to the project. They are:

- Kenning Arlitsch  U of U  Head of Digital Technologies   10% both years
- Jeff Jonsson  U of U  Digitization Systems Analyst   30% both years

The combined salaries for these two are $15,275 each year, and are contributed by the U of U as in-kind.

- Susan Fales  BYU  Curator – Digital Historical Collections  15% year 1
- Brandon McArthur  BYU  Project Manager  15% year 1
- Amy Stucki  BYU  Programmer  15% year 1

The combined salaries for these are $25,609 in the first year only, and are contributed by BYU as in-kind.

The U of U staff will be involved in digitizing newspapers, supporting the website, and other operations of the project throughout the grant period. The BYU staff will be leading the effort to scan, process, and load the first fifty years of the Deseret News, which will occur during the first year of the grant.

Salaries and Wages – Temporary Staff
There are two members of the project team who will be completely dedicated to this project:

- John Herbert  U of U  Project Director  $60,000
- Karen Edge  U of U  Digitization Coordinator  $35,000

They are fully funded by this grant, with half of their salaries coming from the IMLS funding.

Benefits
Fringe benefits are computed at the standard rates of the respective universities: 35% for the University of Utah, and 34% for BYU. The benefits for the permanent staff are contributed as in-kind by the respective universities (U of U and BYU). The benefits for the temporary staff are fully funded by the grant, with half of their benefits coming from the IMLS funding.

Travel
We have budgeted for $6,000 of travel in each year. This includes $2,000 in each of three areas: IMLS required travel, semi-annual Advisory Board meetings, and in-state travel for day-to-day operation of the project. This in-state travel will be used for things such as meeting with other digitization centers, publishers, and libraries, and administering the surveys of libraries for data on their historic newspaper collections and the surveys of library patrons for their needs of our expanded collection.

Training
We have budgeted for a three-day training course at the end of the grant period to disseminate our program to various libraries and historical institutions throughout Utah and neighboring states. By the project providing the funding for this program, this will allow the other institutions to benefit from the training without having to raise the money some number of months from now. The thirteen participants who have already committed to attending are:
Since the representative from the Pioneer Online Library is local to Salt Lake City, no travel expenses have been included for him/her. In addition, the University of Alabama will act as first alternate should a spot open up in the program and our budget can accommodate the relatively expensive airfare from Tuscaloosa to Salt Lake City. Letters of support from all these institutions are included in Appendix D.

We have estimated airfare for those outside Utah, and mileage reimbursement costs for those in Utah to drive to Salt Lake City. We have budgeted for three nights stay each at $80 per night at the University Guest House, and a per diem of $40 for meals and other local expenditures. These components combine to a total cost for the training program of $8,081. More details on the specific cost calculations are also listed in Appendix D.

Materials and Equipment
In the second year of the project we expect to need an additional server at the University of Utah, dedicated only to digital newspapers. Our budget includes hardware components of a new server and additional storage capacity, plus a new CONTENTdm software license for the server.

**Hardware specifications:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Power Edge 2650 server, dual processor CPU, 2.6GHz, 2 external storage channels</td>
<td>$4,854</td>
</tr>
<tr>
<td>Dell Power Vault 220/221 storage enclosure, 730 GB (5x146 GB)</td>
<td>$7,109</td>
</tr>
<tr>
<td>Dell Power Edge 4200 storage rack</td>
<td>$1,047</td>
</tr>
<tr>
<td>APC monitor keyboard drawer (model AR8215)</td>
<td>$1,838</td>
</tr>
<tr>
<td>Belkin 8 port KVM switch (model F1DA108T)</td>
<td>$325</td>
</tr>
<tr>
<td>Veritas Backup Exec Remote Agent Software</td>
<td>$159</td>
</tr>
<tr>
<td>Fuji LTO/Ultrium tape cartridges (20 @$67)</td>
<td>$1,340</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>$16,672</strong></td>
</tr>
</tbody>
</table>

With a new server comes the additional requirement of a license to run the software on that machine. The license we are planning to purchase is the 64,000-image license from CONTENTdm, costing $24,000. (This is the pricing currently quoted by DiMeMa on their website.) Today the U of U is running their digital collection on an unlimited-volume license from CONTENTdm. The non-newspaper volume of the overall collection is approximately 50,000 images. With the purchase of this new server for the expanded newspaper collection, our plan is to separate the digital collection into two pieces: the newspapers on this new server, and the rest of the collection remaining on the existing server. We will then apply the current unlimited-volume license to the new server running the newspaper collection, and apply this new 64,000-
image license to the existing server running the rest of the digital collection. This will keep the software costs low, and in effect, allow the newspapers to gain an unlimited volume license for the reduced cost of the 64,000-image license.

**Services**

Services are broken down into two categories: Outcome-Based Evaluation (OBE) and Processing. We have budgeted $10,000 in each year for OBE costs to develop, implement, and report the measurements we will install to track our progress. (See details in Appendix A.) The baseline measures will be developed and implemented by September 2003 (before this grant period begins), consequently these costs for the baseline measures will be covered by our current grant from the LSTA.

Processing costs will be incurred to scan, digitize, and load the newspapers pages throughout the grant period. We will process 12,000 pages per month, beginning in month four and concluding in month 23, for a total of 20 months, so the total pages processed will be 240,000. The scanning costs vary slightly depending on the source material being scanned: microfilm is $0.15 per page, bound paper is $0.32 per page, and loose paper is $0.22 per page. OCR processing costs will be $1.27 per page, and database-loading costs will $0.16 per page. These per-page costs are summarized in the table below.

<table>
<thead>
<tr>
<th>Source Material</th>
<th>Scanning</th>
<th>OCR Processing</th>
<th>DB Loading</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microfilm</td>
<td>$0.15</td>
<td>$1.27</td>
<td>$0.16</td>
<td>$1.58</td>
</tr>
<tr>
<td>Loose Paper</td>
<td>$0.22</td>
<td>$1.27</td>
<td>$0.16</td>
<td>$1.65</td>
</tr>
<tr>
<td>Bound Paper</td>
<td>$0.32</td>
<td>$1.27</td>
<td>$0.16</td>
<td>$1.75</td>
</tr>
</tbody>
</table>

We are estimating the percentage mix between these three sources to be 45% microfilm, 45% bound paper, and 10% loose paper. On a monthly basis, the microfilm and bound paper volumes each will be 5400 pages, and the loose paper volume will be 1200, which leads to a monthly processing cost of $19,962. Since we are planning to process volume beginning in month four, we will have nine months of processing in the first year of the grant period, and eleven months of processing in the second year. This results in processing costs of $179,658 in Year 1 and $219,582 in Year 2, adding to a total processing cost of $399,240.

**Indirect Costs**

These costs are computed using the federally negotiated rate that the University of Utah has of 27.5%. We are requesting that IMLS contribute $368,247 in direct costs. So, using 27.5%, IMLS’ portion of the indirect costs totals $101,268. We have arranged for the remaining indirect costs to be covered from our matching funds.
Current Federally Negotiated Rate

For Indirect Costs
Ronald E. Tremea, Director
Governmental Accounting and Support Services
University of Utah
408 Park Building
Salt Lake City, Utah 84112

Dear Mr. Tremea:

The original and one copy of a Facilities and Administrative Rate Negotiation Agreement are enclosed. This Agreement reflects an understanding reached between your organization and a member of my staff concerning the rates that may be used to support your claim for these costs on grants and contracts with the Federal Government. Please have the original signed by a duly authorized representative of your organization and return it to me, retaining the copy for your files. We will reproduce and distribute the Agreement to the appropriate awarding organizations of the Federal Government for their use.

This Agreement establishes the equipment capitalization level at $5,000 or more effective July 1, 1998. The unamortized value of equipment between $501 and $5,000 has been taken into consideration in establishing the predetermined rates for fiscal years 1999 through 2003. Therefore, previously capitalized equipment between $501 and $5,000 are considered fully amortized.

A facilities and administrative rate proposal together with the required supporting information must be submitted to this office for each fiscal year in which your organization claims these costs under grants and contracts awarded by the Federal Government. Thus, a proposal for your fiscal year ending June 30, 2002 is due in our office by December 31, 2002.

Sincerely,

David S. Low
Director

Enclosures
A. **LIMITATION**: The rates in this Agreement are subject to any statutory or administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the organization were included in its facilities and administrative costs pools as finally accepted; such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) the same costs that have been treated as facilities and administrative costs are not claimed as direct costs; (3) Similar types of costs have been accrued consistent with accounting treatment; and (4) The information provided by the organization, which was used to establish the rates, is not later found to be materially incomplete or inaccurate.

B. **ACCOUNTING CHANGES**: If a fixed or predetermined rate is in this Agreement, it is based on the accounting system purported by the organization to be in effect during the Agreement period. Changes to the method of accounting for costs which affect the amount of reimbursement resulting from the use of this Agreement require prior approval of the authorized representative of the cognizant agency. Such changes include but are not limited to, changes in the charging of a particular type of cost from facilities and administrative to direct. Failure to obtain approval may result in cost disallowances.

C. **FIXED RATES**: If a fixed rate is in this Agreement, it is based on an estimate of the costs for the period covered by the rate. When the actual costs for this period are determined, an adjustment will be made to a rate of a future year(s) to compensate for the difference between the costs used to establish the fixed rate and actual costs.

D. **USE BY OTHER FEDERAL AGENCIES**: The rates in this Agreement were approved in accordance with the authority in Office of Management and Budget Circular A-21 and should be applied to grants, contracts and other agreements covered by the appropriate regulation, subject to any limitations in A above. The organization may provide copies of this Agreement to other Federal Agencies to give them early notification of this Agreement.

**BY THE ORGANIZATION**

University of Utah Organization

THOMAS G. NUCUM (Signature)

Thomas G. Nucum (Name)

Vice President for Administrative Services (Title)

February 5, 1997 (Date)

**BY THE COGNIZANT AGENCY**

ON BEHALF OF THE FEDERAL GOVERNMENT

DEPARTMENT OF HEALTH AND HUMAN SERVICES (Agency)

DAVID S. LOW (Signature)

David S. Low (Name)

Director, Division of Cost Allocation (Title)

January 28, 1997 (Date)

FEDS Representative: Wallace Chan

Telephone: 1-800-123-4567
SPECIAL REMARKS

The rates in this agreement have been negotiated or revised, as appropriate, to reflect the administrative cap provisions of the revision to OMB Circular A-21 published by the Office of Management and Budget on July 26, 1991. No rate affecting the institution's fiscal periods beginning on or after October 1, 1991 contains total administrative cost components in excess of that 26 percent cap.

DEFINITION OF EQUIPMENT

Effective July 1, 1998, Equipment is defined as tangible nonexpendable personal property having a useful life of more than one year and an acquisition cost of $5,000 or more per unit.

Definition of On/Off Campus
The On-Campus rate includes activities conducted at:

1. University of Utah owned facilities.
2. Rental facilities in Research Park.
3. Facilities at Old St. Mark's Hospital.
4. Medical Center also known as the Stangl Building.

The Off-Campus activities are defined as activities not listed above as on-campus or any activity conducted at a field location for a period of longer than 120 days. The distinction between on and off campus activities will be made in accordance with the proposal and based on actual costs incurred at the selected locations (on and off campus).

The 120 days off-campus definition does not apply to welfare training conducted by the University for the State of Utah. On-Campus course preparation and actual off-campus costs of instruction will be separately identified. The on-campus costs of instruction will be separately identified. The on-campus instruction rate will only be applied to the on-campus costs. The off-campus rate should be applied to the off-campus costs exclusive of facility rental costs regardless of who pays these costs.
The rates approved in this Agreement are for use on grants, contracts and other agreements with the Federal Government, subject to the conditions contained in Section II.

### SECTION I: RATES

<table>
<thead>
<tr>
<th>Type</th>
<th>Effective Period</th>
<th>Rate</th>
<th>Location</th>
<th>Applicable To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>49.5%</td>
<td>On-Campus</td>
<td>Organized Research</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>25.0%</td>
<td>Off-Campus</td>
<td>Organized Research</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>34.1%</td>
<td>On-Campus</td>
<td>Sponsored Training</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>26.0%</td>
<td>Off-Campus</td>
<td>Sponsored Training</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>27.5%</td>
<td>On-Campus</td>
<td>Other Sponsored</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>19.4%</td>
<td>Off-Campus</td>
<td>Other Sponsored</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>50.0%</td>
<td>On-Campus</td>
<td>Organized Research</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>25.0%</td>
<td>Off-Campus</td>
<td>Organized Research</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>34.1%</td>
<td>On-Campus</td>
<td>Sponsored Training</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>26.0%</td>
<td>Off-Campus</td>
<td>Sponsored Training</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>27.5%</td>
<td>On-Campus</td>
<td>Other Sponsored</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/93</td>
<td>19.4%</td>
<td>Off-Campus</td>
<td>Other Sponsored</td>
</tr>
<tr>
<td>Pred.</td>
<td>07/01/93-06/30/94</td>
<td>Same rates as cited above for 07/01/93-06/30/93</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*BASE: Modified total direct costs, consisting of all salaries and wages, fringe benefits, materials and supplies, services, travel, and subgrants and subcontracts up to the first $25,000 of each subgrant or subcontract (regardless of the period covered by the subgrant or subcontract). Equipment, capital expenditures, charges for patient care and tuition remission, rental costs, scholarships, and fellowships as well as the portion of each subgrant and subcontract in excess of $25,000 shall be excluded from modified total direct costs.

### TREATMENT OF PAID ABSENCES

Vacation, holiday, sick leave pay and other paid absences are included in salaries and wages and are charged to Federal projects as part of the normal charge for salaries and wages. Separate charges for the cost of these absences are not made.

### TREATMENT OF OTHER FRINGE BENEFITS

This organization charges the actual cost of each fringe benefit directly to Federal projects. However, it uses a fringe benefit rate which is applied to salaries and wages in budgeting fringe benefit cost under project proposals. The following fringe benefits are treated as direct costs: FICA, State/TIA Retirement, Health/Dental and Life Insurance, L-T Disability, Workers Compensation, and Unemployment.
### JULY 1, 1998 THROUGH JUNE 30, 2001

<table>
<thead>
<tr>
<th>Building Depr</th>
<th>Organized Research</th>
<th>Sponsored Training</th>
<th>Other Spon Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On-Campus</td>
<td>Off-Campus</td>
<td>On-Campus</td>
</tr>
<tr>
<td></td>
<td>5.50</td>
<td>0.90</td>
<td>0.70</td>
</tr>
<tr>
<td>Equipment Depr</td>
<td>3.80</td>
<td>2.00</td>
<td>2.90</td>
</tr>
<tr>
<td>Operation &amp; Main</td>
<td>14.00</td>
<td>3.90</td>
<td>3.60</td>
</tr>
<tr>
<td>Library</td>
<td>1.20</td>
<td>1.30</td>
<td>0.90</td>
</tr>
<tr>
<td>Gen Admin</td>
<td>4.50</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Dept Admin</td>
<td>18.00</td>
<td>20.00</td>
<td>11.60</td>
</tr>
<tr>
<td>Spon Proj Admin</td>
<td>2.50</td>
<td>2.80</td>
<td>2.60</td>
</tr>
<tr>
<td>Admin Components</td>
<td>25.00</td>
<td>25.00</td>
<td>25.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>48.50</strong></td>
<td><strong>34.10</strong></td>
<td><strong>27.50</strong></td>
</tr>
</tbody>
</table>

### JULY 1, 2001 THROUGH JUNE 30, 2003

<table>
<thead>
<tr>
<th>Building Depr</th>
<th>Organized Research</th>
<th>Sponsored Training</th>
<th>Other Spon Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On-Campus</td>
<td>Off-Campus</td>
<td>On-Campus</td>
</tr>
<tr>
<td></td>
<td>5.80</td>
<td>0.90</td>
<td>0.70</td>
</tr>
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<td><strong>34.10</strong></td>
<td><strong>27.50</strong></td>
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</tbody>
</table>

(Administrative Components Limited to 25.0% in accordance with OMB A-21, dated July 28, 1993)

Concur:

(Signature)

Director, Governmental Accounting & Support Services

Title

February 6, 1997

Date
Specifications for Projects Involving Digitization

1. **Describe types of materials to be digitized (i.e., artifacts, maps, manuscripts, photographs, audio recordings, video recordings, motion pictures) and number of each:**

   Historical newspapers published in Utah in the late 19th century through the mid-20th century. The range of dates to be included is 1850-1960 and the total volume of pages to be processed will be 240,000. The source materials will be in microfilm (45% or 108,000 pages), bound paper (45% or 108,000 pages) or loose paper (10% or 24,000 pages).

2. **Identify copyright and other potential restrictions.**
   
   **Public Domain Permissions have been obtained**

   Issues published in our main range of dates (1850-1922) are in the public domain.

   **Permissions to be requested – Plan to address:**

   Permission to digitize newspapers published after 1922 will be secured from publishers, if still in existence, or from holding institutions.

   **Privacy concerns – Plan to address:**

   n/a

   **Other – Explain:**

   n/a

3. **List the equipment, with specifications, whether purchased, leased, or outsourced, that will be used. (e.g., scanner, camera, server, etc.)**

   **University of Utah**

   Newspaper scanning from microfilm and print is outsourced, and the equipment being used is:
   - Microfilm Scanner: IIRI Phoenix Scanner, Printrak Sunrise
   - Flatbed Paper Scanner: Image Access’ Scan2Net A2 Flatbed (300 dpi at A2 size)

   **Production Development Environment for Image Processing is:**
   - Database-driven workflow system
   - Spinnaker NAS storage system (8.1 TBytes)
   - 60-processor clustered image processing system (on-the-fly expandable)
   - Java-based metadata and zone classification applications
   - Java-based QC applications

   **The digital collection website is supported by:**
   - Two single processor Dell 2550 rackmount servers, in a Windows 2000 Advanced Server Cluster, each directly attached to a Dell Powervault 660F based Fibrechannel SAN.
   - Backup hardware is a Dell Powervault 128T twenty tape library which uses LTO/Ultrium 1/2" data cartridges, capable of storing from 100-200GB apiece depending on compression level.
   - Backup software is Veritas Backup Exec for Windows 2000.
Brigham Young University
Newspaper scanning from print volumes is using a Zeutschel Omniscan 10000 Color Book Scanner. This scanner is capable of 36-bit color at 600 dpi.

4. Specify each type of file format (e.g., TIFF, JPEG) to be produced and anticipated image quality of each (minimum resolution, depth, tone, pixels):
   
a. Master (raw) – 8-bit, grey scale, Group IV TIFF image (300 dpi scan)
   
b. Access – PDF w/hidden text, 1-bit color (bi-tonal), 300 dpi.
   
c. Thumbnail (archive)– JPEG, size varies with object. Full-page size is 78x104 pixels.
   
d. Formats for other media (e.g., audio, video, motion picture), including sampling rates, if applicable – n/a

5. Describe the quality control plan.
   There are 5 checkpoints for Quality Control in the production process. They are:
   
   1. Scan QC – this process ensures that the “raw” images being produced are of high quality such that they can be the basis for producing readable “access” and “archive” images.
   2. Image QC – this process looks at the derived images (access, archive and OCR) to be sure they are cropped, de-skewed and cleaned up appropriately.
   3. Meta Data QC – this process samples the manually keyed metadata and manually zoned particles to ensure accuracy of data elements, classification and keystrokes.
   4. OCR QC – this process samples (at a contracted rate) the OCR accuracy to determine projected confidences per image.
   5. Post Process QC – this process reviews the final deliverable to ensure correct image, text, XML and database output formats.

6. Estimate cost per image. Include costs such as scanning, quality control, and indexing. Indicate the basis for calculation:

   Processing costs will be incurred to scan, digitize, and load the newspapers pages throughout the grant period. The scanning costs vary slightly depending on the source material being scanned: microfilm is $0.15 per page, bound paper is $0.32 per page, and loose paper is $0.22 per page. OCR processing costs will be $1.27 per page, and database-loading costs will $0.16 per page. These per-page costs are summarized in the table below.

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<th></th>
<th>OCR</th>
<th>DB</th>
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</tr>
<tr>
<td>Bound Paper</td>
<td>0.32</td>
<td>1.27</td>
<td>0.16</td>
</tr>
</tbody>
</table>

7. Explain how you will describe the content through metadata, including the standard you will use (e.g., MARC, EAD, Dublin Core)
We are utilizing metadata standards recently developed by the Western States Digital Standards Group. This group consists of representatives from academic and historical institutions in eight states (Utah, Colorado, Nebraska, Minnesota, Arizona, New Mexico, Kansas, and Wyoming). The metadata fields are based on Dublin Core. CONTENTdm is fully OAI-compatible as of February 2003, and our servers will be functioning as repositories for OAI harvesters.

8. Describe plans for preservation and maintenance of the digital files after the expiration of the grant period (i.e., storage systems, migration plans, and funding)

Group IV TIFF files of the scanned newspapers will be stored on two copies of DVD. One copy will be maintained in the University of Utah’s Archives and Records Management center, and the other will be housed by the institution that holds the paper or microfilm copy of the original newspaper. BYU will house DVD copies of the Deseret News. Files on all DVDs will be refreshed and migrated to new media on a 3-5 year cycle.

All collections on the CONTENTdm server (including display images and indexing) at the University of Utah are backed up to rotating LTO Ultrium digital tapes on a weekly basis. A copy of tapes containing the newspaper collections will be stored at the Archives and Records Management center. Collections housed on the distributed servers of the Mountain West Digital Library will be stored and maintained in a similar manner by the individual institutions.

The Marriott Library and BYU have committed funding and resources to the long-term sustainability of the collections and website. The UALC has committed to lead the Mountain West Digital Library. These commitments have been built into the base budgets of these organizations, and consequently will insure the ongoing leadership support for our efforts on this project. When the time does arise for new hardware or software to be purchased to continue the collection, these organizations have committed to do so.

9. If you are producing collection-level records, describe plans for submitting collection-level descriptive records to a bibliographic utility, such as Research Libraries Information Network (RLIN) or Online Computer Library Center (OCLC). State reasons for selecting any alternative approaches:

As a result of the NEH United States Newspapers Grant from the 1980s, bibliographic MARC records for all collected newspapers already exist in the University of Utah’s online catalog. These records have been uploaded to OCLC, and will be updated to reflect links to the digital versions of the newspapers.

10. Describe plans for submitting information about the project to a national level registry of digital resources, such as Association of Research Libraries’ Digital Initiatives Database or OCLC’s Cooperative Online Resource Catalog.

The University of Utah is a member of the OCLC, and as a standard practice, we will submit records of the project’s work to them.

11. Provide URL:s for applicant’s previously digitized collections.

University of Utah Digital Collections
http://www.lib.utah.edu/digital/digcol.html

Utah Digital Newspapers Collection
http://www.lib.utah.edu/digital/unews/
Brigham Young University Digital Collections
http://www.lib.byu.edu/hbll/

Mountain West Digital Library
http://www.lib.utah.edu/digital/mwdl/

Utah State University Digital Collections
http://rpa.lib.usu.edu/

Southern Utah University Digital Collections
http://cl01-liweb-server.suu.edu/library/digitization/
Partnership Statement
January 30, 2003

John Herbert  
Project Director - Newspaper Digitization  
University of Utah Marriott Library  
295 S. 1500 East, Rm. 418  
Salt Lake City, UT 84112

Dear John,

I am writing to you to document our joint partnership in the grant proposal to the IMLS regarding our historical newspaper digitization project. In particular, we will support the project’s efforts in two ways:

1. We will contribute approximately $100,000 for the scanning, processing, and loading of the first fifty years of the Deseret News. The components are $55,770 for the processing of the Deseret News, and $43,759 in in-kind funds for efforts of our project team.

2. We will participate in your training program at the end of this grant period to disseminate your program to other libraries and archival institutions through a three-day training course in Salt Lake City. We will send one person from our staff to receive the hands-on training that you will provide so that we can expand our own digital newspaper collection and keep it integrated with yours.

In working together in these ways, we will work toward creating our common vision – a region-wide integrated collection of newspapers.

I look forward to working with you and the Marriott Library during the upcoming months as we expand the small collection into the model for a large, integrated digital collection of historic newspapers.

Sincerely,

Randy Olsen  
University Librarian
ORGANIZATIONAL PROFILE

Utah Academic Library Consortium

Mountain West Digital Library

University of Utah – J. Willard Marriott Library

Brigham Young University - Harold B. Lee Library

Advisory Board
The purpose of this organization is to cooperate in continually improving the availability and delivery of library and information services to the higher education community and to the State of Utah. This is to be accomplished by, but not limited to the following:

A. Fostering research, developing and implementing cooperative library programs
B. Providing a means for the exchange of information on cooperative library ventures
C. Maximizing limited resources by improving library methods and avoiding expensive duplicate purchases
D. Maximizing information delivery through shared use of technology and human resources
E. Acting as an advocate for excellence in library resources and services
F. Taking reasonable and necessary steps for the accomplishment of the purposes set forth in this Article

Member Libraries
Brigham Young University – Provo, UT
   • Harold B. Lee Library
   • Howard W. Hunter Law Library
• College of Eastern Utah – Price, UT
• Community College of Southern Nevada - Las Vegas, NV
• Dixie State College of Utah - St. George, UT
   • Val A. Browning Library
• Great Basin College – Elko, NV
• Salt Lake Community College - Salt Lake City, UT
• Sierra Nevada College - Incline Village, NV
   • MacLean Library
• Snow College – Ephraim, UT
   • Lucy A. Phillips Library
• Southern Utah University - Cedar City, UT
   • Gerald R. Sherratt Library
• Truckee Meadows Community College – Reno, NV
   • Elizabeth Sturm Library
• University of Nevada, Las Vegas - Las Vegas, NV
• University of Nevada, Reno – Reno, NV
   • Getchell Library
   • Savitt Medical Library
• University of Utah – Salt Lake City, UT
   • J. Willard Marriott Library
   • Spencer S. Eccles Health Sciences Library
   • S.J. Quinney Law Library
• Utah College of Applied Technology – Salt Lake City, UT
• Utah State Library Division - Salt Lake City, UT
• Utah State University – Logan, UT
   • Milton R. Merrill Library
   • Sci-Tech Library
• Utah Valley State College – Orem, UT
• Weber State University – Ogden, UT
  ▪ Stewart Library
• Western Nevada Community College - Carson City, NV
• Westminster College - Salt Lake City, UT
  ▪ Giovale Library
The Mountain West Digital Library is a consortium of digital collections from universities, colleges, public libraries, museums, and historical societies in Utah. Four hosting institutions each run CONTENTdm servers and support their own digital collections, and support client institutions by providing scanning and hosting services. A multi-site aggregating server automatically harvests metadata from the hosting institutions on a regular basis and provides the search engine.

**Hosting institutions:**
Marriott Library, University of Utah
Harold B. Lee Library, Brigham Young University
Merrill Library, Utah State University
Gerald Sherratt Library, Southern Utah University

**Partner institutions:**
Delta City Library
Great Basin Association
Green River City
John Wesley Powell River Museum
Murray City Library
Snow College
Topaz Museum
Uintah County Library
Utah Museum of Fine Arts, University of Utah
Utah State Historical Society
Westminster College

**Funding**
The Mountain West Digital Library is funded by the Utah Academic Library Consortium, by grants from the *Library Services and Technology Act* as administered by the Utah State Library, and by individual institutions.
BYU Benson Institute Theses
BYU Children's Book & Play Review
BYU Electronic Theses And Dissertations
BYU Museum of Art Collection
BYU Religious Education Archive Image Collection
BYU Trails of Hope: Overland Diaries and Letters 1846-1869
MCPL Murray City Library Photograph Collection
SUU Branch Normal School Photograph Collection
SUU Dixie National Forest Photograph Collection
SUU Iron Mining District Photograph Collection
UCL Regional History Photograph Collection
UCL Leo Thorne Photograph Collection
USHS Shipler Commercial Photographers Collection
USU Death Valley Region Photo Collection
USU Utah State University Historical Photograph Collection
UU Albert Tissandier Exhibition
UU Aztec Codices
UU C. Julii Caesaris quae exstant
UU Colorado Riverbed Case
UU Cyprus Medical Libraries Project
UU Exploring the Colorado River
UU Ethiopian Manuscripts
UU Frank Lloyd Wright Wasmuth Portfolio
UU Galloway-Stone River Expedition 1909
UU Geology of the Plateaus of Utah
UU Harmonia Macrocosmica
UU Hinckley Journal of Politics
UU Intermountain Ski Instructors Association Archives
UU Journal of Undergraduate Research
UU Lessons: The Journal of the Center for Teaching and Learning Excellence
UU Marriott Library Photo Archives
UU Overland Trails Diaries & Maps
UU Sanborn Fire Insurance Maps
UU Soil Surveys
UU Tanner Trust Book Collection
UU Utah Digital Newspapers
UU Utah Ski Archives Newsletter
J. Willard Marriott Library – University of Utah

The J. Willard Marriott Library is the main library of the University of Utah, in Salt Lake City. It is a member of the Association of Research Libraries with holdings of nearly 3 million volumes, including over 25,000 journals in electronic and print formats.

The Library began digitizing materials in 1998 and in early 2000 purchased the CONTENTdm digital software suite to manage and serve its digital collections over the Internet. The digital library soon grew to include a variety of formats including rare books, photographs, maps, art prints, and documents. Prior to the digital newspapers project, the Digital Technologies department digitized most materials in-house.

In 2001 the Library began to support the digital aspirations of smaller cultural heritage institutions in Utah by providing fee-based scanning services and space on its CONTENTdm server. In 2002 the Library proposed the creation of the Mountain West Digital Library (MWDL) and secured support and funding from the Utah Academic Library Consortium. The goal of the MWDL is to support the digital collections of cultural heritage institutions throughout the states of Utah and Nevada in a manner that allows those institutions to retain control and identity of their collections. CONTENTdm multi-site server technology, which harvests metadata from dispersed servers, was developed by DiMeMa Inc. and allows a single point of search across all collections. The Utah digital newspapers are expected to become an integral part of the MWDL.

KEY PROJECT STAFF

**John Herbert - Project Director.** Full time, 100% grant-funded.  
John’s responsibilities are to plan and coordinate the collection and digitization of Utah historical newspapers. This involves developing and implementing a comprehensive plan that addresses the issues of statewide newspaper collection, storage, microfilming, and digitization. He is also responsible for seeking additional funding from major granting agencies to advance the project beyond its current scope, establish relationships and negotiate contracts with publishers of Utah newspapers, and to communicate and work with other digitization centers in the state.

**Kenning Arlitsch – Head of Digital Technologies.** Part time (10%), in-kind contribution.  
Kenning launched the digital newspapers project in 2000, developed relationships throughout Utah and the intermountain region, generated the funding required to launch and sustain the project, developed the leading-edge processes and technology, and successfully implemented the website. His primary duties are to manage the library’s digitization efforts, co-manage the library's website, and lead efforts to investigate and implement new technologies for the library’s website, its digital projects, and other areas of library automation.

**Karen Edge – Digitization Coordinator.** Full time, 100% grant-funded.  
Karen coordinates the day-to-day activities of this project, and has been doing so since its infancy, two years ago. She is responsible for converting files into a Web-deliverable format, loading them into the library’s digital media management database, and indexing each article using a controlled vocabulary for subject description. She also is responsible for creating our website to present the project, for helping to market the project, and for helping to compile progress reports to granting agencies.

**Jeff Jonsson – Digitization Systems Analyst.** Part time (30%), in-kind contribution.  
Jeff insures the day-to-day activities related to the website, server, and data are running smoothly. He is responsible for the hardware/software needs of the Digital Technologies Division, including the
Digitization Center, the Research and Development group, and the Web Team. He determines and implements technical solutions to help fulfill the needs of the group, and may be asked to assist other parties involved in digitization, both in and outside the library. He also exercises initiative in meeting the library’s digital strategic plan.
Harold B. Lee Library – Brigham Young University
(Source: http://www.lib.byu.edu/hbl/)

The Harold B. Lee Library supports the academic and religious mission of Brigham Young University and its sponsor, The Church of Jesus Christ of Latter-day Saints. The library's mission is to acquire, organize, preserve, and provide access to collections of scholarly and related materials in all media; to assist patrons in finding and using information available at the University and elsewhere; and to encourage lifelong learning.

Library Facts and Figures
Harold B. Lee Library - Brigham Young University

Collections -- The Physical Library
- Books: 2,694,265
- Government Documents: 409,102
- Maps: 245,480
- Microforms: 2,552,467
- Non-Print Media: 75,854
- Serial Subscriptions: 16,086
- Special Collections: 255,125

Collections -- The Digital Library
- Books: nearly 5,000
- Journals: more than 6,000
- Databases: more than 450
- Images: more than 3,000 from the BYU Museum of Art plus thousands more from other collections
- Theses: 600 BYU theses related to the LDS Church

Building Size
- 1961 original building: 205,000 sq. ft.
- 1976 addition: 225,000 sq. ft.
- 1999 addition: 235,000 sq. ft.
- TOTAL: 665,000 sq. ft.

Length north to south = 2½ football fields
Shelving for 5.2 million volumes (98 miles of shelves)
Seating for 4,600 people
200-seat auditorium
8 technology-enhanced classrooms
3 student computer labs (total of 200+ work stations)
39 student group study rooms
Research rooms for 130 faculty

Activity
- Open 101 hours each week
- More than 10,000 patrons enter the building daily
- 386,427 reference questions answered

Circulation
- 656,985 items checked out & returned
- 782,993 items used inside the building

Interlibrary Loan
- 31,379 items loaned
- 29,676 items borrowed

Library Instruction
- 2,376 sessions held
- 36,588 participants
Staff Size
158 full-time personnel
400 student employees

Susan Fales – Curator, Digital Historical Collections. Part time (15%), in-kind contribution. Susan is responsible for working in conjunction with special collections curators, librarians, and faculty at the University in the selection of existing print and manuscript collections for consideration as digital publications. She acts as the content specialist on a team or as the project manager responsible for bringing the digital publication to completion and delivery.

Brandon McArthur – Project Manager. Part time (15%), in-kind contribution. Brandon insures that assigned digital library projects are effectively carried through to completion, focusing on projects originating in Library Special Collections. He manages daily functions of text mark-up operation, organizes working teams drawn from different library departments and coordinates work efforts with each individual team member’s supervisor, and manages several concurrent projects, each with limited resources.

Amy Stucki – Web Programming Manager. Part time (15%), in-kind contribution. Amy provides web and database application development for library services and digital library programs. This includes designing, coding, documenting, and supporting applications. She consults with project sponsors to determine how best to meet the needs of the project with the existing infrastructure and databases. She programs database access applications using Perl, PHP, MySQL, and other appropriate tools. She also provides user training and support once the application is released.
ADVISORY BOARD

Philip Notarianni – Director, Utah State Historical Society

David Lewis – Professor of History, Utah State University

Dean May – Professor of History, University of Utah

Randy Olsen – Director, Harold B. Lee Library, Brigham Young University

Amy Owen – Director, Utah State Library

Randy Silverman – Head of Preservation, Marriott Library, University of Utah

Lynnda Wangsgard – Director, Weber Co. Library
IMLS Assurances

The IMLS is required to obtain from all applicants certifications regarding federal debt status, debarment and suspension, non-discrimination, and a drug-free workplace. Applicants requesting more than $100,000 in grant funds must also certify regarding lobbying activities and may be required to submit a “Disclosure of Lobbying Activities” (Standard Form LLL). Some applicants will be required to certify that they will comply with other federal statutes that pertain to their particular situation. These requirements are incorporated in the Assurances Statement below. Review the Statement and sign the certification form. If you receive a grant, you must comply with these requirements.

(Certification of Authorizing Official)

I have examined this application, and I hereby certify on behalf of the applicant organization that
1) the information provided is true and correct; and
2) all requirements for a complete 2003 IMLS application have been fulfilled; and
3) the applicant is providing and will comply with the applicable certifications regarding federal debt status, debarment and suspension, nondiscrimination, drug-free workplace, and lobbying activities as set forth in the Assurances statement below.

Should my organization receive a grant, the organization and I will comply with all grant terms and conditions, all requirements of the IMLS Grants Regulations (45 CFR Part 180 et seq.), all statutes outlined below, and all other applicable Federal statutes and regulations.

[Signature]
[Date: JAN 28 2003]

VINCENT BOGDANSKI
ACTING CO-DIRECTOR
OFFICE OF SPONSORED PROJECTS

Name and Title of Authorizing Official (printed or typed)

IMLS Regulations are available upon request.

ASSURANCES STATEMENT

By signing the application form, the authorizing official, on behalf of the applicant, assures and certifies that, should a grant be awarded, it will comply with the statutes outlined below and all related IMLS regulations. These assurances are given in connection with any and all financial assistance from IMLS after the date this form is signed, but may include payments after this date for financial assistance approved prior to this date. These assurances shall obligate the applicant for the period during which the Federal financial assistance is extended. The applicant recognizes and agrees that any such assistance will be extended in reliance on the representations and agreements made in these assurances, and that the United States government has the right to seek judicial enforcement of these assurances, which are binding on the applicant, its successors, transferees, and assignees, and on the authorized official whose signature appears on the application form.
I. CERTIFICATIONS REQUIRED OF ALL APPLICANTS

FINANCIAL, ADMINISTRATIVE, AND LEGAL ACCOUNTABILITY

The authorizing official, on behalf of the applicant, certifies that the applicant has legal authority to apply for Federal assistance and the institutional, managerial, and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management, and completion of the project described in this application.

The authorizing official, on behalf of the applicant, certifies that the applicant will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 (31 U.S.C. § 7501 et seq.) and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

The authorizing official, on behalf of the applicant, certifies that the applicant will comply with the provisions of OMB Circular No. A-110, "Uniform Administrative Requirements for Grants and Other Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations."

The authorizing official, on behalf of the applicant, certifies to the best of his or her knowledge and belief that the applicant is not delinquent in the repayment of any federal debt.

DEBARMENT AND SUSPENSION

The authorizing official, on behalf of the applicant, certifies to the best of his or her knowledge and belief that the applicant and its principals:

(a) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;

(b) have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction, or in connection with a violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, makings false statements, or receiving stolen property;

(c) are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and

(d) have not within a three-year period preceding this application/proposal had one or more public transactions (federal, state or local) terminated for cause or default.

The authorizing official, on behalf of the applicant, certifies that the applicant will comply with the following nondiscrimination statutes and their implementing regulations:

(a) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. § 2000 et seq.), which prohibits discrimination on the basis of race, color, or national origin;

(b) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 701 et seq.), which prohibits discrimination on the basis of disability;
(c) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-83, 1685-86), which prohibits discrimination on the basis of sex in education programs; and

(d) the Age Discrimination in Employment Act of 1975, as amended (42 U.S.C. § 6101 et seq.), which prohibits discrimination on the basis of age.

(A) The authorizing official, on behalf of the applicant, certifies that the applicant will or will continue to provide a drug-free workplace by:

(a) publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee’s workplace and specifying the action that will be taken against employees for violation of such prohibition;

(b) establishing an ongoing drug-free awareness program to inform employees about:

(1) the dangers of drug abuse in the workplace;

(2) the grantee’s policy of maintaining a drug-free workplace;

(3) any available drug counseling, rehabilitation, and employee assistance programs; and

(4) the penalties that may be imposed on employees for drug abuse violations occurring in the workplace;

(c) making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

(d) notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will

(1) abide by the terms of the statement; and

(2) notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace not later than five calendar days after such conviction;

(e) notifying the agency in writing within ten (10) calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the federal agency has designated a central point for the receipt of such notices. Notices shall include the identification number(s) of each affected grant;

(f) taking one of the following actions within thirty (30) days of receiving notice under subparagraph (d)(2) with respect to any employee who is so convicted:

(1) taking appropriate personnel action against such an employee, up to and including termination consistent with the requirements of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 701 et seq.); or

(2) requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law or other appropriate agency; and

(g) making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).

(B) The applicant shall either identify the site(s) for the performance of work done in connection with the project in the application material or shall keep this information on file in its office so that it is available for federal inspection. The street address, city, county, state, and zip code should be provided whenever possible.
CERTIFICATION REGARDING LOBBYING ACTIVITIES (APPLIES TO APPLICANTS REQUESTING FUNDS IN EXCESS OF $100,000)

The authorizing official certifies, to the best of his or her knowledge and belief that:
(a) no federal appropriated funds have been paid or will be paid, by or on behalf of the authorizing official, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of a federal contract, the making of a federal grant, the making of a federal loan, the entering into of a cooperative agreement, or the extension, continuation, renewal, amendment, or modification of a federal contract, grant, loan, or cooperative agreement.
(b) if any funds other than appropriated federal funds have been paid or will be paid to any person (other than a regularly employed officer or employee of the applicant) for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan or cooperative agreement, the authorizing official shall request, complete, and submit Standard Form LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
(c) the authorizing official shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

GENERAL CERTIFICATION

The authorizing official, on behalf of the applicant, certifies that it will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing the program.

II. CERTIFICATIONS REQUIRED OF SOME APPLICANTS

The following certifications are required if applicable to the project for which an application is being submitted. Applicants should be aware that additional federal certifications, not listed below, might apply to a particular project.

SUBAGREEMENTS

Applicants who plan to use awards to fund subgrants, contracts and subcontracts should be aware that they must receive the following certifications from applicants to grant programs and those who bid on contracts:
(1) certification of compliance with the nondiscrimination statutes from institutional applicants and contractors, and
(2) certification regarding debarment and suspension from applicants to grant programs (regardless of the amount requested) and from potential contractors and subcontractors who will receive $100,000 or more in grant funds. Applicants are also required to include without modification the following wording in solicitations for all grant proposals and for contracts that are expected to equal or exceed $100,000:
(a) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.
(b) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.
The authorizing official, on behalf of the applicant, certifies that the applicant will comply with the provisions of the Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. § 3001 et seq.), which applies to any organization that controls or possesses Native American human remains and associated funerary objects, and which receives federal funding, even for a purpose unrelated to the Act.

The authorizing official, on behalf of the applicant, certifies that the applicant will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470f), Executive Order (E.O.) 11593, and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. § 469 et seq.).

The authorizing official, on behalf of the applicant, certifies that the project will comply with environmental standards, including the following:
(a) institution of environmental quality control measures under the National Environmental Policy Act of 1969, as amended (42 U.S.C. § 4321 et seq.) and Executive Order (E.O.) 11514;
(b) notification of violating facilities pursuant to Executive Order (E.O.) 11738;
(c) protection of wetlands pursuant to Executive Order (E.O.) 11990, as amended by Executive Order (E.O.) 12608;
(d) evaluation of flood hazards in floodplains in accordance with Executive Order (E.O.) 11988, as amended.
(e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972, as amended (16 U.S.C. § 1451 et seq.); and
(f) conformity of Federal actions to State (Clean Air) Implementation Plans under section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. § 7401 et seq.); and
(g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (42 U.S.C. § 300f et seq.); and

The authorizing official, on behalf of the applicant, certifies that the project will comply with the Wild and Scenic Rivers Act of 1968, as amended (16 U.S.C. §1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

The authorizing official, on behalf of the applicant, certifies that the applicant will comply with the flood insurance requirements of the Flood Disaster Protection Act of 1973, as amended (42 U.S.C. § 4001 et seq.), which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

The authorizing official, on behalf of the applicant, certifies that the project will comply with 45 C.F.R. Part 46 regarding the protection of human subjects involved in research, development and related activities supported by this award of assistance.
The authorizing official, on behalf of the applicant, certifies that the project will comply with the Laboratory Animal Welfare Act of 1966, as amended (7 U.S.C. § 2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

For further information on these certifications, contact IMLS at 1100 Pennsylvania Avenue, NW, Room 510, Washington, DC 20506 or call (202) 606-8536.
RESUMES

Key Members of Project Team

and

Advisory Board
Kenning Arlitsch  
Head Of Digital Technologies  
University of Utah - Marriott Library

295 S. 1500 East, Rm. 450  
Salt Lake City, UT 84112

EDUCATION:
University of Utah, Academic Outreach and Continuing Education, Salt Lake City, Utah  
Webmaster Certificate, December 2000

University of Wisconsin-Milwaukee, School of Library and Information Science,  
M.L.I.S., December 1993

Alfred University, Alfred, NY  
B.A. English, May 1987

Suffolk County Community College, Selden, NY  
A.A.S. Business Administration, May 1985

EXPERIENCE:
Marriott Library, University of Utah, Salt Lake City, UT  
Head of Digital Technologies, April 2001 - Present
Manage the library's digitization projects and application programming needs with a staff of 10 members in efforts to continue building the library's digital collections, provide automation needs for in-house applications, and develop and manage technologies for use in the library's website.

Marriott Library, University of Utah, Salt Lake City, UT  
Head, Marriott Library Digitization Center, January 2000 - April 2001
Led library's digitization efforts by establishing best practices for scanning, metadata, and establishing an infrastructure to manage digitized collections. Created high-resolution digital collections of the library's rare books, maps, manuscripts, etc. Established librarian Mentoring Program.

Marriott Library, University of Utah, Salt Lake City, UT  
Digital Librarian, September 1998 - December 1999

American Center, Nicosia, Cyprus  
USIA/ALA International Library Fellow, September 1997 - March 1998
One of 12 librarians selected to represent the United States overseas. Established twelve-member database consortium to purchase five SearchBank full-text databases. Trained librarians and staff in the use of various technologies. Successful grant proposal led to return visit in 1999; helped create Cyprus Medical Library's first electronic document delivery system and online database of medical research published in Cyprus.

Marriott Library, University of Utah, Salt Lake City, UT  
Technology Instruction Librarian, June 1994 – August 1998
Trained students, staff, and faculty in the use of information technologies, databases, Internet, software applications, and operating systems. Created instructional handouts and original Marriott Library WWW home page. Coordinated construction of two hands-on teaching labs; co-developed and taught Internet Navigator, Utah's first online Internet instruction course; produced print and Web versions of the Information Systems Handbook; co-editor of Inline newsletter.
University of Wisconsin-Milwaukee, School of Library and Information Science, Teaching Assistant and ESL Instructor, 1993 - 1994
Taught undergraduate-level library instruction courses. Taught English grammar, reading, writing and library terminology to international librarians to help prepare them for graduate-level courses at the SLIS.

Information Access Company, Foster City, CA
Indexer-Editor, 1989-1992
Indexed a wide variety of journals and newspapers for the InfoTrac line of databases. Trained other Indexers in addition to indexing responsibilities and quotas.

GRANTS
- LSTA: “State-wide Newspaper Collection and Digitization” $282,000, January – September 2003
- LSTA: “A Digital Collections Server for Utah” $70,000, December 2001 - September 2002
- LSTA: “Digitizing Utah Newspapers” $93,000, May 2001-September 2002
- Middle East Cancer Consortium: “Cyprus Medical Libraries Project” $15,000, 1998- 2000

PUBLICATIONS:


JOHN HERBERT
Project Director
University of Utah - Marriott Library

Senior operations leader with extensive global experience in Supply Chain Management. Twelve years experience in Information Technology. Excellent knowledge of financial services, printing, courier, and insurance industries, as well as material handling automation. Broad cross-functional experience in Finance, Procurement, and Customer Service. Senior relationship manager with strategic/worldwide suppliers. Accomplished in both operations management and large-scale project leadership. Strong preference for change, customer focused, versatile, and collaborative.

PROFESSIONAL EXPERIENCE

AMERICAN EXPRESS-TRAVELERS CHEQUE (TC) GROUP Salt Lake City, UT
Operations and Technologies HQ for worldwide leader in TC industry.

Director-Logistics Design 1999-2002
Led large-scale initiative to automate material handling/fulfillment at U.S. distribution center. Selected for project lead because of knowledge, experience, and track record of innovation.
- Developed business case and gained approval for funding. Identified significant process improvements, new technology platform, global applicability, and potential revenue streams. Project budget of $3 million, ROI of 33%, and IRR of 20%.
- Organized large, complex project team consisting of several internal AmEx groups in Salt Lake and New Jersey, multiple suppliers in U.S. and Europe, project staff, and consultants.
- Closely managed European supplier through time, distance, and language barriers, against aggressive project schedule, and amid difficult circumstances.
- Designed and completed building re-stack to accommodate machinery.
- Properly aligned IT (software) and equipment (hardware) issues through managing complex requirements, software and hardware development, and rigorous integrated testing.
- Launched software, but project closed down due to supplier’s bankruptcy before hardware completed. Negotiated settlement with supplier that allowed for ongoing software support.

Director-Worldwide Distribution 1993-1998
Produced & distributed all TC products worldwide to insure highest level of customer service. Managed global supply chain of six printing suppliers, 30+ distribution centers, and secure couriers. Directed staff of 100+, with seven direct reports across the globe. Developed/met operational and printing budgets of over $25 million.
- Created, gained approval for, and executed strategic plan to re-engineer worldwide TC printing, distribution, and fulfillment processes, including new Logistics Design position.
- Instituted regional fulfillment centers by consolidating nine distribution centers into Singapore, and six into the U.K. Negotiated regional courier contracts with FedEx. Generated $2 million savings in operating expenses and inventory costs.
- Achieved world-class employee satisfaction in 11 of 12 categories by sponsoring diversity, teams, 360 feedback, and mentoring initiatives.
- Reduced printing expenses 20% ($4 million) by signing global contracts with strategic suppliers, utilizing first formal RFP process.
- Piloted and proved concept of “print-to-ship”, designed to drastically reduce inventories and cycle time, postpone SKU differentiation, and move toward Just-In-Time.
- Reduced counterfeits 40% ($3 million) by re-designing TC product’s security features, setting a new industry standard.
Manager-Business ReEngineering 1992-1993
- Organized and reported all TC Operations’ re-engineering efforts, including complete coordination of center-wide organizational redesign, which generated $3 million savings.
- Advised Senior Vice President regarding major organizational and restructuring decisions, and detailed review of all departmental budgets
- Acted as liaison between SLC and NYC corporate offices.

Manager-Financial Reconciliation 1991-1992
- Reviewed, reconciled, and insured collection of all cash payments from worldwide TC sales of $25 billion. Reduced write-off to approx. $1 million (0.004%). Directed staff of 40, with 3 direct reports (supervisors).
- Proposed, organized, & implemented department merger into Customer Service, which combined similar reconciliation processes to better serve customers.
- Improved morale and productivity by instituting flexible work schedules, small work teams, quantitative performance measures, and extensive ad-hoc reporting system.

Lead Programmer/Analyst (Project Leader) 1985-1990
- Managed all technical components of Walker General Ledger installation, insuring it was on time and within budget. Coordinated Salt Lake and New York activities to insure accurate setup of accounting system. Directed all efforts of programming staff.
- Designed, developed, and maintained systems to automate incentive payments to TC sellers. Decentralized process from NYC to SLC and the field. Developed & conducted training sessions in Hong Kong and Tokyo.

WAUSAU INSURANCE COMPANIES Wausau, WI
Corporate Systems Analyst 1979-1985
- Developed & maintained large group health claim payment systems. Supervised project team. Increased productivity of claims unit over 40% by improving reporting and flow of information.
- Developed group health information system for policyholders to review group health expenses. Demonstrated to field sales force and Board of Directors. Trained policyholders to use system.

EDUCATION
Master of Business Administration University of Utah 1990
Outstanding MBA Scholar (valedictorian), Dean's Scholar. Beta Gamma Sigma and Phi Kappa Phi honor societies.

Bachelor of Arts - Computer Science
Bachelor of Arts - Mathematics University of Kansas 1978
Honor Roll/Dean's List.

MEMBERSHIPS AND INTERESTS
- Member, Board of Directors, United Way, Greater Salt Lake Area, 1997-2000
- Chair, United Way Campaign, American Express, Salt Lake City, 1996
- Guest Lecturer, “International Operations”, Univ. of Utah Exec MBA Program, 1999 & 2000
- Member, Bike Organizing Committee, Utah MS 150 Bike Tour (fundraiser), 2002.
- Member, MBA Admissions Committee, University of Utah, 1990
- President, Midvale Middle School, Parent Advisory Board, 1997-1999
Dean L. May is a Professor of History at the University of Utah in Salt Lake City, and has taught as Fulbright guest Professor at the University of Bonn, Germany and Ain Shams Univesity, Cairo. He is a Fellow of the Utah State Historical Society, has served as chairman of the Utah Board of State History, is past editor of the Journal of Mormon History, and immediate past president of the Mormon History Association. He has twice received the Students Choice Award for Teaching Excellence, and in 2002 received the Ramona Cannon Award for Teaching Excellence in the Humanities.

He was a contributor to the FDR Encyclopedia and The Harvard Encyclopedia of American Ethnic Groups, and has published extensively on the social history of the American West. He is author or co-author of books on New Deal economic and social policy during the late 1930s, on communal life and values among the Latter-day Saints, and on Utah history. His Three Frontiers: Family, Land, and Society in the American West, 1850-1900, comparing the social structure and values of early settlers of rural Oregon, Idaho, and Utah was published in 1994 by Cambridge University Press and appeared in paperback in 1997.

He has written and produced two video series on Utah history and folkways, A Peoples’s History of Utah (Salt Lake City, University of Utah Instructional Media Services, 1981-88), 20 half-hour programs; and Utah Remembers (Salt Lake City, KJZZ, Channel 14, 1986), seven forty-five-minute programs. In 1996 he was historical consultant to the Utah Centennial Commission in planning for the state’s centennial celebrations. In 2001 he taught immigration history on the Norwegian Full-Rigged Sailing Vessel, the Christian Radich, for two months while sailing in the North Sea and crossing the Atlantic to New York City. He was honored as a “Pioneer of Progress in Historic and Cultural Arts” by the Days of ’47 Celebration Committee for the State of Utah in 2002.

His publications include the following:


“Three Days in May: Life and Manners in Salt Lake City, 1895,” Utah Historical Quarterly 64(Spring, 1996): 121-132.


Utah: A People’s History (Salt Lake City: University of Utah Press, 1987).
David Rich Lewis
Professor of History, Utah State University
Coeditor, Western Historical Quarterly

EDUCATION:

PROFESSIONAL EMPLOYMENT:
• Professor, Department of History, Utah State University, Logan, UT. 1988-present
• Coeditor, Western Historical Quarterly 1992-present

HONORS/FELLOWSHIPS:
• Researcher of the Year, College of Humanities, Arts, and Social Sciences, Utah State University, 1997.
• Honors Professor, Utah State University Honors Program, 1996-1997.
• University Faculty Research Grant, Utah State University, 1989-1990.
• Visiting Scholar and Research Fellow, American West Center, University of Utah, 1986-87.
• Pre-doctoral Fellowship, D'Arcy McNickle Center for the History of the American Indian, Newberry Library, Chicago, IL, 1985-86.
• Bert M. Fireman Prize, Western History Association, 1984.
• W. Mont Timmins Essay Prize, Dept. of History, Utah State University, 1979

PUBLICATIONS:
Neither Wolf Nor Dog: American Indians, Environment and Agrarian Change


Western Historical Quarterly, 1992-present.

REFEREED ARTICLES:


INVITED ESSAYS/BOOK CHAPTERS:


PROFESSIONAL ORGANIZATIONS:
- American Indian Historians Association
- American Society for Environmental History
- American Society for Ethnohistory
- Organization of American Historians
- Phi Alpha Theta
- Western History Association
EDUCATION
• Ph.D., Anthropology, University of Utah, Course work and comprehensive exams completed, dissertation in progress.
• M.P.A., Public Administration, Brigham Young University, 1981
• M.L.S., Library and Information Science, Brigham Young University, 1973
• B.A., Political Science and German, Utah State University, 1971.

BRIGHAM YOUNG UNIVERSITY, HAROLD B. LEE LIBRARY
University Librarian, 2002-Present
• Set direction for all areas of the library: collection development, public services, technical services, strategic planning, special collections, budget, personnel, development, and physical facilities.
• Define and implement digital library services and coordinate activities with academic programs and other distributed learning programs.
• Identify and cultivate donors for the library’s development program.
• Articulate the library’s needs and role within the mission of the university and articulate the economics of scholarly information to the university administration.

Deputy University Librarian, 1993-2002
• Lead the public library’s service and collection development programs.
• Direct the technology programs including digital library initiatives.
• Lead development efforts including work with the Friends of the Library Board and liaison with the LDS Foundation and donors.
• Develop building program documents and coordinate communication with architects, contractors and university planning personnel during the library’s expansion and remodeling projects.

Assistant University Librarian for Collection Development and Public Services, 1985-1993
• Responsible for establishing collection development policy, supervising twenty-five subject bibliographers, and developing approval, standing order, and subscription programs.
• Responsible for administering public service programs, including reference services, library use instruction, and computer-assisted research.
• Responsible for administering all budgets associated with collection development and public service programs.

Assistant University Librarian for Budget and Administrative Services, 1980-1985
• Formulate budget plans, develop budget requests, and oversee library funds expenditures.
• Develop and administer personnel policies, including personnel planning, staff development, and salary administration.
• Manage physical facilities, including library security and emergency preparedness.

ASSOCIATIONS
Utah Library Association 1981-2001
Utah Academic Library Council 1986-1996
Mountain Plains Library Association 1989-2001
American Library Association 1980-1985
PUBLICATIONS/PAPERS/PRESENTATIONS

“Perspectives on Change.” (July 18, 2000). An Address given at the Brigham Young University Devotional. Published in Brigham Young University 2000-2001 Speeches (pp. 61-68). Provo, UT: Brigham Young University.


Amy Owen
Utah State Library Division
250 North 1950 West, Suite A
Salt Lake City, Utah 84116

Education
B.A. Brigham Young University, 1966
Bachelor of Arts, Composite Major/Minor: Humanities
M.L.S. Brigham Young University, 1968
Masters of Library and Information Science

Work
1968-72 Systems Librarian, Utah State Library Division
1972-74 Director of Reference Services, Utah State Library Division
1974-81 Director of Technical Services, Utah State Library Division
1981-87 Deputy Director, Utah State Library Division
1987- Director, Utah State Library Division

Utah Activities
Governor's Conference on Library and Information Services, Executive Planning Comm. Chair, 1991
Human Pursuits, Executive Board, 1991-1998; Chair, 1997-1998
University of Utah, President's Task Force on the Future of Libraries, 1992
Utah Academic Library Council, Council Member, 1987-; Executive Secretary, 1978-84
Utah Advisory Committee on Library and Information Services, State Library Liaison, 1979-
Utah Education Network, Steering Committee, 1995-
Utah Humanities Council, Council Chair, 1988-90; Council Member, 1985-91
Legislative Committee, ex officio member, 1987-
Utah System of Higher Education, State Division of Facilities Construction and Management
Utah Statewide Library Study, Steering Committee Co-Chair, 1988-89

National Professional Activities
American Library Association
Association of Specialized and Cooperative Library Agencies
Budget and Finance Committee, 1984-86, 1989-92
Board of Directors, Member at Large, 1984-86; Executive Committee, 1993-96
State Library Agency Section, Executive Board Member at Large, 1988-1990
President, 1994-95

Communications Services
Voices and Visions: Reading, Viewing, and Discussion Programs in America's Libraries, National Advisory Board, 1988-90
Office for Research, Public Library Data Collection Pilot Project, Advisory Committee, 1985-88
Public Library Association
  Goals, Guidelines and Standards Committee, 1987-92; Chair, 1990-91
  Kellogg Phase III Advisory Committee, Chair, 1990-91
  New Standards Task Force, Public Library Development Project Study Team, 1985-87
  Public Library Data Service Advisory Committee, 1988-91
  President's Strategic Issues and Directions Committee, 1991-1993
Bibliographic Center for Research, Board of Trustees, 1987-
  Board of Trustees President, 1991-1993
Chief Officers of State Library Agencies
  Board of Directors, 1990-96
  Chair, LSTA Evaluation Committee, 1996-
Dynix Snowbird Leadership Institute, National Advisory Board, 1990-
Intermountain Community Learning and Information Center Project
  Management Board Member, 1987-90
National Center for Educational Statistics, State Library Agency Steering Committee, 1995-
National Commission on Libraries and Information Science
  Cooperative Federal/State Public Library Data System: Task Force Member, 1988-1990
  Fee Study, Review Panel Member, 1984-85
National Endowment for the Humanities, Library Programs Division
  Grant Panelist, 1988,1992, 2002; Reading & Discussion Groups, Panelist, 1988; State Programs Division, Review Panelist, 1992
National Network of Libraries of Medicine, Midcontinental Region Advisory Committee, 1991-94
University of Minnesota, Carlson School of Management
  U. S. Department of Education Title II-B study, "Assessment of the Public Library's Missions in Society," national advisory committee member, 1991-92
University of Wisconsin-Madison, School of Library and Information Studies
  U.S. Department of Education Title II-B study, "Evaluating Federally Funded Library Programs," national advisory committee member, 1992-94
Western Council of State Libraries, Council member, 1987-; President, 1995-96
  Workshop planner/presenter, "Impact of the PLA Public Library Development Project Project on State Library Development Activities," 1987

HONORS
1989  Mountain Plains Library Association: Distinguished Service Award
  Utah Library Association: Special Recognition Award
1990  Brigham Young University College of Humanities, Honors Alumni
1991  Library Journal, "Librarian of the Year"
  Brigham Young University School of Library and Information Science, Alumni Award for Distinguished Service in Librarianship
  Resolution of Honor from the Utah State Legislature, H.C.R.23
1992  Utah Library Association, Librarian of the Year Award
PHILIP F. NOTARIANNI

CURRENT POSITION:
  Director  Associate Professor Lecturer
  Division of State History  Ethnic Studies Program
  Utah State Historical Society  University of Utah

EDUCATION:
  University of Utah, B.S. History, 1970
  University of Utah, M.A. History, 1972
    Thesis: "The Italian Immigrant in Utah: Nativism 1900-1926"
  University of Minnesota, M.A. History, 1976
  University of Utah, Ph.D. History, 1980
    Dissertation: "Tale of Two Towns: The Social Dynamics of Eureka and Helper, Utah"

SPECIALIZED WORK, PROFESSIONAL EXPERIENCE AND DISTINCTIONS:
UNICO National and Rockefeller Foundation Research Assistant, Immigration History Research Center, University of Minnesota, 1973-76. Processing of Italian-American manuscript collections, general archival assignments, and archival training.
Preservation contract, Utah State Historical Society, 1976-77. The specific assignment dealt with the survey and documentation of the history and historic and cultural sites of the Tintic Mining District, Utah
Coordinator, Museum Services Section, Utah State Historical Society, 1983-1990. Direct and supervise all aspects of the Society's museum program with a budget of approximately $150,000.
Awarded a Fulbright Research Grant to Italy for 1987-88. Host institution: Department of Anthropology, University of Calabria, Cosenza, Italy.
Recipient, Utah Humanities Council Award of Merit, 1991, for museum programming.
Coordinator of Public Programs, Utah State Historical Society, 1990-2002. Directed the Division of State History's public and outreach programs.

SELECTED PUBLICATIONS:
Books:


Articles:


**Archival Monographs:**
“An Inventory of the Papers of Onorio Ruotolo,” Immigration History Research Center, University of Minnesota, 1974.

“An Inventory of the Papers of Michelangelo Crisafi (pseud. Germoglino Saggio),” Immigration History Research Center, University of Minnesota, 1975.

“An Inventory of the Papers of the American Committee on Italian Migration.” Immigration History Research Center, University of Minnesota, 1976.
Randy Silverman
Associate Preservation Librarian
University of Utah, Marriott Library, Salt Lake City, UT 84106

EDUCATION
1986 Brigham Young University (Provo, UT), Master of Library Science (MLS)
1978 The Evergreen State College (Olympia, WA), Bachelor of Arts (BA)

EMPLOYMENT
1993-pres. Preservation Librarian, University of Utah, Salt Lake City, UT
1987-93 Preservation Librarian, Brigham Young University, Provo, UT
1985-87 Collections Conservator, Brigham Young University, Provo, UT
1983-85 Assistant Rare Book Conservator, Brigham Young University, Provo, UT
1980-82 Bookbinder, Dobbs Brothers Restoration & Conservation, St. Augustine, FL
1978-80 Bookbinder, Colonial Bookbindery, Ft. Lauderdale, FL

TEACHING
1998-pres. Adjunct, Emporia State University’s School of Library and Information Management,
“Preservation of Library and Archival Materials,” (LI863), and “The History of Information,”
(LI839) in four Western states (Utah, Oregon, Colorado, and New Mexico), plus
“Practicum in the Park,” in Rocky Mountain National Park, CO.
1988-92 Adjunct, Brigham Young University School of Library and Information Sciences, “Preservation
of Library and Archival Materials,” (LIS 594R).
1999-pres. Program Advisory Committee, Preservation and Conservation Studies Program, University of
Texas at Austin.

PROFESSIONAL AFFILIATIONS
American Institute for Conservation of Historic and Artistic Works (AIC), Professional Associate.
Conservation Assessment Program (CAP), certified to conduct surveys for Heritage Preservation and
the Institute of Museum and Library Services.
Nicholson Baker’s American Newspaper Repository, Advisory Board.
Utah Library Association (ULA), President (2000-01).

GRANTS RECEIVED
Ten grants from 1987 to 2001 including National Endowment for the Humanities (Mountain Plains
Regional Book Repair Technician Training Program); American Institute for Conservation of Historic
and Artistic Works (Kress Conservation Publication Fellowship); Council on Library Resources
(Investigation into the Non-damaging Book Drop); Kress Foundation (Travel Fellowship); Utah
Humanities Council and Utah Office of Museum Services, (Preservation Roadshow).

CONSULTANCIES
Twenty-six paid and pro bono consultations from 1986 to 2001.

PRESENTATIONS & WORKSHOPS
110 professional presentations from 1987 to the present in 21 states as well as Canada, England,
France, and Italy.

SELECTED PUBLICATIONS
2002 Silverman, R. Book review, The Art of Publishers' Bookbindings 1815-1915 by Ellen K. Morris and
2000 Silverman, R. & Grandinette, M. “Connoisseurship of nineteenth and early twentieth century
publishers' bookbindings,” in Carlo Federici, et al., (eds.), International conference on
conservation and restoration of archive and library materials, Erice, 22-29 April 1996. Rome:
al., (eds.), International conference on conservation and restoration of archive and library
p. 367-374.


Lynnda M. Wangsgard  
Weber County Library System  
Ogden, UT 84401-2404

Education:  
Brigham Young University. Master of Public Administration, 1982.  
Weber State College. Bachelor of Science Degree, 1970.

Current Employment:  
Director, Weber County Library System.

The Weber County Library (WCL) serves a population of approximately of 200,000 from its Main Library, three Branch Libraries, and Public Law Library. The library has 90+ staff members and an annual operating budget of $5,200,000. The library’s mission is to serve as a community information and reference center. Public computer centers (for adults and children) offer access to Internet and other WAN resources. WCL has an active Friends of the Library that publishes the American Library Association award-winning magazine, The Rough Draft; a Development Fund that raises money for Library capital projects; and a corps of more than 75 community volunteers that provide day-to-day support for Library programs and services including art exhibits, public readings, adult literacy, computer literacy, children’s discovery programs, and Reading Is FUNdamental (RIF).

Selected Professional Activities:

2001- Chair. Utah LSTA Advisory Board
1999-00 Member: Utah 21st Century Library Challenge Fund.
1986- Utah Library Association, Legislative Committee.

Selected Awards:

1988. YWCA of Northern Utah. Woman of the Year Award, Professional Manager.
1986. Utah Business and Professional Women. Woman of the Year Award.

Community Service:

Appendix A

Goals,

Objectives,

and

Outcome-Based Evaluations
Goal 1 – Develop the model for a statewide, distributed collection of historical newspapers.

Objective A – Perfect our technological solution by testing its scalability and improving the user interface

Outcomes:
- Prototype expanded into a large, working collection
- Stable technology platform that can be replicated and implemented at other sites

Activities/Outputs:
- Add content to the collection to test/prove scalability
- Improve the design of the user interface
- Reduce the size of the searchable text files

Objective B – Integrate the project with the Mountain West Digital Library (MWDL)

Outcomes:
- Greater understanding of digital newspaper collections by the other members of the MWDL (BYU, Utah State, and Southern Utah)
- Coordinated efforts in building the statewide digital newspaper collection

Activities/Outputs:
- Surveys of libraries and historical institutes to gather data on statewide inventory of newspaper collections
- Planning Conference with the Advisory Board and MWDL to review statewide inventory and prioritize additions to the collection
- Training Program with the other members of the MWDL to build their own digital collection of historical newspapers and integrate with the University of Utah

Objective C – Explore participation in OAI metadata harvesting projects

Outcomes:
- Greater understanding of the issues involved in providing OAI metadata harvesting for other institutions
- The evolution and intellectual development of harvesters

Activities/Outputs:
- Investigate and test integration with other OAI harvesters, especially non-CONTENTdm platforms
- Develop best practices for metadata harvesters
Objective D – Expand the current collection by adding content to each of the distributed sites

Outcomes:
- Significantly higher volume of important historical newspapers will become accessible to anyone with Internet access
  - Materials will be added in priority sequence, as determined by the Advisory Board and the MWDL
- Increased statewide interest in the content of the collection
- Greater knowledge of local history and events of that day
- Greater understanding of the limits of the technology platform
  - Especially the metadata harvesting on the aggregating server, with expanded volume at each of the distributed sites

Activities/Outputs:
- Add geographically-based volume to the collection, based on priorities developed at the Planning Conference
- Website statistics: number of pages loaded into website, quality of scanned images, number of visits to and searches in the website, percent of time website is available, cycle time of search queries

GOAL 2 – Develop greater understanding of the project’s constituents to best leverage the model and its content:

Objective A – Gather “customer-related” information about newspaper researchers (traditional and new), and how our new tools will benefit them

Outcomes:
- Patrons will be actively engaged in the pursuit of Lifelong Learning
  - Fast, successful searches will motivate/stimulate patrons to do more
  - Personal knowledge will increase as materials are read and reviewed
  - Research tools will be simple enough for anyone (K-12 and adults) to use
- Patrons will have high satisfaction from greater ability to conduct searches that:
  - Are faster (cut through minutiae)
  - Are more complex (cross referencing multiple keywords)
  - Are more comprehensive (across multiple collections, in many time periods, across many regions)
  - Have a higher degree of success
- Library staffs will have greater knowledge of the needs of their patrons, and will apply this knowledge to better serve them

Activities/Outputs:
- Administer various survey instruments to library patrons to gather pertinent information on their interests in historical newspapers
- Publish results to libraries
- Overall result will be greater number of patrons performing newspaper research, especially first-time users
Objective B – Gather “client-related” information about other institutions and their collections. Coordinate the project’s activities with newspaper publishers throughout the state.

Outcomes:
- High satisfaction of libraries who have had their collections digitized
- Greater understanding within the library community of our project, its overall direction, current status, and its impacts on them
- Greater understanding of the needs of newspaper publishers related to issues with building digital collections
- Activities by publishers and the project team will be coordinated and will work toward common goals

Activities/Outputs:
- Administer various survey instruments to library staff to gather pertinent information on their interests in historical newspaper collections
  - Document each library’s current collection and include it the statewide inventory
  - Prioritize the library’s current collection for inclusion into the digital collection
- Attend Utah Press Association conference and present our project to publishers
- Meet with publishers as needed to address issues

Objective C – Prepare an “Impact Report” on the project’s impact on all its constituencies

Outcomes:
- Greater understanding of all parties related to the project
- New conclusions drawn from considering all impacted parties
- Best practices on developing statewide collections

Activities/Outputs:
- Prepare white paper on findings and impacts
- Publish complete statewide inventory of historical newspapers on website

GOAL 3 – Disseminate the project throughout the Intermountain West so that others can implement customized versions of our model.

Objective A – Develop and publish Project Handbook

Outcomes:
- Increased understanding by any party interested in the project’s activities and successes
- Knowledge of the OAI and metadata standards used, and the criticality of interoperability

Activities/Outputs:
- Document all project activities for inclusion into the Handbook
- Make Handbook available online and publicize its completion
Objective B – Develop and administer Training Program

Outcomes:
• Increased understanding by training participants on how to develop their own digital collections and how to further disseminate within their own states or geographic area
  o Participants will understand which factors require customization of our model: number of newspapers, dates, type and condition of source materials, quality of processed images, number of distributed sites, technology platform, available funding, etc.
• More rapid and less expensive proliferation of the model to other sites through shared knowledge
  o Participants will apply the knowledge they gain through the training by producing their own successful projects

Activities/Outputs:
• Document all project activities and best practices for inclusion into the Training Program
• Conduct three-day training program for twelve institutions and end of grant period
  o Participants to research and document their project’s local factors beforehand

Objective C – Provide technical support and project management advice

Outcomes:
• “Satellite” projects are successfully completed
• Assured compliance with OAI, metadata standards, and interoperability

Activities/Outputs:
• Telephone and email communication with various “satellite” project teams
• Other support as needed
Appendix B

Our Suppliers
And
Their Processes
BACKGROUND

iArchives was selected to perform the task of converting the microfilm into a format that could efficiently be integrated into CONTENTdm. iArchives provides the technology and processing method that substantially reduces the time and cost it takes to convert the microfilm into a highly accurate searchable database. iArchives also provides a non-proprietary solution. The University of Utah worked closely with DiMeMa and iArchives to define the specifications of the project and provide a solution that can be easily duplicated in the future.

iArchives produces searchable, high-resolution images in TIFF, PDF, or other file types. iArchives has developed a highly accurate and patented OCR software methodology that consistently produces higher accuracy results when compared to “off the shelf” OCR engines.

iArchives was founded in 1994 and operated as a service bureau utilizing its internally developed OCR technology. In 2000, the company began to focus all of its resources on developing leading edge technology in the areas of image enhancement and OCR recognition of dirty documents. Because iArchives had already developed its own OCR technology, the characteristics that affect OCR accuracy were studied, and technology has been developed to enhance image quality and improve OCR accuracy. iArchives has developed and patented its OCR technology to maximize the results of its own OCR, as well as other top performing OCR engines. The iArchives OCR process utilizes multiple OCR engines that build upon each other. The results of the individual engines are not voted; rather the results of all engines are retained. This allows the iArchives OCR process to provide results that are substantially better than other OCR technologies currently on the market.
iArchives

Presentation on

Processing and Technology

(Reprinted with permission)
iArchives
Distributed OCR and Data Conversion

Architectural Overview
and
Software Features

Reprinted with permission.

iArchives' Advantages

- New paradigm in document conversion
- Scalable, accurate, and automated
- Data for any target (database management) system
  - 6 standard file formats supported, including CONTENTdm
  - Can develop any format required
- Data tailored to customer's specifications
- Olive interface not yet developed
- Their spec is not published (i.e., it is proprietary)
- Modular and extensible architecture
- Inexpensive
- Throughput - can easily process 100,000 8.5x11 text images in 24 hours

Data Flow

Text Images

- Input images can be any common image file format: .tif, .jpg, .bmp, etc
- Black-and-white, grayscale, or color
- Minimum resolution 300 dpi, 400 dpi preferred
- Extensive investigation into scanning technology, especially microfilm
- Images acquired from local scanner or from a remote scanner via cd, dvd, ftp, tape, ...
- 24x7 automated processing available
Image Acquisition

- Introduce images into workflow management system
- Properties of project established
- Multiple projects can be concurrently managed by one or more project managers
- Project priority established
- Data organized by customer type, customer, project, container, image

Image Processing

- Automatic crop and de-skew
- Image processing focused on text images, multiple image formats
- Many specialized and proprietary image algorithms such as global threshold, parameterized local adaptive threshold, despeckle, character bleed-through removal, line removal, text line de-swap, ...
- Image format conversion
- Resolution reduction
- Character de-fragmentation
- Processing algorithms configured by customer type, customer, project, container, image

OCR Framework

- Multiple OCR engines including iArchives' neural net OCR as well as best commercial engines
- Non-citing, results from all OCR engines are preserved and ranked
- OCR accuracy computed for each image
- Multiple languages
- Extensive names dictionary, more than 4 million entries
- Post-OCR processing using language models, n-gram frequencies, etc.
- OCR engines configured by customer type, customer, project, customer, image

Post Process

- Post process converts data into format specified by customer
- Internal data in XML, easily transformed into customer specification
- Customer post-processes easy to write [3 hrs to 1 day]
- Formats currently include image plus XML, image-on-text PDF, multipage image-on-text PDF, ContentDM, eXist, open source indexable text (LTP files), etc.
- Post-process configured by customer type, customer, project, customer, image
**DiMeMa Inc.**
(Source: http://contentdm.com/about-us.html)

DiMeMa Inc. (Digital Media Management) was formed in early 2001 to provide support for the rapidly growing community of CONTENTdm users. DiMeMa’s corporate objective is to provide leading software tools for content management for professional archivists. Using the latest technology integrated with input from information professionals we will continue to evolve these tools to provide easy to use, reliable, flexible and high performance applications specifically targeted for media management and archiving.

**Background**

While conducting research into optimal digital image database technologies, the CISO Lab began collaborating with the University of Washington Libraries. The special collections of the Libraries were stored in a multitude of forms and formats, and demand was building to provide flexible online access to these resources. The Libraries began to use the CISO Lab software for fast, full-featured access and management of the collections. The Libraries now have more than 45 collections with 40,000 media items either online or in development under CONTENTdm. After extensive field testing, the products resulting from these research and development activities – predecessors to the CONTENTdm Software Suite – were made available to organizations outside the University. Because of its collaborative origins and ongoing enhancements based on feedback from users, the CONTENTdm Software Suite is now a powerful digital collection management solution.

**CONTENTdm technology**

CONTENTdm offers scalable tools for archiving collections of any size. These tools are designed with minimal support requirements and maximum flexibility.

Design goals for CONTENTdm include:

- **Search efficiency**: CONTENTdm can search databases of several million objects in less than one second.
- **Scalability**: CONTENTdm allows users to start small and grow. CONTENTdm has been implemented by a variety organizations - from a public library using volunteer support staff - to large universities supporting geographically distributed collections and multinational commercial organizations.
- **State-of-the-art features**: CONTENTdm evolves continually to provide the features required by collection managers to better manage and administer collections and also offer varied search options and interfaces to users, while focusing on minimal (if any) disruption to current CONTENTdm collections.
- **Web compatibility**: CONTENTdm is 100% Web compatible to provide maximum collection access options.
- **Interoperability**: CONTENTdm is intended to provide the digital media management module within the context of other installed systems. A host of input options are provided to leverage existing collection formats and the search results from CONTENTdm may be imported to other programs to provided an integrated user interface.

DiMeMa Inc. is the developer of the CONTENTdm Software Suite for digital collections. Originally created by the Center for Information Systems Optimization (CISO) at the University of Washington, CONTENTdm was spun off to DiMeMa Inc. in 2001. CONTENTdm has become the primary software for digital special collections development in over 100 sites in the United States alone. CONTENTdm handles virtually all media types and supports open standard file types and metadata fields. The CONTENTdm Software Suite includes multiple acquisition stations for capturing and indexing items, and a Query Building Tool for developing custom web interfaces for collections access. With the 3.4 release in February 2003 CONTENTdm will also be fully compatible with the Open Archives Initiative.

In May 2002 DiMeMa Inc. signed an agreement in which OCLC became the sole distributor and marketing agent of the CONTENTdm Software Suite to libraries, museums, historical societies, and non-profit archive organizations.
Recent press releases have announced:

- Version 3.4, which adds Open Archives Initiative support and collection management and searching enhancements.

- New multi-site server that supports collections maintained at various locations. It gathers metadata from multiple CONTENTdm servers and compiles them into a single index. When a search is conducted with the Multi-Site Server search client, item information is rapidly identified and displayed in the search results. Actual items are retrieved from and stored on the remote servers. System Administrators can designate which collections can be searched with the network and customers can customize the Web interface for cross-server searching. The Mountain West Digital Library (MWDL) has been a beta test site for this software, building search capability across 52 collections located on four distributed servers. The combined collections consist of more than 79,000 stored items accessed from MWDL’s single search interface.
Appendix C

Selection Criteria

For

Inclusion into Digital Collection
CRITERIA FOR DIGITAL NEWSPAPER SELECTION

50% Coverage of broad historical topics
   Reflecting Utah's unique and significant contribution to
   the history of the American West
   Westward expansion
   Statehood
   Pioneer settlements - planning and organizing
   Transportation - "Crossroads of the West"
   Religion
   Military
   Agriculture
   Natural Resources - water rights, mineral resources
   Growing national economy

25% Coverage of local issues
   Reflecting the wide variety of news events and peoples in the state
   Strong local reporting
   Complementing national stories covered in the dailies
   Photographs
   Classifieds and advertising
   Personals, other "minutae"
   Ethnicity: Native- and African-Americans

Location
Geographic spread to cover the entire state

25% combined
Circulation
Size of the paper
Make-up of the readers

Completeness of the collection
Fewer missing issues insure completeness of searches

REQUIRED Quality of the originals - paper and/or microfilm
Poor originals will make poor digitized images
Appendix D

Training Program:

Travel Budget

And

Letters of Support
# Training Program Travel Budget

Number of participants: 12

## TRAVEL

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**COST**: 3,550.00

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**COST**: 211.12

## LODGING

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## MEALS

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**TOTAL COST**: 8,081.12
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<tr>
<td>Brigham Young University</td>
<td>Randy Olsen, University Librarian</td>
</tr>
<tr>
<td>Utah State University</td>
<td>Betty Rozum, Assoc. Director of Technical Services</td>
</tr>
<tr>
<td>Southern Utah University</td>
<td>Matthew Nickerson, Special Projects Librarian</td>
</tr>
<tr>
<td>Pioneer Online Library</td>
<td>Wayne Peay, Director</td>
</tr>
<tr>
<td>University of Nevada-Las Vegas</td>
<td>Kenneth Marks, Dean of Libraries</td>
</tr>
<tr>
<td>New Mexico State Library</td>
<td>Benjamin Wakashige, State Librarian</td>
</tr>
<tr>
<td>University of Montana</td>
<td>Frank D’Andraia, Dean of Library Services</td>
</tr>
<tr>
<td>Southern Oregon University</td>
<td>Teresa Montgomery, Associate Library Director</td>
</tr>
<tr>
<td>Wyoming State Archives</td>
<td>Tony Adams, State Archivist</td>
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<tr>
<td>University of Wyoming</td>
<td>Maggie Farrell, Dean of Libraries</td>
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<tr>
<td>Idaho State University</td>
<td>Kay Flowers, University Librarian</td>
</tr>
<tr>
<td>Idaho State Historical Society</td>
<td>Linda Morton-Keithley, Administrator</td>
</tr>
<tr>
<td>Mohave Library Alliance</td>
<td>Susan Smith, Vice President</td>
</tr>
<tr>
<td>University of Alabama</td>
<td>Ken Gaddy, Paul W. Bryant Museum staff</td>
</tr>
</tbody>
</table>
January 23, 2003

John Herbert  
Project Director - Newspaper Digitization  
University of Utah Marriott Library  
295 S. 1500 East, Rm. 418  
Salt Lake City, UT 84112

Dear John,

I am the principal investigator for an IMLS grant being implemented by Southern Oregon University Library. Our project goal is to create the Southern Oregon Digital Archives of bioregional and tribal documents and other materials in the public domain relating to this unique Cascade/Siskiyou/Klamath bioregion.

I am writing to you in support of your grant proposal to the IMLS regarding your historical newspaper digitization project. In particular, we support your efforts to disseminate your program to other libraries through a three-day training course in Salt Lake City during the third quarter of 2005. We will be pleased to send one person from our staff to receive the hands-on training that you will provide. This will enable us to developing plans to model your project. The goal of creating an integrated collection of regional historical newspapers is worthy and we applaud this.

I look forward to communicating with you and the Marriott Library during the upcoming months as you expand your small collection into a model for a large, integrated digital collection of historic newspapers. We wish you the best of luck in this endeavor.

Sincerely,

Teresa Montgomery

Teresa Montgomery, Associate Director
January 23, 2003

John Herbert  
Project Director - Newspaper Digitization  
University of Utah Marriott Library  
295 S. 1500 East, Rm. 418  
Salt Lake City, UT 84112

Dear John,

I am writing to you in support of your grant proposal to the IMLS regarding your historical newspaper digitization project. In particular, we will support your efforts to disseminate your program to other libraries and archival institutions through a three-day training course in Salt Lake City, Utah, during the third quarter of 2005.

The Wyoming State Archives will send one person from our staff to receive the hands-on training that you will provide so that we can model your success, begin to build our own digital newspaper collection, and integrate it with yours. In this way, we can both work toward creating our common vision – a region-wide integrated collection of newspapers.

I look forward to working with you and the Marriott Library to provide training for our rural population, and also better access to our cultural resources. Good luck with this special project and your program.

Sincerely,

Tony Adams, CRM  
State Archivist

Dave Freudenthal, Governor  

John T. Keck, Interim Director
January 23, 2003

John Herbert
Project Director - Newspaper Digitization
University of Utah Marriott Library
295 S. 1500 East, Rm. 418
Salt Lake City, UT 84112

Dear John,

We are writing to you in support of your grant proposal to the IMLS regarding your historical newspaper digitization project. In particular, we will support your efforts to disseminate your program to other libraries through a three-day training course in Salt Lake City during the third quarter of 2005. We will be pleased to send one person from our staff to receive the hands-on training that you will provide so that we can model your success, begin to build our own digital newspaper collection, and integrate it with yours. In this way, we can both work toward creating our common vision – a region-wide integrated collection of newspapers.

I look forward to working with you and the Marriott Library during the upcoming months as you expand your small collection into the model for a large, integrated digital collection of historic newspapers. We wish you the best of luck in this endeavor.

Sincerely,

Maggie Farrell
Dean of Libraries
January 27, 2003

John Herbert
Project Director - Newspaper Digitization
University of Utah Marriott Library
295 S. 1500 East, Rm. 418
Salt Lake City, UT 84112

Dear John,

We are writing to you in support of your grant proposal to the IMLS regarding your historical newspaper digitization project. In particular, we will support your efforts to disseminate your program to other libraries through a three-day training course in Salt Lake City during the third quarter of 2005. We will be pleased to send one person from our staff to receive the hands-on training that you will provide so that we can model your success, begin to build our own digital newspaper collection, and integrate it with yours. In this way, we can both work toward creating our common vision—a region-wide integrated collection of newspapers.

I look forward to working with you and the Marriott Library during the upcoming months as you expand your small collection into the model for a large, integrated digital collection of historic newspapers. We wish you the best of luck in this endeavor.

Sincerely,

Kay A. Flowers
University Librarian
January 23, 2003

John Herbert
Project Director - Newspaper Digitization
University of Utah Marriott Library
295 S. 1500 East, Rm. 418
Salt Lake City, UT 84112

Dear John,

I am writing to you in support of your grant proposal to the IMLS regarding your historical newspaper digitization project. In particular, we will support your efforts to disseminate your program to other libraries and archival institutions through a three-day training course in Salt Lake City during the third quarter of 2005.

We will be pleased to send one person from our staff to receive the hands-on training that you will provide so that we can model your success, begin to build our own digital newspaper collection, and integrate it with yours. In this way, we can both work toward creating our common vision – a region-wide integrated collection of newspapers.

I look forward to working with you and the Marriott Library during the upcoming months as you expand your small collection into the model for a large, integrated digital collection of historic newspapers. We wish you the best of luck in this endeavor.

Sincerely,

Linda Morton-Keithley
C.A.
Administrator, Historical Library and State Archives
Mohave Library Alliance
P.O. Box 4191
Kingman, AZ 86402-4191

January 29, 2003

John Herbert
Project Director - Newspaper Digitization
University of Utah Marriott Library
295 S. 1500 East, Rm. 418
Salt Lake City, UT 84112

Dear John,

I am writing to you in support of your grant proposal to the IMLS regarding your historical newspaper digitization project. In particular, we will support your efforts to disseminate your program to other libraries and archival institutions through a three-day training course in Salt Lake City during the third quarter of 2005.

We will be pleased to send one person from our organization to receive the hands-on training that you will provide so that we can build on your success, and share these skills with librarians and other persons in our community who are interested in building digital newspaper collections.

I look forward to working with you and the Marriott Library during the upcoming months as you expand your small collection into the model for a large, integrated digital collection of historic newspapers. We wish you the best of luck in this endeavor.

Sincerely,

Susan E. Smith, Vice-President
Mohave Library Alliance
John Herbert  
University of Utah  
Marriott Library  
295 South 1500 East  
Room 418  
Salt Lake City, UT 84112

Dear Mr. Herbert,

The Paul W. Bryant Museum is excited about the opportunity to participate in a workshop dealing with digitalization of newspapers. We are interested in preservation and access of newspapers in our collection potentially using technology such as the web to meet these goals.

Please include the Bryant Museum in your IMLS grant application as a committed partner in the project.

For the Museum Staff,  

Ken Gaddy
January 30, 2003

John Herbert
Project Director - Newspaper Digitization
University of Utah Marriott Library
295 S. 1500 East, Rm. 418
Salt Lake City, UT 84112

Dear John,

I am writing to you to document our joint partnership in the grant proposal to the IMLS regarding our historical newspaper digitization project. In particular, we will support the project’s efforts in two ways:

1. We will contribute approximately $100,000 for the scanning, processing, and loading of the first fifty years of the Deseret News. The components are $55,770 for the processing of the Deseret News, and $43,759 in in-kind funds for efforts of our project team.

2. We will participate in your training program at the end of this grant period to disseminate your program to other libraries and archival institutions through a three-day training course in Salt Lake City. We will send one person from our staff to receive the hands-on training that you will provide so that we can expand our own digital newspaper collection and keep it integrated with yours.

In working together in these ways, we will work toward creating our common vision – a region-wide integrated collection of newspapers.

I look forward to working with you and the Marriott Library during the upcoming months as we expand the small collection into the model for a large, integrated digital collection of historic newspapers.

Sincerely,

Randy Olsen
University Librarian
January 23, 2003

John Herbert
Project Director - Newspaper Digitization
University of Utah Marriott Library
295 S. 1500 East, Rm. 418
Salt Lake City, UT 84112

Dear John,

I am writing to you in support of your grant proposal to the IMLS regarding your historical newspaper digitization project. In particular, we will support your efforts to disseminate your program to other libraries and archival institutions through a three-day training course in Salt Lake City during the third quarter of 2005.

We will be pleased to send one person from our staff to receive the hands-on training that you will provide so that we can model your success, begin to build our own digital newspaper collection, and integrate it with yours. In this way, we can both work toward creating our common vision – a region-wide integrated collection of newspapers.

I look forward to working with you and the Marriott Library during the upcoming months as you expand your small collection into the model for a large, integrated digital collection of historic newspapers. We wish you the best of luck in this endeavor.

Sincerely,

Betty Rozum
Associate Director for Technical Services
January 23, 2003

John Herbert  
Project Director - Newspaper Digitization  
University of Utah Marriott Library  
295 S. 1500 East, Rm. 418  
Salt Lake City, UT 84112

Dear John,

I am writing to you in support of your grant proposal to the IMLS regarding your historical newspaper digitization project. In particular, we will support your efforts to disseminate your program to other libraries and archival institutions through a three-day training course in Salt Lake City during the third quarter of 2005.

We will be pleased to send one person from our staff to receive the hands-on training that you will provide so that we can model your success, begin to build our own digital newspaper collection, and integrate it with yours. In this way, we can both work toward creating our common vision - a region-wide integrated collection of newspapers.

I look forward to working with you and the Marriott Library during the upcoming months as you expand your small collection into the model for a large, integrated digital collection of historic newspapers. We wish you the best of luck in this endeavor.

Sincerely,

Matthew Nickerson  
Special Projects  
Southern Utah University
January 31, 2003

John Herbert
Project Director - Newspaper Digitization
University of Utah Marriott Library
295 S. 1500 East, Rm. 418
Salt Lake City, UT 84112

Dear John,

I am writing to you in support of your grant proposal to the IMLS regarding your historical newspaper digitization project on behalf of Pioneer: Utah's Online Library. Pioneer is statewide collaboration of libraries in higher education, public education and with public libraries to provide the citizens with electronic access to high quality information resources and services. We are very excited about this project and we will support your efforts to disseminate your program to other libraries and archival institutions through a three-day training course in Salt Lake City during the third quarter of 2005.

We will be pleased to send one person from our staff to receive the hands-on training that you will provide so that we can model your success, begin to build our own digital newspaper collection, and integrate it with yours. In this way, we can both work toward creating our common vision—a region-wide integrated collection of newspapers.

I look forward to working with you and the Marriott Library during the upcoming months as you expand your small collection into the model for a large, integrated digital collection of historic newspapers. We wish you the best of luck in this endeavor.

Sincerely,

Wayne J. Peay
Director, and
Chair, Pioneer Subcommittee
January 23, 2003

John Herbert
Project Director - Newspaper Digitization
University of Utah Marriott Library
295 S. 1500 East, Rm. 418
Salt Lake City, UT 84112

Dear John,

I am writing to you in support of your grant proposal to the IMLS regarding your historical newspaper digitization project. In particular, we will support your efforts to disseminate your program to other libraries and archival institutions through a three-day training course in Salt Lake City during the third quarter of 2005.

We will be pleased to send one person from our staff to receive the hands-on training that you will provide so that we can model your success, begin to build our own digital newspaper collection, and integrate it with yours. In this way, we can both work toward creating our common vision — a region-wide integrated collection of newspapers.

I look forward to working with you and the Marriott Library during the upcoming months as you expand your small collection into the model for a large, integrated digital collection of historic newspapers. We wish you the best of luck in this endeavor.

Sincerely,

[Signature]

Kenneth E. Marks, Ph.D.
Dean UNLV Libraries
January 24, 2003

John Herbert
Project Director - Newspaper Digitization
University of Utah Marriott Library
295 S. 1500 East, Rm. 418
Salt Lake City, UT 84112

Dear John,

On behalf of the New Mexico State Library, I am writing to you in support of your grant proposal to the IMLS regarding your historical newspaper digitization project. In particular, we will support your efforts to disseminate your program to other libraries and archival institutions through a three-day training course in Salt Lake City during the third quarter of 2005.

We will be pleased to send one person from our staff to receive the hands-on training that you will provide so that we can model your success, begin to build our own digital newspaper collection, and integrate it with yours. In this way, we can both work toward creating our common vision—a region-wide integrated collection of newspapers.

At this time the following benefits are envisioned for New Mexico as possible outcomes of this project.

- The nascent union list of serials and the digitization (resource sharing) projects would be augmented.
- The advantage of someone at the state library having this special (and free) training would highlight the State Library as a unique resource.
- NMSL could then disseminate the “how-to” as a benefit to others.
- The processes for and useful profitability of good digital work could be spread throughout the state to augment research and resource sharing.

I look forward to working with you and the Marriott Library as you expand your small collection into the model for a large, integrated digital collection of historic newspapers. During the upcoming months, please make contact through Eleanor Bernau, Acquisitions & Serials Librarian. Her contact information is enclosed. We wish you the best of luck in this endeavor.

Sincerely,

Benjamin Wakashige
State Librarian
23 January 2003

John Herbert
Project Director - Newspaper Digitization
University of Utah Marriott Library
295 S. 1500 East, Rm. 418
Salt Lake City, UT 84112

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Sincerely,

Frank D'Andraia
Dean of Library Services
Appendix E

Final Report
From Previously Completed
Phase of Project

2002 LSTA Grant

Source:
THE UTAH DIGITAL NEWSPAPERS PROJECT

A NEW DIGITIZATION METHOD DEVELOPED BY THE UNIVERSITY OF UTAH, IARCHIVES INC., AND DIMEMA INC

KENNING ARLITSCH, HEAD OF DIGITAL TECHNOLOGIES, UNIVERSITY OF UTAH
Utah Digital Newspapers Project

Abstract
This paper will describe a new method for digitizing historic newspapers, developed by a partnership between a university and two commercial organizations. Utilizing OCR and newspaper processing technology from iArchives Inc. and the CONTENTdm digital collections software suite, the University of Utah has posted on its website 30,000 pages spanning thirty years from three weekly newspapers. The OCR and newspaper processing technology from iArchives Inc. was used to format the digital files with XML. DiMeMa Inc. expanded its CONTENTdm Software Suite to batch import these files and automatically generate XML-wrapped newspaper issues. The newspapers are publicly accessible and may be browsed by issue or searched. With the recent award of a new grant another 100,000 pages from different newspapers are slated for digitization in 2003.

Background
Newspapers are a primary source of historical information, and are useful to scholarly researchers and laypeople alike. Historical newspapers are immensely popular with genealogists and historians.

"I cannot begin to tell you how many thousands of people have used this [Vernal Express] index all over the world... I have wished so many times the other newspapers in the state were indexed." i

It is the broad appeal of newspapers that garnered so much support in both the academic and public library communities, and driven this project and others. Newspapers are also one of the most difficult and inefficient research materials; indeed it may be said that newspapers are often not consulted by researchers simply because they are so difficult to use. Regional, historical newspapers are rarely indexed and therefore cannot be searched. They most often can be found only in microform in centralized locations. Their use is therefore limited to one user at a time in one place and to non-electronic browsing.

Numerous attempts at digitizing newspapers have been made over the past ten years.ii In most efforts the cost of digitization and file storage, and the lack of good optical character recognition (OCR) technology, outweighed the achievements. More recent efforts have required a specialized newspaper-specific software package that does not integrate into the larger digital collections offerings.iii In general other approaches available today are costly, lack accuracy in the OCR results, or are stand-alone newspaper solutions.

In 2001, the Marriott Library at the University of Utah was the recipient of a $93,000 Library Services and Technology Act (LSTA) grant to digitize three weekly Utah newspapers. The goals of the grant were to develop a scalable and sustainable newspaper digitization method utilizing existing digital collections presentation and management technologies, and to post a significant portion of digital newspapers on a website. Issues of cost, server space, and file format were to be addressed during this year-long project. The three newspapers chosen for digitization have existed in Utah since the late 19th century and all are still published today:

1. Vernal Express (Vernal, Utah)
2. Grand Valley Times/Times Independent (Moab, Utah)
3. Wasatch Wave (Heber City, Utah)

Partners
Marriott Library, University of Utah
The J. Willard Marriott Library is the main library of the University of Utah, in Salt Lake City. It is a member of the Association of Research Libraries with holdings of nearly 3 million volumes, including over 25,000 journals in electronic and print formats.

The Library began digitizing materials in 1998 and in early 2000 purchased the CONTENTdm digital software suite to manage and serve its digital collections over the World Wide Web. The digital library soon grew to include a variety of formats including rare books, photographs, mapsiv, art prints, and documents. Prior to the digital newspapers project, the Digital Technologies department digitized most materials in-house.

In 2001 the Library began to support the digital aspirations of smaller cultural heritage institutions in Utah by providing fee-based scanning services and space on its CONTENTdm server. In 2002 the Library proposed the creation of the Mountain West Digital Library (MWDL) and secured support and funding from the Utah Academic
Library Consortium. The goal of the MWDL is to support the digital collections of cultural heritage institutions throughout the states of Utah and Nevada in a manner that allows those institutions to retain control and identity of their collections. CONTENTdm multi-site server technology, which harvests metadata from dispersed servers, was developed by DiMeMa Inc. and allows a single point of search across all collections. The Utah digital newspapers are expected to become an integral part of the MWDL. More information may be found at http://www.lib.utah.edu/digital/mwdl/.

Two distinct methods were employed to digitize the three newspapers. After scanning, the Vernal Express newspaper was processed almost entirely by the University of Utah. The Grand Valley Times and the Wasatch Wave were scanned and processed by iArchives and DiMeMa, and then delivered as complete collections to the University of Utah.

iArchives Inc.
iArchives was selected to perform the task of converting the microfilm into a format that could efficiently be integrated into CONTENTdm. iArchives provides the technology and processing method that substantially reduces the time and cost it takes to convert the microfilm into a highly accurate searchable database. iArchives also provides a non-proprietary solution. The University of Utah worked closely with personnel at DiMeMa and iArchives to define the specifications of the project and provide a solution that can be duplicated easily in the future.
iArchives uses state-of-the-art technology and processes to produce searchable, high-resolution images in TIFF, PDF, or other file types. iArchives has developed a highly accurate and patented OCR software methodology that consistently produces higher accuracy results when compared to the “off the shelf” OCR engines. iArchives was founded in 1994 and operated as a service bureau utilizing its internally developed OCR technology. In the year 2000, the company began to focus all of its resources on developing leading edge technology in the areas of image enhancement and OCR recognition of dirty documents. Because iArchives had already developed its own OCR technology, the characteristics that affect OCR accuracy were studied, and technology has been developed to enhance image quality and improve OCR accuracy. iArchives has developed and patented its OCR technology to maximize the results of its own OCR, as well as other top performing OCR engines. The iArchives OCR process utilizes multiple OCR engines that build upon each other. The results of the individual engines are not voted; rather the results of all engines are retained. This allows the iArchives OCR process to provide results that are substantially better than other OCR technologies currently on the market. More information about iArchives Inc. may be found at http://www.iarchives.com.

DiMeMa Inc.
DiMeMa Inc. is the developer of the CONTENTdm Software Suite for digital collections. Originally created by the Center for Information Systems Optimization (CISO) at the University of Washington, CONTENTdm was spun off to DiMeMa Inc. in 2001. CONTENTdm has become the primary software for digital special collections development in over 100 sites in the United States alone. CONTENTdm handles virtually all media types and supports open standard file types and metadata fields. The CONTENTdm Software Suite includes multiple acquisition stations for capturing and indexing items, and a Query Building Tool for developing custom web interfaces for collections access. With the 3.4 release in February 2003 CONTENTdm will also be fully compatible with the Open Archives Initiative.
In May 2002 DiMeMa Inc. signed an agreement in which OCLC became the sole distributor and marketing agent of the CONTENTdm Software Suite to libraries, museums, historical societies, and non-profit archive organizations. More information on CONTENTdm and DiMeMa is available at http://www.contentdm.com

Methodology
Before iArchives was brought into the project, newspapers were scanned from microfilm by a local vendor, and manual indexing was anticipated. Some of the microfilm was of an extremely poor photographic quality. Newspapers were scanned at 300 dpi, and in both grayscale and bitonal bit depths because some images were unreadable as bitonal scans. After the digital files were returned to the University an attempt was made to use off-the-shelf OCR packages, but they failed miserably. Adobe Acrobat® Capture® and ABBYY FineReader (which has performed admirably in other situations) were used and then abandoned.
1. **Vernal Express (Vernal, Utah)**
   a. **Method:** Microfilm was scanned by FutureVision Inc. An index created manually for many years by the Uintah County Library (and generously contributed to this project) was imported into CONTENTdm and merged with the images. Compound documents (XML wrapper files) were created manually using CONTENTdm tools to display all pages of the newspaper issues.
   b. **Result:** Newspaper issues may be browsed by year and date. Searching is available by article title, subject headings, and date. Pages may be viewed as quick-loading JPEG images and larger MrSID® files may be downloaded for detailed zooming. Only local-interest stories were indexed.

2. **Wasatch Wave (Heber City, Utah) and Grand Valley Times (Moab, Utah)**
   a. **Method:** Microfilm was scanned and processed by iArchives Inc. Articles were zoned into separate files, and headlines were re-keyed. Articles were classed into the following types: articles, weddings/engagements, obituaries, and advertisements. Files were delivered to DiMeMa Inc. where they were imported into CONTENTdm and compound documents were generated automatically.
   b. **Result:** Newspaper issues may be browsed by year and date, or searched. Articles are viewed in context to the pages they were published on, and full-text, article titles, and article types are searchable. PDF images with hidden text allow secondary searching in the Acrobat Reader.

**Evaluation**
The method used to digitize the *Vernal Express* relied heavily on manual processes. The method grew out of the availability of the index provided by the Uintah County Library and because the partnership with iArchives Inc. was still being conceived. The method used to digitize the *Wasatch Wave* and the *Grand Valley Times* has proven much more efficient and effective and will be used in future digital newspaper projects at the University of Utah. The advantages and disadvantages of each method are listed below. Note that approximately 10,000 pages were digitized for each newspaper, for a total of 30,000 pages:

**Vernal Express**

**Advantages**
1) Initial JPEG image loads quickly; headlines are legible.
2) High-resolution MrSID file is only loaded when requested.
3) Relatively small total number of files (29,000 files - includes thumbnail, display JPEG, and high-resolution MrSID for each newspaper page, and an XML wrapper file for each newspaper issue)

**Disadvantages**
1) No full-text searching
2) Individual articles are not zoned
3) Free MrSID plug-in or viewer is required to see detailed text
4) Larger total server space used than for the other two newspapers (21.5Gb)
5) Manual processes to create the collection were slow and inefficient

**Wasatch Wave and Grand Valley Times**

**Advantages**
1) Full text searching
2) Zoned articles
3) PDF navigation (ubiquitous viewer)
4) Small file sizes (10Kb-50Kb for articles, 300Kb for full pages)
5) Small total server space (approximately 10Gb for each newspaper)
6) Automated processes from iArchives and DiMeMa greatly increased volume

**Disadvantages**
1) Large number of files because of the zoned articles. Each of the two newspapers collections contains approximately 255,000 files. That figure includes a thumbnail image and PDF display image for each page and article, and an XML wrapper file for each newspaper issue.
Costs
Contracted Service – Newspaper scanning and processing costs
The scanning and processing costs listed below include newspaper scanning from three different formats. They also include the OCR and post-processing, as well as DiMeMa’s fee for batch importing the images and metadata. While newspapers for this project were only scanned from microfilm, the next phase will include hard copy (see Future Directions section). The average total cost per newspaper page for all three formats is $1.65.

<table>
<thead>
<tr>
<th>Format</th>
<th>iArchives Inc. scanning/page</th>
<th>iArchives Inc. processing/page</th>
<th>DiMeMa Inc. import CONTENTdm/page</th>
<th>Total per page</th>
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</thead>
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<tr>
<td>Microfilm</td>
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<td>$.15</td>
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<td>$1.27</td>
<td>$.15</td>
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<tr>
<td>Paper – Bound</td>
<td>$.32</td>
<td>$1.27</td>
<td>$.15</td>
<td>$1.74</td>
</tr>
</tbody>
</table>

Future Directions
In November 2002, with the first digital newspapers project nearly complete, the University of Utah was awarded a second LSTA grant in the amount of $282,000 to continue digitizing newspapers and to expand the scope of the project. Community support for the project was unprecedented. Thirty-five percent of the total grant was raised as matching funds from the Utah Academic Library Consortium and public libraries that were enthusiastic about seeing their community newspapers on the Web.

The funded proposal will digitize 100,000 pages of an expanded selection of Utah newspapers by December 2003. It will also break new ground by including newspapers scanned from hard copy instead of only microfilm. The hard copies are difficult to find but several runs have been located and we expect better images and more accurate searchable text as a result.

The new grant includes funding for a Project Director whose job it will be to write additional grant proposals to keep the project moving into 2004 and beyond. The Project Director will also be responsible for developing and implementing a plan to address the following issues:

1. **Newspaper collection** – Are hard copies of all currently published newspapers in the state being collected? Who is collecting them? How many copies are being collected, where are they stored, and which dates have been collected? What is the condition of the hard copies, are they accessible for digitization, and for the public to browse? Can missing issues be found?

2. **Storage** – Is a centralized storage facility for hard copies warranted, and if so, how would this be established and funded? Or, if a distributed storage system is adequate, how will it be coordinated to ensure that copies are being collected and stored in an acceptable manner?

3. **Microfilming** – Microfilm is still considered to be the archival storage media of choice, and will be for the foreseeable future. Is our microfilm being created and stored to archival standards, as mandated by the Research Libraries Group (RLG)? Where are the master reels of microfilm being stored? Do we have appropriate contracts with our microfilm provider?

4. **Digitization** – How will newspapers be prioritized for digitization? Do we have permission to digitize all years, or are we limited to those years in the public domain? Can we get permission? Can we establish relationships with the largest newspapers (SL Tribune, Deseret News) to digitize their papers? Can the digitization process established by the previous LSTA grant be improved? Will digital newspaper files be stored on a centralized server, or distributed at sites around the state? What additional hardware will be required to support the digital files as they reach large numbers? Is it possible for Utah to participate in the LOCKSS (Lots of Copies Keep Stuff Safe) program?

5. **Electronic copy collection and storage** – Newspaper publishers currently use software to produce their newspapers. In our surveys we have found that some publishers simply discard their electronic files after publication. This is an alarming condition and must be changed so that the files are collected and archived by libraries. Digitizing these files would eliminate the need for scanning and would produce more accurate search results. What software are the publishers using? Can files be exported? How can we store these files? Are publishers amenable to participating in an archival storage project?
Conclusion
The newspaper digitization method developed in this project is cost-effective and easily duplicated at other sites already running CONTENTdm. Because CONTENTdm effectively manages and presents a variety of collection formats, no additional server or interface is required for digital newspapers. The low cost of entry and the ability to scale from small to extremely large collections with CONTENTdm makes an easy pathway to get started in the digital library business. Having proven its OCR and processing capabilities, iArchives has again been chosen as the contractor to process all 100,000 newspapers pages in the new LSTA grant for 2003.

The Utah Digital Newspapers project has generated considerable excitement in the state, even though it has not yet been publicized. For the first time historic regional newspapers in Utah are available and accessible free of charge to anyone with an Internet connection.

“W e’ve never met before, but I sit at the front desk down here at the T-I [Times-Independent] I just wanted to thank you for forwarding that link to the T-I archives online. Answering the editor’s email, you wouldn’t believe how many inquiries I field from people searching for long-lost information about their Moab ancestors. Now I can give the people who don’t have access to the T-I on microfilm at the G C Library or at the U of U a place to go to do research.”

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v Warner, Sadie. Assistant Editor at the Times-Independent in Moab, Utah, in an email to Eve Tallman, director of the Grand County Library. December 30, 2002. (The Grand Valley Times merged with the Moab Independent in 1919 and became the Times-Independent.)