

**Final Performance Report**

NEH Ref: PA-23733-01

**The Quilt Index**

(MSU Ref: 61-1967)

Project Directors,

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**The Quilt Index**  
**Phase 2: Development and Deployment**  
NEH Ref: PA-23733-01

**Final Performance Report Narrative**

*“We have been contacted many times over the years by researchers hoping to draw parallels between their state quilt documentation efforts and the results of the Texas Quilt Search. The documentation methodologies were so different from state to state that that was impossible. We hope when the results of the state searches are on the Index that such research will begin in earnest. We anticipate it will produce a rich trove of information for future scholars to mine.” Nancy O'Bryant and Karey Bresenhan, 3/23/04*

*Project Activities and Accomplishments*

Since 2001, The Quilt Index Phase 2: Development and Deployment has achieved its goals set forth under the National Endowment for the Humanities Preservation and Access grant (NEH Ref: PA-23733-01). The Quilt Index ([www.quiltindex.org](http://www.quiltindex.org)) has successfully developed a repository and access system, and piloted the system with four contributing repositories. The Quilt Index is set to become *the* national online center for quilt documentation.

During this funding phase of the project, the following major activities were completed:

- the underlying structure of the Quilt Index was designed, constructed and tested;
- web interfaces for records management and public access were designed, tested, and launched;
- nearly 2,000 quilt images and corresponding documentation were prepared and entered from each of the four pilot sites -- Louisville Archives/Kentucky Quilt Project, The Illinois Quilt Project/Illinois State Museum, Michigan Quilt Project/Michigan State University Museum (MSUM) and Quilts of Tennessee/Tennessee Libraries and Archives and links were made to the American Folklife Center;
- The Quilt Index Comprehensive Fields were revised and published online; and
- the online resource was peer-evaluated, a needs assessment and project expansion plan was developed.

A task force consisting of quilt scholars and project partners from each participating organization guided the Index development. Currently, the task force is chaired by **Mark Kornbluh** (MATRIX) and **Marsha MacDowell** (MSU Museum), and members include: **Justine Richardson**, MATRIX project manager; **Merikay Waldvogel**, The Alliance for American Quilts & Quilts of Tennessee Inc.; **Shelly Zegart**, The Alliance for American Quilts; **Alan Jabbour**, The Alliance of American Quilts; **Kathie Johnson**, University of

Louisville Archives and Records Center; **David A. Taylor**, American Folklife Center, Library of Congress; **Jan Wass**, Illinois State Museum; **Pat Keller**, The Alliance, Q.S.O.S. oral history project; **Wayne Moore**, Tennessee State Library and Archives; and **Pat Crews**, International Quilt Study Center and University of Nebraska Textile Program. The internal listserv PLAN-QUILT@listserv.h-net.org serves as the discussion forum for this group.

### *Metadata Challenges and Accomplishments*

The initial task of the project was to finalize the comprehensive data model developed during the planning phase (see Evaluation, below). The resulting Quilt Index Comprehensive Fields, which focus mainly on descriptive metadata for the quilt object, is a standardized metadata schema -- a master list of metadata fields designed to accommodate all of the information requested on state and regional quilt documentation forms developed to date. This schema is divided into 27 Groups addressing a range of technical, administrative and descriptive metadata. Each metadata field includes the group name and number, field name (actual database field name), sequence (order in which field appears within its group), description (further definition of field for data entry and management), caption (for online management view), field type, note (for any additional information), and character limit. The descriptions of the fields clarify the type and meaning of data entered into each field. These descriptions currently serve as both a glossary and as directions for data entry. Because this Quilt Index Comprehensive Fields is a master list of descriptive terms for quilts, no single documentation project or pilot site uses the entire list.

### *Technological Challenges and Accomplishments*

The materials digitized for this project are ingested into an OAI and OAIS compliant, database-driven digital repository and cataloged using a METS based database system built using publicly licensed, open source software (MySQL and PHP). The database system was designed with the explicit intent of migrating from database storage into XML based METS metadata structures when this is feasible.

During these first seven months of the project, Quilt Index staff worked closely with the digital library community in the development of Metadata Encoding Transmissions Standards (METS) and digitizing standards with the intention of completing the Quilt Index project as a fully open set of XML METS records. METS was chosen over EAD as the metadata standard because of the capacity and specificity for individual digital objects afforded by METS as well as the structure for adding additional information required by quilt object description. METS proved to be the best standard for records for the project, however, based on our research in 2001, the technology for successful delivery of those records in XML was not yet feasible.

We conducted extensive research and testing of XML hardware and software delivery systems, including establishing XML servers running RedHat and Tamino as well as experimenting with other commercially available XML editors such as XMLSpy. No

XML solution fully met the needs of the Quilt Index, which requires multiple site entry and delivery as well as non-technical project staff submitting large volumes of information. Since we are particularly committed to Open Archives Initiative (OAI) and the Open Architecture Information Systems (OAIS), we did not want to use a commercial solution and become path-dependent upon a costly proprietary delivery system.

Rather than delay the development of the project, we decided to build the system using an open source database constructed with MySQL and PHP. We designed a site-based database development schema that allows local contributing sites to construct their own input forms tailored to the information in their collections. This allows for broad expandability of the project to include new sites at a fraction of the start-up costs. This structure was designed in accordance with METS and structured so that the records can be translated into XML as soon as delivery of such records is feasible. In 2004, MATRIX research staff began testing such XML transfers for its repositories. We will eventually migrate our digital library projects, including the Quilt Index, into this format.

### ***Audiences and Website Activity***

The Quilt Index has aimed to be the comprehensive, publicly accessible research and reference resource for individual quilt-object documentation. The resource is designed to be useful to quilt field professionals (researchers, curators, appraisers, historians, etc.), teachers, students, and the general public. Based on a broadly disseminated survey in spring 2004 (6 months after public launch), we found a wide variety of uses from teachers, researchers, students, quilters, and industry. Many teachers were planning to utilize the Index in formal university teaching beginning in fall 2004. Several Master's degree students had used the Quilt Index as a central data source for term projects. A small public history museum was using the Index as a reference when local people brought in quilts. One literature professor was using the Quilt Index as a graphical expression of genre and voice! Below are some quotes from responses to this survey:

*I plan to use it this fall when I teach a graduate level course in Material Culture Analysis for textile history students. It is an excellent resource for students seeking similar examples for comparative analysis. I will also suggest it as a resource the next time I teach "History of Quilts," a graduate level course for our textile history masters program. P. Crews, 3/22/04*

*I'm beginning to use it as a dating resource for specific block designs and names. It really helps pinpoint certain traditional blocks: what they were called in various parts of the country or in various time periods, as well as when they became popular. (But, obviously, the fabric dating aspects are terrific, as is the purely inspirational joy of seeing such beauty!) Something else, for those like me who cannot travel, is the gratification of seeing quilts we'd never see in a local setting. I will be using the Index more & more. My sincere appreciation!  
Charlotte Bull, 3/18/04*

*I have listed the site for reference by a class of beginning quilters here in the UK. They are learning the American style of block construction in their work, but I am also making them familiar with English construction techniques. On your site I am able to show examples and influences from both traditions. Sally Ward, 3/17/04*

*I used the Index to conduct research for a term paper in HED 826, Material Culture. It was extremely helpful in collecting comparative data for the material culture analysis of a quilt in the museum's collection. I have also used it repeatedly as a reference tool at work. M. Worrall, 3/24/04*

*Literature classes----I used these graphic arts to illustrate use of genre, creativity within a genre; "voice"---the individual attitude one takes to a subject; and (okay, laugh!, but it worked) Aristotle's discussion of reality as a composite of matter and idea (as opposed to Plato's Idealism). Gaye Ingram, 3/17/04*

*"...we are currently using it for research. We have an extensive corporate quilt collection with several hundred items spanning antique, contemporary, and miniature quilts and other textiles. Quilts from the collection are loaned to museums, featured in books, and exhibited at our own events, both within the U.S. and abroad. We are reorganizing our collection database to make it comport with the Quilt Index, in order to maximize the potential for future comparative research. We think it will become important for large private collections such as ours to be available for selected study by quilt scholars." Nancy O'Bryant and Karey Bresenhan, Quilts, Inc.3/23/04*

*I use the Quilt Index for my personal research. I love it. The photography is great. I am a traditional quilter and I enjoy seeing the numerous and non-traditional ways women quilted in the olden days. Christina Schwaber, 4/17/04*

By November 2004, The Quilt Index server was displaying results for nearly 4,000 search requests per week, with fully half resulting in basic quilt displays and more than 500 accessing further research in the detailed, full record of quilts displayed in the Index. We are averaging 60 downloads of the Quilt Index Comprehensive Fields per week, available in PDF format on the website. Because of the online nature of the project, its audience is geographically broad. The website itself is freely available to anyone with access to the Internet anywhere in the world. The content contributed to the Index during this phase come from quilt documentation efforts in Kentucky, Tennessee, Illinois and Michigan. However, the quilts documented in these projects have origins in at least 35 states, which is recorded in the quilt record's "provenance" metadata.

### ***Evaluation***

While there was no formal third-party evaluator to this project, review by contributors, peers, field experts, and potential users was built in as formative evaluation and

development throughout the course of the project. The data field model, content management system, web interfaces, and final functioning project, have all been peer-evaluated during development and modified based on responses. The MSU Museum served as a beta-testing site for all new developments and a number of MSU Museum staff members, representing curatorial, collection management, education, and visitor services, were involved in critically assessing the site. H-Net through H-Quilts has been a central participant in Quilt Index development and evaluation, along with several active field-related listservs (QHL - Quilt History List and the Quilt Art List). H-Quilts has served as the path for much dissemination and review of the project.

The data format that had been developed during the planning phase, was sent to field lists generally, as well as to directly to quilt documenters and to each existing documentation project for which we had current contact information in 2001. The fields were cross-checked with existing paper documentation forms and controlled vocabularies were finalized to product The Quilt Index Comprehensive Fields. This data model was constructed into the content management system. As staff from the four pilot projects began to enter data directly, their contributions were analyzed and feedback gathered. As we expected, the actual data from the handwritten forms contributed to some modifications to the dataset, particularly in additions to the controlled vocabularies for various styles and techniques.

The content management system used is MATRIX's Repository ("Repos"). This Repository was developed largely through National Science Foundation, Digital Library II support. The practical application of the Quilt Index Comprehensive Fields as a corpus of humanities content, in turn informed the needs and requirements for the Repository itself, and necessitated the development of the various usage tools and types of form fields for entry, storage and retrieval.

MATRIX staff completed full website requirements documents and information architecture and completed the public website, with significant modifications based on user-base feedback. This process involved graphical user interface design and information maps, detailed mapping for searches and browse options to map a usable web interface to the complex data set to bring forth meaningful searching and sorting options. The web interfaces were reviewed in several draft stages by all contributing partners and through user walk-throughs. Responses from these evaluations contributed to a major shift in design direction and resulted in the final website look and feel. The public interface site was completed and implemented it for internal use and testing beginning July 2003. The website was tested for three months with active use from internal quilt researchers and pilot site staff and modified for a public launch at the beginning of October 2003. Finally, the overall site has been reviewed by a wide variety of users, producing some very interesting results about who was using the site and what they wanted to see added or amended as the project grows and develops. Some of this feedback resulted in immediate site edits, other suggestions will be incorporated into a larger site renovation to be produced as part of the IMLS national leadership project (see next section on continuation).

## **Continuation of the Project**

Through input from the site coordinators and discussions with Quilt Index Task Force advisors Alliance for American Quilts board members, and representatives of the Alliance's national working group of quilt museums (those solely devoted to or with substantial collections and programs), Quilt Index leaders have determined that the next phase will focus on: a) expanding the data in the Index by soliciting data from new partners representing a wide range of diverse factors (type, size, geographic location, private/public, university, museum, etc.); b) creating mechanisms to facilitate ingestion of existing databases through the development of specially-tailored "middleware" to execute the migration of data used by various museums or documentation projects to the Index; c) completing the data entry from the Phase Two sites; d) developing options for interactive use of the Index data with special online curatorial and teaching tools; e) developing strategies to support/expand the database contents; and f) creating a library of documents to facilitate input of data into the Index as well as to facilitate basic documentation of quilt history.

The response to a broad call for new partners was tremendous. Over 30 state documentation projects, private collections, and museums all with significant quilt information to contribute came forward with interest in partnership. The Index strives to maintain both excellence and inclusiveness with regards to new partners. A combination of new quilt documentation partners spans the country – ranging from the northeastern states of Massachusetts, Rhode Island, Connecticut, and New Jersey; to the Midwestern research done in Wisconsin, Minnesota, Iowa, and Nebraska; to the southern coast of Louisiana; to Wyoming in the west; to the unique efforts to inventory traditional Hawaiian quilting. In addition to state documentation projects, the Index expansion would include three private quilt collections and one museum collection as test collections for such expansion.

In addition, individual and clusters of scholars have been in discussion with Quilt Index leadership regarding linked projects, specifically on quilts with written text (i.e. signature quilts), Mennonite fundraising quilts, and on the history of the state quilt documentation movement. These projects will ultimately expand the Index's usability and, importantly demonstrate the core strength of having an Index upon which other studies can be built and linked.

Building on this successful development phase and working from user surveys and requests from the field, project participants have defined Phase III of The Quilt Index and are seeking support from the NEH Preservation and Access to preserve and present a critical mass of the country's quilt documentation projects and to greatly expand and enhance the research tools in the website. The Quilt Index has been awarded a leadership grant from the Institute of Museum and Library Services to incorporate quilts from museum collections and to document the project's processes and methods as a national model for preserving and presenting specific cultural heritage objects in a digital environment.

### ***Long Term Impact***

The Quilt Index is a significant resource for quilt documentation projects across the country. The work on field and form development, utilizing all the state documentation forms, is an important contribution to the field. The Quilt Index Comprehensive Fields, available on the website, is a stand-alone document that has been referred to by new documentation projects starting out to develop their fields as well as by existing projects seeking to revise their data collection mechanism or to create their own local database for managing their records, usually in hopes of integrating into the Quilt Index at a future date.

As the critical mass of the Index content grows, there is great opportunity for the development of educational resources to support student use and research in the website. Future educational resources will likely include, as one survey respondent requested, "... creat[ing] teacher friendly lesson plans about various aspects of Quilt History (or Links to said sites) that can help school teachers tie in (correct) quilt history to all facets of the classroom, as in: American History; economics; math; geography; women's history; textile & manufacturing history; glossary of terms for fabrics, etc."

The NEH support for this project has already begun to result in non-federal contributions for participation. After meeting their NEH project goal for digitization and ingestion into the Quilt Index, the participants in Tennessee obtained a significant grant from a statewide quilt guild which funded the complete digitization of their project's remaining quilt images. As the Index becomes more central to quilt documentation, and as more projects become invested in the Index with a significant portion of their collected data in the Index, these organizers will seek to leverage funds from their geographic areas in order to be included in this national project.

Through the IMLS funding as a national leadership project, Quilt Index staff and contributors will be drafting and publishing additional detailed documentation that will facilitate broad participation in the Index as well as provide a map for utilizing digital repository resources to collect and present other type-specific objects that are scattered across the country and the world.

### ***Grant Products***

The Quilt Index website is, of course, the most obvious product of this project. The Quilt Index Comprehensive Fields, available on the website, is a stand-alone document that has been referred to by new documentation projects starting out to develop their fields as well as by existing projects seeking to revise their data collection mechanism or to create their own local database for managing their records, usually in hopes of integrating into the Quilt Index at a future date. The website has been widely distributed and used. In addition, the project has been presented at the international Museums and the Web conference for the past two years, including two paper publications in the online

proceedings. Partners are promoting their participation in the project in various ways, including their institutional newsletters. The work has resulted in a variety of proposals and presentations for regional and national conferences including, American Quilt Study Group, Society of American Archivists, American Folklore Society, National Assembly of State Arts Agencies, American Association of Museums, Michigan Museums Association, Midwest Museums Association.

## **Appendices:**

### **Documents**

Quilt Index Comprehensive Fields

[http://www.quiltindex.org/QI\\_dbfields\\_12-08-03.pdf](http://www.quiltindex.org/QI_dbfields_12-08-03.pdf)

### **Papers**

Justine Richardson, Michael Fegan, Mark Kornbluh, Dean Rehberger - MATRIX: Center for Humane Arts, Letters and Social Sciences Online at Michigan State University; and Marsha MacDowell, Michigan State University Museum, USA “Bits & Bolts to Bits & Bytes: The Quilt Index Online Repository and Distributed Archival Management System”

<http://www.archimuse.com/mw2004/papers/richardson/richardson.html>

Marsha MacDowell (Michigan State University Museum), and Justine Richardson, Mark Kornbluh, Dean Rehberger, Scott Pennington, Michael Fegan, and Dennis Boone (MATRIX: Center for Humane Arts, Letters and Social Sciences Online at Michigan State University), USA “Developing Collaborative Online Collections Using an Open Source Digital Repository: The Quilt Index Case Study”

<http://www.archimuse.com/mw2003/papers/richardson/richardson.html>

### **Press Releases and Announcements**

“New Website Focuses On American Quilting Traditions”

<http://www.quiltindex.org/PressRelease1.pdf>

“Quilt Index Launched: Online Database Uncovers America’s Quilt Heritage “

<http://www.quiltindex.org/PressRelease2.pdf>

Call for Participants for Next Phase: April 2003 Announcement (Attached)

April 2003  
Announcement:

The Quilt Index, an online center dedicated to making all types of quilt documentation widely available through the Internet, is seeking partnerships with state and regional quilt projects and with collecting institutions around the country to expand access to the tens of thousands of quilts that have been documented.

#### BACKGROUND:

The Quilt Index has been conceived and developed by The Alliance for American Quilts in partnership with Michigan State University's MATRIX: The Center for Humane Arts and Letters Online and the Michigan State University Museum. The Quilt Index has been developed and deployed in collaboration with the four pilot digitization partners (The Illinois State Museum, The Kentucky Quilt Project/University of Louisville Archives and Records Center, the Michigan Quilt Project/Michigan State University Museum, and The Quilts of Tennessee/Tennessee State Library and Archives), as well as the additional input of many other state project participants, through the support of the National Endowment for the Humanities Preservation and Access program.

Through this collaboration, a comprehensive online repository has been developed, programmed and implemented. Pilot sites are digitizing and inputting data daily (more than 200 quilt images with corresponding information so far); and online public access site will be launched soon.

#### EXPANSION PHASE:

We seek to expand both the content and scope of the Quilt Index in the next phase, Phase III. In Phase III we will be seeking support for adding new quilts and quilt content to the Index and for programming to convert and ingest existing digitized quilt surveys/catalogs/etc. into the Quilt Index. We are seeking state documentation projects, regional documentation projects, museums and collections, perhaps some individuals with significant collections of quilts and/or quilt information, and selected international documentation groups to partner in the next phase of the Quilt Index.

The expansion phase will have two areas of quilt information expansion: 1) documentation and collections that will be entering information directly into the Index from forms and archival materials; and 2) programming and filesharing development to create centralized access to projects or collections that are already in some kind of database.

We will be seeking matching funding from the National Endowment for the Humanities (with a program deadline this year of July 15) for a set of partnerships with public projects and collections. Through this opportunity, local sites would receive some funding for equipment and staff time, customized Quilt Index web-entry forms, technical support and training. Partners would have to provide match that could be in dollars, staff time, equipment or other cost-sharing scenarios.

It is the vision of the Quilt Index to be inclusive of all quilt documentation including projects outside the US. In the meantime, we need to assess the overall interest and then try to assemble the strongest possible proposal of public collections for this particular NEH funding opportunity. We intend to continue to expand the project and pursue different funding strategies for additional and private collections. Inquiries for partnerships are always welcome.

#### STATEMENTS OF INTEREST:

If your project or a group you know would be an appropriate partner for this phase, please let us know that you are interested as soon as possible. For the immediate upcoming proposal, we need names of potential projects or collections and contact persons by MONDAY, JUNE 9, 2003.

Contact the Quilt Index by phone, fax or email:

Justine Richardson, MATRIX: Center for Humane Arts, Letters and Social Sciences Online;

phone: 517-355-9300

fax: 517-355-8363

email: quiltindex@centerforthequilt.org or richa332@msu.edu

Once you have contacted us, potential partners will need to gather information for a letter of interest that addresses the following:

- 1) Name of Project or collection:
- 2) Current location of collection:
- 3) Current contact person and contact information (address, telephone, email, fax):
- 4) Project Directors/coordinators (if different):
- 5) Description of the collection -- How many quilts? When were they (or the information about them) collected? When were the quilts made -- earliest & latest? Were there restrictions, of date or location for example, for inclusion in the project? Were photographs taken of quilts? If so, are they on slides, polaroids, 35mm camera film? What do the pictures show, i.e. are they pictures of the full quilt only, quilt and quiltmaker, details of blocks or backing or quilting, etc.? Also list or describe any other quilt related materials besides quilts and images.
- 6) Importance of the collection. What's unique, significant, special about your collection? For the NEH proposal, we must emphasize the importance of quilt information and the significance of the particular collections in the partnership. Please describe the significance of your collection for teaching and research in the humanities.
- 7) Digitization (Note: This is NOT a prerequisite for participation)-- Has the information ever been entered into any kind of database? If so, what program was used, e.g.

filemaker pro, microsoft access, SAS? Who did the inputting? Is this information still accessible? Were the images scanned? If so, what file formats are they in, e.g. tiff's, jpeg's etc? What resolution are they? How and where are they stored?

8) Ownership: Who owns the quilt? What copyrights or limiting restrictions are associated with your collection? Do you have permission to place your collection or information on line?