Interoperability Options:
Lessons Learned from an IMLS National Leadership Grant

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Texas State Library and Archives Commission

Agenda

- Texas Heritage Digitization Initiative
- IMLS NLG, 2005-2007
  - Interoperability (OAI-PMH, Z39.50, SRU)
  - Texas Heritage Online
- Lessons Learned
  - Collection Granularity
  - Metadata Madness
  - Transformers
- Contacts & Credits
Digitization: Texas

♦ Existing Projects:
  – Handbook of Texas Online
  – Texas Archival Resources Online
  – Portal to Texas History
  – Texas Tides
  – Texas Beyond History

♦ Funding Sources:
  – State Grants
  – Federal grants
  – Foundations
  – Institutions
THDI Vision

To offer unified online access to cultural heritage resources held by Texas institutions
Collaboration: TARO

Texas Archival Resources Online

Browse the finding aids by repository:

Select a repository

Select a repository
Alexander Architectural Archive, University of Texas at Austin
Austin History Center
Benson Latin American Collection, University of Texas at Austin
Center for American History, University of Texas at Austin
Cushing Memorial Library, Texas A&M University
Harry Ransom Humanities Research Center, University of Texas at Austin
Houston Public Library, Houston Metropolitan Research Center
Moody Medical Library, University of Texas Medical Branch
Robert E. Nall, Jr. Historical Archives at Old Jail Art Center
Southern Methodist University
Southwest Collection/Special Collections Library, Texas Tech University
Tarleton Law Library, University of Texas at Austin
Texas State Library and Archives
Texas Woman's University, the Woman's Collection
University of Houston Libraries, Special Collections and Archives
University of Texas at San Antonio
University of Texas at Arlington Libraries, Special Collections
Woodson Research Center, Rice University

Texas Digital Library Alliance
Funded by TIF 2000–2003
Initially 5 ARL institutions plus state archives
– 8 additional institutions
Central repository for finding aids in EAD (XML)
Hosted and maintained by UT Austin
Lessons:
– Sustainability
– Growth
Sam Houston (1793-1863)
One of the most colorful and controversial figures in Texas history, Sam Houston was born in Virginia on March 2, 1793. He spent much of his youth, however, in Texas. He attended Sam Houston State University, and Houston's grave is in Huntsville, Texas, near the Sam Houston Memorial Museum, a 69 ft statue, Sam Houston State University, and Houston's gravesite. 

Sam Houston - Wikipedia, the free encyclopedia
Huntsville, Texas, is the home of the Sam Houston Memorial Museum, a 69 ft statue, Sam Houston State University, and Houston's gravesite. 

Sam Houston, State University | See How Success Unfolds
Sam Houston State University, founded in 1879, is one of the largest universities in the state of Texas. Sam Houston State University currently offers 86 degree programs. 

Sam Houston Memorial Museum
Calendar of events, virtual tour, hours of operation, membership information, and chronology. Located in Huntsville. 

Sam Houston Race Park
Quarter Horse and Thoroughbred racing at Houston, TX. Map of 7575 N Sam Houston Pkwy W, Houston, TX 77084. 

Sam Houston a Texas Hero
Sam Houston was born in Virginia on March 2, 1793.
Sam Houston: Sources

**THE HANDBOOK OF TEXAS Online**

**HOUSTON, SAMUEL** (1793-1863). Sam Houston, one of the most illustrious political figures of Texas, was born on March 2, 1793, in Orange County, Virginia, to Samuel and Elizabeth (Paxton) Houston. He was raised in a Presbyterian family and was educated at the Presbyterian College in Nashville. Houston's father died when he was young, and he was raised by his mother and his brother.

The young Houston moved to Tennessee at the age of 14 and later to Alabama, where he became involved in politics. He served in the Alabama House of Representatives and was elected to the United States Congress in 1823. Houston returned to Alabama in 1827 and was re-elected to the Congress in 1833.

In 1836, Houston became governor of the Republic of Texas. He led the forces of Texas against Mexico during the Texas Revolution and was re-elected as governor in 1838. Houston resigned from the governor's office in 1842 and moved to Tennessee, where he remained until his death in 1863.

Houston was a military leader and politician who played a significant role in the history of Texas and the United States. He was a skilled orator and a dedicated public servant who worked to promote the interests of his country and his state.

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**THE LIFE OF SAM HOUSTON**

New York: J.C. Debby, 318 Nassau Street. Printed and Published by Debby & Co. Published by Debby & Co. 1853. Illustrated.

...
THDI IMLS Grant

♦ Purposes:
  - To enhance interoperability among disparate collections of digital assets
  - To provide seamless access to digital assets through a federated search engine
  - To demonstrate the feasibility of using open source software in support of international standards
Web Search

Term/Exp | List of Documents
---|---
A | 1, 4, 8
B | 1, 2, 6
A OR B | 1, 2, 4, 6, 8
C | 2, 6, 7
(A OR B) AND C | 2, 6
Metadata Harvesting

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Protocol: OAI-PMH
Federated Search

Protocols:
- Z39.50
- SRU/SRW
a. Build indexes
b. OAI Harvest
c. Query Z39.50/SRU
Texas Heritage Online

http://www.texasheritageonline.org
Technical Specifications

- Full support for Z39.50
  - SRW/U “bonus”
- Metadata normalization
  - Dublin Core
  - MARC
- Support for thumbnail images
- Open Source
- Standards-Compliant
  - Including Accessibility
Product Details

- **Vendor:** Index Data
- **Product:** Keystone DLS (TKL)
  - Also used in
    - Library of Texas
    - Portal to Texas History
- **Features:**
  - XML-based CMS
    - CSS-driven interface
  - YAZ toolkit
  - Zebra indexing engine
Welcome to Texas Heritage Online!

Texas Heritage Online provides unified online access to Texas' historical documents and images for use by teachers, students, historians, genealogists, and other researchers.

You can search for specific items or browse to help narrow down your interest. You can learn about the Texas Heritage Digitization Initiative, a cooperative project to identify, describe, digitize, preserve, and make broadly accessible special collections of history and culture held by libraries, archives, museums, historical societies, and other institutions in Texas.

If you have any questions, you can check the help pages to contact us. Your feedback is always welcome!

Featured Collections

**Title:** The Portal to Texas History  
**Institution:** University of North Texas Libraries

The Portal to Texas History offers students and lifelong learners a digital gateway to the rich collections held in Texas libraries, museums, archives, historical societies, and private collections. The Portal covers all geographic areas of Texas and covers prehistory through the twentieth century. It features digital reproductions of photographs, maps, letters, documents, books, artifacts, and more.
Portal to Texas History

Info / Link
Showing record 1 to 10

Results per page: 10

[Letter from unknown person to Mexia, May 27, 1836]
Letter from unknown person to Mexia: Arriving to Galveston and hearing the news of the retreat of the enemy. Describes conditions of the prisoners in Galveston and mentions speaking to some of the imprisoned officers. Galveston, May 27, 1836.

[Letter from Lorenzo de Zavala Jr. to unknown person, enclosed with letter to W.E. Hutchison, July 1, 1879]
Letter from Lorenzo de Zavala Jr. to unknown person enclosed with an additional letter to W.E. Hutchison. The letter addressed to Hutchison describes the mis-handling of the affairs over the estate and property of the deceased Lorenzo de Zavala Sr. The additional letter to unknown person describes his own eye-witness account of the events of the Battle of San Jacinto and his personal endeavors afterwards. Merida, Yucatan, July 1, 1879.

Houston, Sam: Letter to James H. Raymond
Request for payment of $240 to the Executive Contingent Fund.

Bruce, Henry: Life of General Houston, 1793-1863
Biography of Sam Houston.
Life of General Houston, 1793-1863

Creator (Author): Bruce, Henry
Publisher Name: Dodd, Mead and Company
Place of Publication: New York
Original Creation Date: 1831
Coverage: From 1793 to 1863
Description: Biography of Sam Houston
Language: English
Subjects: [LCSH] Houston, Sam, 1793-1863
[UNT-BH] People - Individuals - Sam Houston
Series Title: Makers of America
Institution: University of North Texas Libraries
Collection: Texas History Collection
Identifier: Accession or Local Control No: pt-txhp-1114046
OCLC: 1114046
Digital Creation Date: 2005
Resource Type: Text-Book
Format: Text
Permalink: Please use this URL for external references:
http://texashistory.unt.edu/ark:/67531/metnp2408

Click above to see object
About the Publisher:
Dodd, Mead and Company
Comment on this Entry

Search Inside

[Text content about the life of General Houston]

Bruce, Henry: Life of General Houston, 1793-1863
Biography of Sam Houston.
Collection Technologies

- **Library Catalogs**
  - Dallas Public Library
  - North Richland Hills Public Library
  - UT Arlington

- **Repositories & DAMS**
  - Stephen F. Austin
  - Texas A&M
  - Univ. of North Texas

- **Online Databases**
  - General Land Office
  - Historical Commission
  - Texas State Library
  - UT Austin

- **Web-Based Exhibits**
  - Texas State Library
  - Austin History Center
  - Dallas Public Library
  - UT Arlington
Interoperability Options

♦ Library Catalogs
  - Z39.50 Dallas Public Library
  - Z39.50 North Richland Hills Public Library
  - Z39.50 UT Arlington

♦ Repositories & DAMS
  - OAI Stephen F. Austin
  - OAI Texas A&M
  - SRU Univ. of North Texas

♦ Online Databases
  - General Land Office
  - Historical Commission
  - Texas State Library

♦ Web-Based Exhibits
  - Texas State Library
  - Austin History Center
  - Dallas Public Library
  - UT Arlington
Next Steps & Wish List

- Usability testing
- Mapping “mashups”
- Person search
  - Genealogy
- OpenSearch
  and/or Yahoo! API
- Merge/rank across targets
- Faceted search results
Lessons Learned

- **Collection granularity**
  - What is a “collection”?  
  - Common  
    - Provenance
    - Topic
  - Metadata assigned at collection or item level

- **Granularity Issues**
  - Relevance ranking
  - Federated search display
Lessons Learned

♦ Metadata madness:
  - Dublin Core
    • Simple (OAI)
    • Qualified
  - MARC21
  - MODS
  - “Custom”
  - None

♦ Standards?
Standards: Levels

- **Minimal**
  - Lowest level of common practice
  - Weak interoperability

- **Basic**
  - Appropriate for most institutions
  - Vendor-supplied interoperability

- **Enhanced**
  - Experimental
  - Newer standards are unsupported
THDI Standards

- Digitization
- Metadata
- Controlled vocabulary
- Interoperability
- Preservation
Lessons Learned

- **Transformers**
  - Move burden of normalization from collection to aggregator
  - Protocol syntax requirements

- **XSLT**
  - Dublin Core as lowest common denominator
  - Custom normalization filters determined by target analysis
Evolution of Federated Search:
1. Metadata-centric
2. Resource-centric
3. Collection-centric
4. User-centric
Contacts

♦ Texas Heritage Online
  http://www.texasheritageonline.org

♦ Danielle Cunniff Plumer
  THDI Coordinator
  Texas State Library and Archives
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♦ Ann Hodges
  THDI Steering Committee
  Univ. of Texas at Arlington Library
  ann.hodges@uta.edu
1. Texas Declaration of Independence, Prints and Photographs Collection, Texas State Library and Archives Commission.

2. Sam Houston Collage
   - Handbook of Texas Online, s.v. “Houston, Samuel.”
   - Sam Houston statue, Huntsville. Photo by Dreanna Belden of the statue by Adickes, David. Available from the Portal to Texas History, University of North Texas.
   - Daguerrotype of Sam Houston in white duster coat, c. 1859. Prints and Photographs Collection, Texas State Library and Archives Commission.
   - Sam Houston’s title to land in Nacodoches County, 05 May 1835. Texas General Land Office patent no. 315, vol. 18.
   - Sam Houston’s jaguar-skin vest. Sam Houston Memorial Museum Collection, Texas Tides, Stephen F. Austin State University.
   - Sam Houston Inaugural Address, 1836 (first page). From the Earl Vandale Collection, The Center for American History, The University of Texas at Austin.


5. Caddo Pottery, Courtesy Texas Beyond History, The University of Texas at Austin. Available at http://www.texasbeyondhistory.net/tejas/clay/galleries/index.html


7. Oil near Ranger going over the top, circa 1917. W.D. Hornaday Collection, Prints and Photographs Collection, Texas State Library and Archives Commission.

8. Texas Rangers; taken at Railroad Station in Ft. Worth, Texas during a railroad strike in April, 1886. ETRC Photograph Collection. Texas Tides, Stephen F. Austin State University.

9. Needle point picture of a map of Austin’s Old 300 Colony. From the collections of the Fort Bend County Museum, Richmond, Texas. Available on the Portal to Texas History, University of North Texas

10. Toy John Deere wagon. From the collections of the George Ranch Historical Park, Richmond, Texas. Available on the Portal to Texas History, University of North Texas

11. Boy in a charro costume, Casasola Studio Photographs, PH041-01-00007, Special Collections Department, University of Texas at El Paso Library.