Texas Center for Border Economic and Enterprise Development
College of Business Administration
Texas A&M International University
Texas Center Research Fellows Grant Program 2006-2007

ELECTRONIC ACCESS TO THE EARLY *LAREDO TIMES* (1881-1919)

Research Project Report
Prepared by

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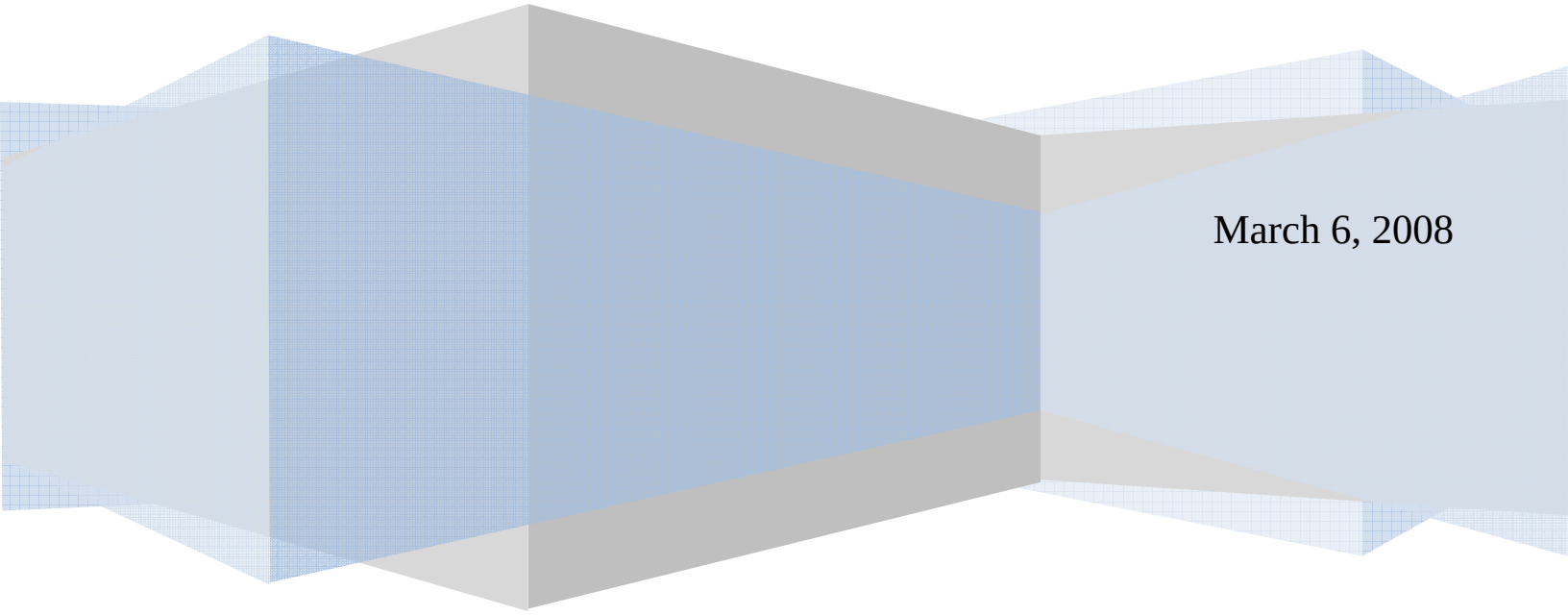

March 6, 2008

HOTEL LAREDO
(Northwest Corner of Market Square)

New Laredo, MEXICO
Charles Brosig, Proprietor
Accommodations for Travelers and Boarders
Well ventilated Rooms
Table supplied with the best the market affords
Stable connected with the Hotel

Classified ad from
***Laredo Times,* September 21, 1881**

DAYLIGHT SAVINGS IN EUROPE

Paris, March 31.—An increase in labor and a great saving in coal and oil, which have become precious commodities in Europe, are among the desirable ends that are expected to be accomplished by the introducing of the so-called daylight saving scheme, in France and Italy tomorrow. At midnight tonight the clocks throughout the two countries are to be set forward one hour and the new time will prevail until the beginning of October.

***Laredo Times,* April 1, 1917**

The passport law is in full force and effect now, and the immigration and consular officers are a busy lot. People going "between Mexico and the United States these days must present the proper passports or they are "up against it" good and proper. The passport law is a precautionary measure and is being "rigidly enforced.

***Laredo Times,* Sunday, December 9, 1917**

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Research Objectives

Laredo is currently the most important inland port for the exchange of goods between the United States and Mexico. But far fewer individuals are aware that, for over 250 years, Laredo has been a prototype of life and commerce on the U.S./Mexico border. Laredo citizens and businesses have gone about their activities in unique and distinctive ways during the past two and a half centuries. The roots of this modern-day commercial powerhouse on the border that Laredo currently is lie in its own history, which is a key to understanding 21st century international trade and commerce both from a local and a global perspective. Furthermore, Laredo's history is, to a large extent, the general history of two nations.

Newspapers are the record of daily life of the city where they are published. In that sense, the *Laredo Times* (in its various titles since its inception, on June 14, 1881) is the quintessential source for finding out not only about daily life on the border from a historical perspective, but also about the origins of trade between the U.S.A, and Mexico. Nevertheless, despite the wealth of historical information that the *Laredo Times* contains, there is no modern tool available for doing research in this newspaper prior to 1996. Users interested in conducting historical research on Laredo using the *Laredo Times* must load microfilm reels into the readers and browse page after page in order to find what they are looking for. Regardless of whether they are searching for a specific news story, a series of stories on a topic, information on certain individuals, or paid advertisements, researchers must spend hours scanning microfilm before they can obtain the information they need. Providing electronic access to the early *Laredo Times* can simplify the research process and, at the same time, be a useful tool for education at all levels. It can facilitate analysis and understanding of Laredo's commercial and urban development; it can assist in genealogical research, historical fact finding, etc. My general goal with this research project has

been to initiate the process towards modernizing the way historical research on Laredo is conducted. I intended to provide the basis for facilitating electronic access to the early *Laredo Times* in order to simplify doing research on Laredo and the region. This project is only the initial step in solving the vacuum of available research tools on one of the most important US/Mexico border cities. It provides digitized information that is readily searchable. It also offers the structure for follow up detailed indexing work that will complement the basic search process already made available through this research grant via searchable images of all available *Laredo Times* issues, from 1881 to 1919. Together, these tools will permit anyone interested in quickly finding out about people, events, and businesses that have shaped Laredo since the late 19th century.

This research project originally established three specific objectives:

1. To investigate methods and vendors available for digitizing and obtaining electronic access to the first 20 years of the *Laredo Times* (1881-1900). The source will be the corresponding microfilm reels available in Killam Library. Scanning and electronic conversion of microfilm reels were to be outsourced after I researched options and alternatives.

2. To create a working model of an indexing structure that can be applied in the future to the digitized years of the *Laredo Times*. The proposed indexing model will include fields for variables such as personal names, commercial names, geographic names, product names, obituaries, classified advertisements, etc.

3. To study ways of making available through the internet the digitized *Laredo Times* and the indexing model that will be developed.

The outcomes of this project were established as:

1. Digitized images of the early *Laredo Times* (1881-1900). This period was later expanded to cover the years 1881-1919 thanks to supplementary funds from Killam Library.

2. A working model for indexing the *Laredo Times* in a future, full-scale implementation.

3. A proposal for making items 1 and 2 available through the internet.

Local Newspaper Indexing – an outlook with current considerations

Indexing of newspapers has been carried out almost from the onset of the first modern newspaper. It is part of newspaper history itself. *The London Times* started its indexing work in 1791, while *The New York Times Index* began production in 1851 (Smith, p.1). However, these large newspapers have always provided their readers with a national and international perspective that is not directly related to events and history at a local level. Newspaper indexing of local and regional newspapers began as an enhancement of the indexes of the national press that did not cover the news of small towns. In 1942, Harry Friedman published the first known newspaper indexing manual as an attempt to solve problems he had encountered for many years as a newspaper librarian (Koch, p. 273). In his manual, Mr. Friedman provided a correlation of several indexing methods that were in use at the time. He considered that personal names are the key element of a newspaper index. Next in relevance were subject terms, which were to be developed based on standards suitable to the individual local newspaper. Friedman recommended three possible systems for determining subject entries to use:

1. Subject heading are assigned to an article only when the proper name in a story is created, destroyed, or radically altered.

2. Subject headings are created to correspond with every name heading taken from the story; and

3. Subject headings are assigned only when the article deals with the subject itself, and not when the subject is second in importance to a proper name (such as granting a franchise to a particular company).

Friedman's manual was the basis for many other newspaper indexing manuals and projects that came about from the 1950's until the advent of full text indexing processes, in the early

1990's. It is interesting to notice that the 1970's and 1980's saw a multitude of local newspaper indexing projects. There was some sort of *indexing synergy* at the time. Local libraries, as well as genealogical and historical societies both in the United States and abroad started showing special interest in organizing access to local historical newspaper materials. Some examples of the many indexing projects initiated in the 1970s' and 1980's include:

- The index of *The Milledgeville Southern Reporter*, in Georgia started indexing news from 1820 and on, (Armstrong).
- The subject and name index of *The Arizona Champion-Coconino Sun*, which focused on the years 1883 and 1884, (Shook).
- The indexing of *The Perth Courier* in Perth, Scotland, covered the years 1802-1822, (Howat).

Indexing local newspapers published in the 19th century is usually challenging because available printed or microfilmed issues of the newspaper are often scattered and poorly preserved. Additionally, there is always scarcity of trained personnel and resources. Several new guides and indexing manuals became available in the 1970's that offered useful and practical advice for the inexperienced. These manuals, and other newspaper indexing guides that became available prior to the widespread availability of microcomputers, recommended that indexes be based on 3 x 5 index cards, and that the indexer work from paper copy, even though microfilmed newspapers were already available. In 1975 Esther Perica published a well know manual among indexers: the *Newspaper Indexing for Historical Societies, Colleges and High Schools.* Perica's manual was largely based on Friedman's. Judith Meister Einhorn published in 1976 her *Guidelines for Indexing Local Newspapers*, in which she emphasized the importance of creating an authority file of subject headings with "*see*" and "*see also*" cross references. Einhorn's

manual is believed to be functional but rigid. She included 500 subject terms in it, but her guidelines sternly advise against using more than two subject headings per news article. Many of the newspaper indexing projects that started in the 1970's and the 1980's opted for using well established subject lists. One example is the *Flagstaff Cooperative Newspaper Indexing Project*, which was based on modified Sears List headings. The objective was to use subject headings that were general in scope and many *"see"* references leading to more specific terms. In other instances, the subject headings used were derived from several sources. One case in point is the indexing of the *Milledgeville Southern Records* mentioned earlier. The subject index was developed by consulting the *Library of Congress Subject Headings*, along with local and state historical documents. Subject lists used in any newspaper indexing project are always expanding, and so is the network of cross references used. Clearly written procedures for controlling this process are always essential.

Newspaper indexing is a process that has evolved substantially in the past 20 years. Automated indexing of full text and digitized images has largely replaced the manual labor that was typically involved in producing newspaper indexes. The advent of the microcomputer and specialized software in the early 1980's made it possible to consider new approaches to the classical process that used 3 X 5 index cards and required the production and maintenance of an elaborate thesaurus of index terms. Members of the American Society of Indexers and Librarians started synergies with computer programmers and experimented with programs that extracted keywords from textual information. The new software thus developed promised to be a viable alternative to the elaborate and costly subject lists in indexing projects. Acronyms such as KWIC (Keyword in Context) and KWOC (Keyword out of context) became well known in the library world. These indexing techniques relied heavily on keywords present in titles and headlines. In

the United Kingdom, similar efforts to automate the indexing process led to concepts such as PRECIS (Preserved Context Index System), a technique that required great analytical effort on the content to be indexed before the input stage. In 1982 Hans-Ole Madelung, a Danish librarian, studied the relative effectiveness of PRECIS and KWIC indexes for newspaper articles. His research showed that students using PRECIS indexes to retrieve newspaper articles were able to determine relevance more accurately, traced more correct articles, and were able to produce fewer wrong responses when questioned about news stories indexed using both KWIC and the PRECIS methods. It was concluded that newspaper headlines are not necessarily the best indicators of the content of newspaper articles. This is in fact one of the main difficulties associated with newspaper indexing.

In the late 1980's specialized software available for creating indexes became available, first in DOS and later in the Microsoft Windows environment. Electronic indexing systems such as MACREX, SKY, and CINDEX were supported by the American Society of Indexers as useful and flexible tools in applying the rules and the thought process involved in creating indexes. In Monterrey, Mexico, a company called InfoSel (for Informacion Selectiva, in Spanish) worked out a strategic alliance with Microsoft, and developed a proprietary system called InfoDex, which was the basis for the electronic indexing process of the regional newspaper *El Norte*. In 1994 the contents of the national newspaper *Reforma* were added to the indexing workflow. Opinion writers and newspaper reporters used InfoDex everyday to search for support data and previous related news to the stories they were writing and, in general, to add value to their articles and stories. I directed these newspaper indexing projects from 1989 to 1996. Systems like CINDEX were exported to many English-speaking countries, while InfoDex, a Spanish-language based system was exported to many Latin American countries and Spain, and the

contents of *El Norte* and *Reforma* are now available in the ProQuest platform through their product *Latin American Newsstand*. They still use the same structure we developed for entries, names, geographic locations, headlines rules, and so on.

The most recent step in newspaper indexing is the large-scale newspaper digitization projects being carried out by commercial companies such as *Newspaper Archive*, *Readex*, *Proquest*, and others. Images of both historic and current newspaper issues are viewable online. While these services and systems permit users to search every word in the documents, lists of subject headings are still being produced for subject searching. Perhaps the best example of this approach is the impressive LAURIN Project. Launched in 1998 by seventeen partners from seven European countries, the LAURIN Project, which stopped in 2004, used information technology coupled with sophisticated indexing standards to maintain a network of European newspaper clippings. One of the main outputs of the project was image processing software that replaced old methods of maintaining newspapers clippings -- namely scissors, glue, and print files of clippings. Another major output of this project, and perhaps more directly related to our own project was the LAURIN Multilingual Thesaurus, which included more than 256,000 thesaurus terms.

There are several reasons that explain why manual indexing of newspapers by using a thesaurus and a set of indexing terms is still valuable in the era of scanned images with searchable contents. Perhaps the main motivation for this additional intellectual work is *quality*. Manual indexing allows for precision and customization of information retrieval to a level that no automated scanning of the full text or newspaper stories can provide. Barbara P. Semonche describes this rationale when she writes:

> "Some additional intellectual effort and news article analysis are necessary to link appropriately all the myriad, fleeting and unstated associations among a never-ending stream of stories about people, events and institutions." (Semonche, p.25)

It is important to recognize in any newspaper indexing project that, while the intellectual input must be as high as possible, at the same time the activity must be as efficient and automated as possible. In this context, a main prerequisite of advanced newspaper indexing is a controlled vocabulary that meets the special requirements of a collection.

Early *Laredo Times* Index – Planning and Options

Up until 2005, The Sue & Radcliffe Killam Library at Texas A&M International University owned only three years of microfilm of *Laredo Times* issues published in the 19th century. These were: 1893, 1894, and 1895. In 2006, the library made a substantial effort, and obtained microfilm copies of the *Laredo Times* for the years 1881-1892 and 1896-1907, none of which were available at that time in our collection. Although the library now has holdings of all the extant issues of the *Laredo Times* and its variant titles, it must be clarified that the contents are not complete for these years and the quality of the microfilm of the early *Laredo Times* varies. Although the majority of the images obtained in microfilm for 1881-1892 and 1896-1907 are easy to view in the microfilm reels, many pages are very difficult to read. In some instances parts of a page are completely faded. This is a problem of origin that, unfortunately, we could not do anything to correct.

In compliance with objective #1 of this project (*i.e.* to obtain digitized images of the early *Laredo Times*), the first step of the project was to investigate companies that could digitize the existing microfilm reels of the early *Laredo Times.* I carried out this activity using mainly professional directories, professional listservs, and national library associations. The website of the Special Library Association was particularly useful in helping me identify the best possible

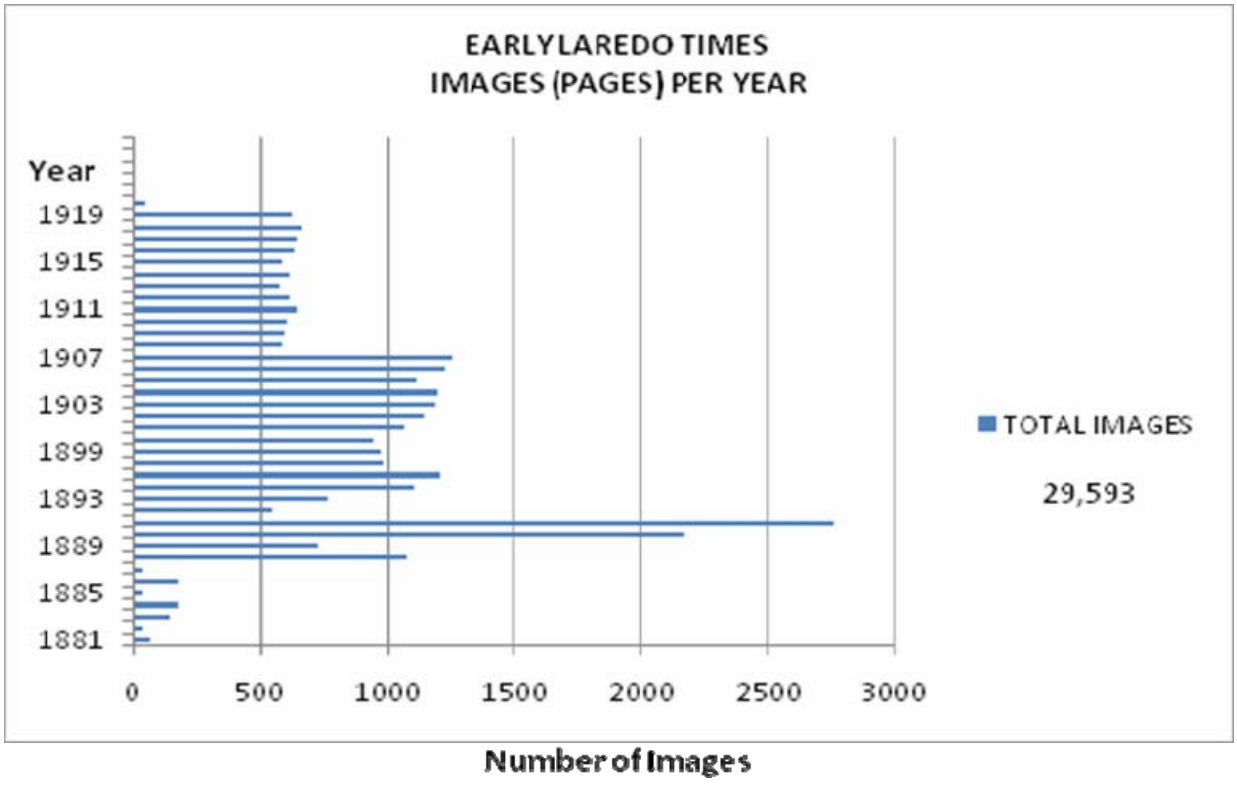
vendors to approach for this project. I selected Heritage Microfilm, Inc. I based my decision on a number of factors that included range of services offered, previous business relationships with Killam Library, feedback from colleagues, and potential costs for a relatively small digitization project, such as this one. Heritage Microfilm is a leader in microfilming and digitization services. It is located in Iowa. Other finalists in my list were Morris Digital Works, and Cold North Wind. On July 10, 2007, I submitted to the Texas Center my proposal and request for contracting with Heritage Microfilm to digitize 16 microfilm reels of the early *Laredo Times*. After learning that my original proposal would require bidding because it was $250 over the allowed $2,000, I modified it to cover 14 reels only, and resubmitted my proposal on July 16. The revised plan allowed for the digitization of 14 reels covering the years 1881 to 1895. Table I below provides details.

Year(s)	Number of 35 mm reels
1881/1882	1
1883/1886	1
1887/1888	1
1888/1888	1
Apr. 1889-Sept 1889	1
Jan. 1890 - Apr. 1890	1
May 1890-Oct. 1890	1
Nov. 1890 - Dec. 1890	1
Jan. 1891 - Dec. 1891	3
Jan. 1892 - Dec. 1892	2
1893-1895	1
TOTAL REELS	14

Table I. Microfilm reels to digitize through Heritage Microfilm, Inc., using grant funds

Killam Library provided additional funds, which allowed us to digitize issues for the years 1896-1919, thus completing digitized holdings from July 6, 1881 to December 28, 1919 for all issues of the newspaper that are still available. An inventory by date and variant title

was created. It is too big to add to this report, but it will be shared with the Catalog Librarian and the Special Collection Librarian. We digitized, during this project, a total of 29,593 images corresponding to pages of the first thirty-eight years of the Laredo Times. The chart and table below show the number of digitized images per year. The resulting PDF files are stored in four DVD's that will be transferred to the Killam Library Special Collections and Archives for permanent retention once they are added to our Catalog. The images have also been made available through *NewspaperArchive.com*, which is one of the largest historic newspaper sources online. The URL is http://access.newspaperarchive.com Users require TAMIU authentication in order to be able to browse or search the digitized images available.



Early *Laredo Times*

YEAR	TOTAL IMAGES
1880	48
1881	63
1882	40
1883	144
1884	184
1885	42
1886	180
1887	36
1888	1083
1889	724
1890	2172
1891	2760
1892	546
1893	764
1896	1108
1897	1212
1898	981
1899	971
1900	950
1901	1067
1902	1148
1903	1190
1904	1198
1905	1115
1906	1234
1907	1258
1908	588
1909	592
1910	605
1911	644
1912	612
1913	574
1914	611
1915	586
1916	632
1917	647
1918	664
1919	620
TOTAL	29,593

What is included in digitizing?

The digitization process involved the scanning of microfilm and subsequently running an optical character recognition process (OCR), which permitted the identification of all words that appear in the scanned images. During the digitization process I maintained communication with the vendor representative. Some of the images presented special problems during the OCR process because of poor image quality of the original. In some instances, the technicians at Heritage Microfilm were able to improve the digitization of poor originals (*i*.e. poor microfilm images). Images 1 and 2 below show the improvement process of one page of *The Laredo Times* published on September 6, 1883.

Image 1 - First attempt at digitization of damaged page in original

Image 2 – Improved digitized image

In many instances, it was impossible to improve the original image available on microfilm. One example of this is Image 3 below, which shows one page that was impossible to improve.

Image 3 – Bad image, unable to improve

Perhaps one of the reasons why some images from the early years of this local newspaper are very difficult to read is partly the poor condition of the original paper copies that were utilized during the microfilming process. It is also possible that the original microfilming process took place at a time when this technology was not developed to a sophisticated level. However, the fact that some words or even complete stories are not recognized during the OCR process can be somewhat ameliorated on the final, long term outcome of this project, as one of the project

goals was to develop a structure for manually indexing key information elements from our local newspaper.

Indexing software considerations

I considered from the beginning that indexing the early *Laredo Times* should make use of information technology and specialized software. I evaluated the following commercial indexing software products. Although they are designed for indexing in general, they can also be used as a starting point for indexing newspapers at a local level:

MACREX
CINDEX
SKY INDEX

I downloaded demos of CINDEX and SKY Index, and comparatively tested their features. These products are not database engines. They are specifically designed for structured contents, such as name, geographic, and subject indexes. Additionally I did extensive bibliographic research, and identified various academic articles describing pros and cons of each of these products. I also consulted journal articles and documents describing similar historical newspaper indexing projects. I decided to request the publisher's edition of CINDEX for Windows, v.1.5. This specific version allows indexing in a network environment. This will in turn facilitate the indexing process by more than one individual at a time. The version of CINDEX that we acquired will permit several indexers to work simultaneously using, as a process standard, the indexers' guide proposed in this report.

Indexing structure and guidelines

Before the indexing of the early *Laredo Times* gets underway some realities and problems will need to be addressed. Lack of time and trained human resources are at the forefront of the issues that need to be resolved. First, we do not have trained indexers among the Killam Library staff in order to develop an elaborate thesaurus of index terms. Secondly, all

librarians have a full load of tasks and projects that prevent us from being able to concentrate on indexing the *Laredo Times* as part of our regular activities. In order to fulfill objective #2 of this project (i.e. to create a working model of an indexing structure that can be applied in the future to the digitized years of the *Laredo Times*), I considered that the design of the standard index record should be, at least in an initial stage, as straightforward as possible. We need to think about using concepts and indexing models already available in similar projects. For example, thesaurus terms used in other historic regional newspaper projects can be adapted to the early *Laredo Times* without too much difficulty. It is possible that the manual indexing may require the use of database application software such as MS Access or FileMaker Pro in order to maintain a thesaurus for indexers to use. We will have to develop our own names, institution, and geographic indexes in CINDEX, and I provide basic rules that can be used for this process.

A structural analysis carried out on issues of the early *Laredo Times* shows that the newspaper has a very unique composition. The first page of an issue includes some bibliographic elements such as volume number, and issue number, but the various additional pages are not numbered, or do not have any bibliographic record identification. Some additional distinctiveness of news and entries in early issues of the *Laredo Times* include:

- Separate news items are basically identified by a period. Each news story starts on a new paragraph.
- Each classified advertisement is separated by a line.
- Many news stories are often very short, from 3 to 5 lines in some cases.
- Editorials and opinion articles are rare.
- Many advertisements are repeated on every issue for several months.

These characteristics have to be taken into account during the actual indexing operation. For example, it may be appropriate to establish criteria for how many times, or how often, a specific

advertisement is to be indexed.

I recommend organizing the manual indexing project into the following four operational phases:

- Phase 1 – Local information. This phase will include news stories, names, obituaries, advertisements, and classified ads from Laredo and Nuevo Laredo.

- Phase 2 – The Regional Context. The second phase will include published information that relates to the states of Texas, Coahuila, Nuevo Leon, and Tamaulipas.

- Phase 3 – National and Bi-national Information. This phase will consider indexing news stories related to events taking place both in the United States and Mexico. Of special interest will be news items covering bi-national topics.

- Phase 4 – International News. The final phase will include news stories of events taking place in countries other than the United States and Mexico.

The following are general guidelines pertaining to a model workflow for the indexing operation. This guide is designed to assist the future indexers of the early *Laredo Times* and, in its variant titles, the *Laredo Daily Times*, the *Laredo Morning Times* and the *Laredo Weekly Times.* It provides recommendations and procedures for the assignment of index descriptors for each type of entry published in the newspaper, including news articles, anniversaries, obituaries, announcements, cartoons, and advertisements. These recommendations and guidelines will have to be adapted to practical realities present at the time when the indexing operation starts. Indexing terms and descriptors for each record need to be identified with the following operational considerations:

Consistency

In order to be consistent, the indexer should use similar index descriptors for each type of format and content of the news-item.

Completeness

Index terms should provide a complete, but concise description based on content and origin of the news item being processed. Each index record will include fields for author, headline (title), subject term(s), names, geographic location, etc. It is recommended to use subject headings from the Library of Congress in order to expand the list of subject descriptors provided in Attachment 1.

Principle Topic
The indexer should include only the most important concept that describes the news-item. Each entry should reflect and describe only the main topic of the event.

Accuracy
Each entry should reflect accurate degree of spelling and factual accuracy in areas such as dates, names, and places.

Each record will consist of a series of index terms that will describe content, regardless of format. I have identified what I consider to be the main data elements for the indexing structure of the early *Laredo Times*. These are:

CONTENT DESCRIPTION
Headline, *i.e.* the title or caption of the news article
Author/Agency, *i.e*. the person or organization responsible for writing the news article.
People's names (individuals and families mentioned)
Organization names, *i.e.* companies in the news
Advertisements
Product type, *e.g*. ice, liquors, cigars, etc.
Item category, *e.g.* editorial, obituary, photographs, advertisement, classified, etc.
Type of event, *e.g*. wedding, funeral, anniversary, political rally, etc.
Economic sector, *e.g.* transportation, tourism, oil, gas, mining, etc.
Geographic descriptor (i.e. counties, cities, regions, and countries)
Subject category

BIBLIOGRAPHIC DESCRIPTION:
Source – the source title is necessary to enter the variant titles available.
Date - this field describes the exact date of the news item.
Issue number
Volume
Page
Section
Column number
Column title

Standards for Assigning Index Terms

While more work is necessary to produce a detailed indexer's manual, the following are basic standards, recommendations, and formats for entering certain index terms for each record. These examples are presented here to provide insights into the level of operational detail that needs to be applied in the indexing process.

1. TYPING STANDARDS - All indexing information, including headlines, captions and index terms or descriptors will be capitalized.

2. HEADLINE – The headline must be transcribed exactly as it appears, including all acronyms, abbreviations, or typographical errors. Headlines must not be altered in any way, although *"[sic]"* can be inserted after errors. All subtitles or subheadings must be included when available. Headlines must not end with a period, and indexers should not underline any words.

3. AUTHOR/AGENCY

    - Enter the personal or corporate author if one exists, e.g. *Associated Press*.

    - Enter personal names in inverted order: last name, first name. middle initial
      e.g. Morrison, Joseph M.
    - If there is no middle initial, do not put a period after the given name.
    - For more than one author, list names vertically.
      e.g. Morrison, Joseph M.
      Medina, Jacinto
    - If a photograph appears in the news article, include the keyword PHOTOGRAPH in the entry list of descriptors.
    - Do not include honorary titles or professional titles unless those are part of the given name, *e.g.* Anderson, Frederick, and not Anderson, Dr. Frederick
    - Include nicknames and abbreviated names when they appear in the newspaper article.

4. PERSONAL NAMES. Enter the name or a person in inverted order.

5. ORGANIZATION NAMES. Include all relevant organization, association or company names in each news article or advertisement.

6. ADVERTISEMENTS. Include the keyword ADVERTISMENT when indexing advertisements.

7. PRODUCT TYPE. Describe the main type of product(s) being described in advertisements and news items. Use the plural form of the term when appropriate, *e.g.* liquors, cigars, mattresses. When no plural form is adequate use the singular most descriptive term, e.g. ice, machinery, etc.

8. ITEM CATEGORY – The following are content categories suggested and how to treat them in the indexing process:

    <u>Editorials</u>

If the article is an editorial or opinion article, include either the words EDITORIAL or OPINION ARTICLE. Enter a forward slash before the headline or title, and also include the descriptor: EDITORIAL as an index term.

Photographs

When indexing photographs with no accompanying story, enter the item category PHOTO. Also enter a forward slash before the headline or note title, also include the descriptor: PHOTOGRAPH as an index-descriptor.

Obituaries

Obituaries are specialized formats of news items from newspapers, noting the death of an individual. Include index terms containing names and dates. Include the descriptor OBITUARY.

Anniversaries

Anniversaries are specialized pieces of newspapers, noting a special celebration or commemoration. Add the index term ANNIVERSARY. Enter the name mentioned in inverted order. Include the names of persons' or organizations' anniversaries.

Cartoons

A cartoon is a humorous or satirical drawing of events in the news. Add the index term CARTOON

Classifieds

These are short advertisements. Classifieds of the Laredo Times include both commercial and personal entries.

9. TYPE OF EVENT. Enter only one the index term describing the main type of event in the news item. Describe the event in its singular form, *e.g*., wedding, funeral, anniversary, political rally, etc.

10. ECONOMIC SECTOR. Use only one descriptor. Analyze the item carefully, and decide which term from the subject headings list best describes the economic sector of the item.

11. GEOGRAPHIC DESCRIPTOR. Include all relevant geographic descriptors that are mentioned in the news article, at all levels: city, county, state, regional zone, country, *e.g*. Nuevo Laredo, Monterrey, Portland, Zapata County, etc.

12. SUBJECT CATEGORY. Include the most appropriate subject headings, and sub-heading(s) that describe the main concept in the content. Use the list of subject headings available for the project. More specific procedures need to be developed for adding, deleting, or modifying subject terms.

13. SOURCE - *Laredo Times, Laredo Morning Times, Laredo Weekly Times, and Laredo Daily Times*. Indexers need to be attentive, and enter the correct title of the materials

being processed.

14. DATE of the publication news article (item). Enter the whole year, month, and day in that order. Use the following format: YYYY,MM,DD. Example, March 07, 1897 will appear as 1897,03,07. Note that single-digit month or day will appear as 03, 07, etc.

15. PAGE - Include the page number where the item, news article or insert appear in the newspaper. And the section when is stated. Example: International Section.

The general indexing above described can become the foundation of a large scale manual indexing of the *Laredo Times*. Grant resources may be sought in the future to continue developing and implementing this indexing structure and process in order to take full advantage of all digitized images, as well as to make up for deficiencies in the scanned images that do not allow their content to be retrieved via optical character recognition (OCR).

Internet access to the early *Laredo Times*

The third goal of this project was "to study ways of making available through the internet the digitized *Laredo Times*, and the indexing model proposed. As mentioned earlier, the more than 29,000 scanned images are already available in the database service *Newspaper Archive*, to which Killam Library has access. The URL is: http://access.newspaperarchive.com

Authenticated users can search the early *Laredo Times* using an interface that allows for the use of keywords and search limits. The interface is easy to learn, and it uses a structure similar to the search interface used by many other databases the library. Images 4 to 8 below show some features of the search interface and search results using both the browse and search functions.

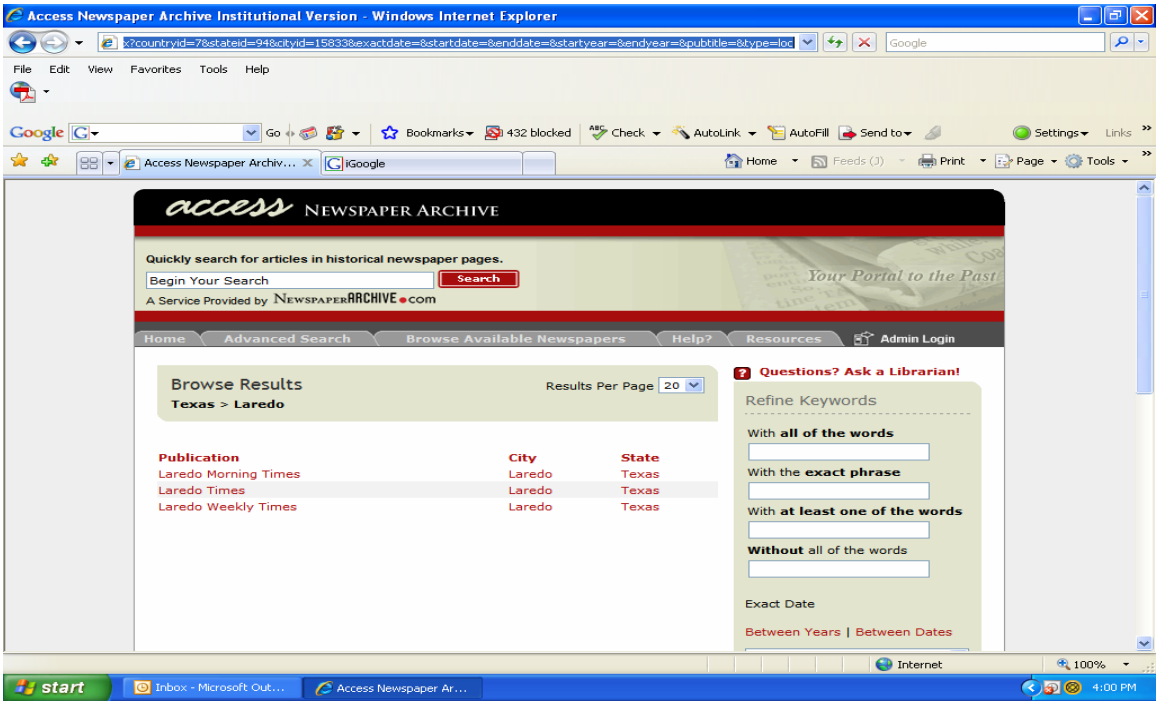


Image 4 - Browse Results for *Laredo Times*

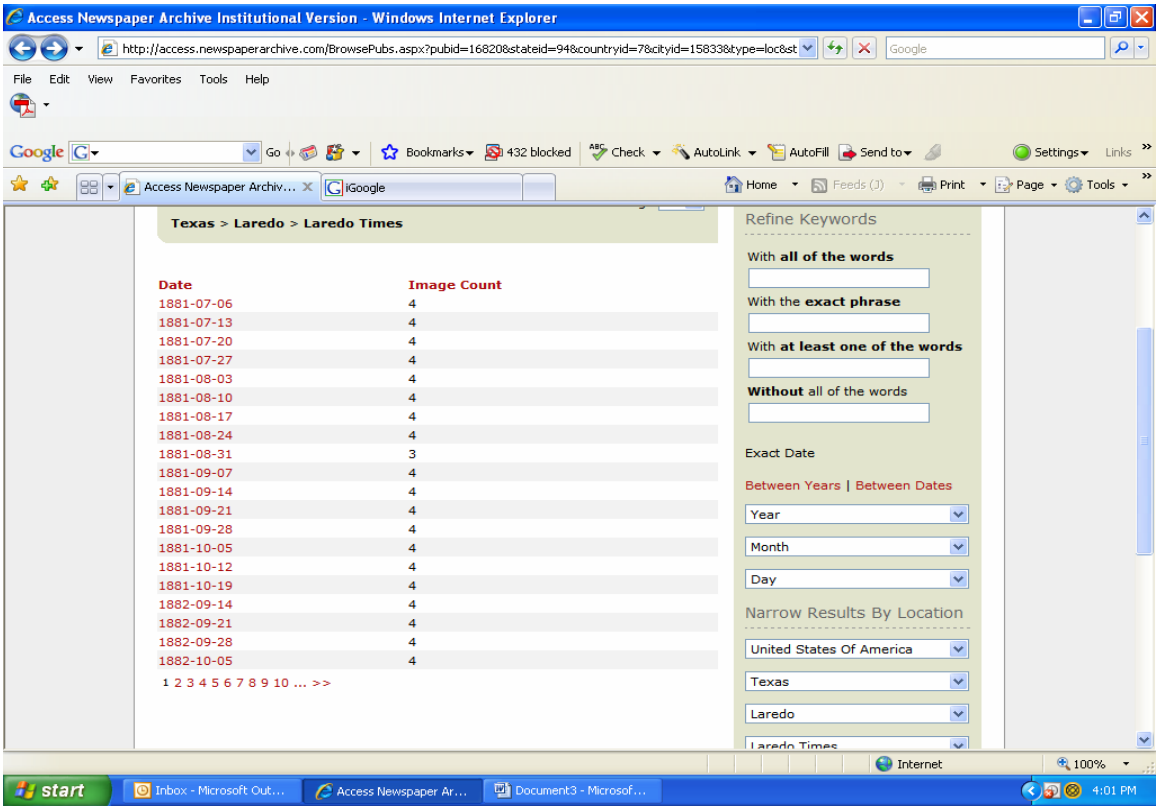


Image 5 - Image count results by date

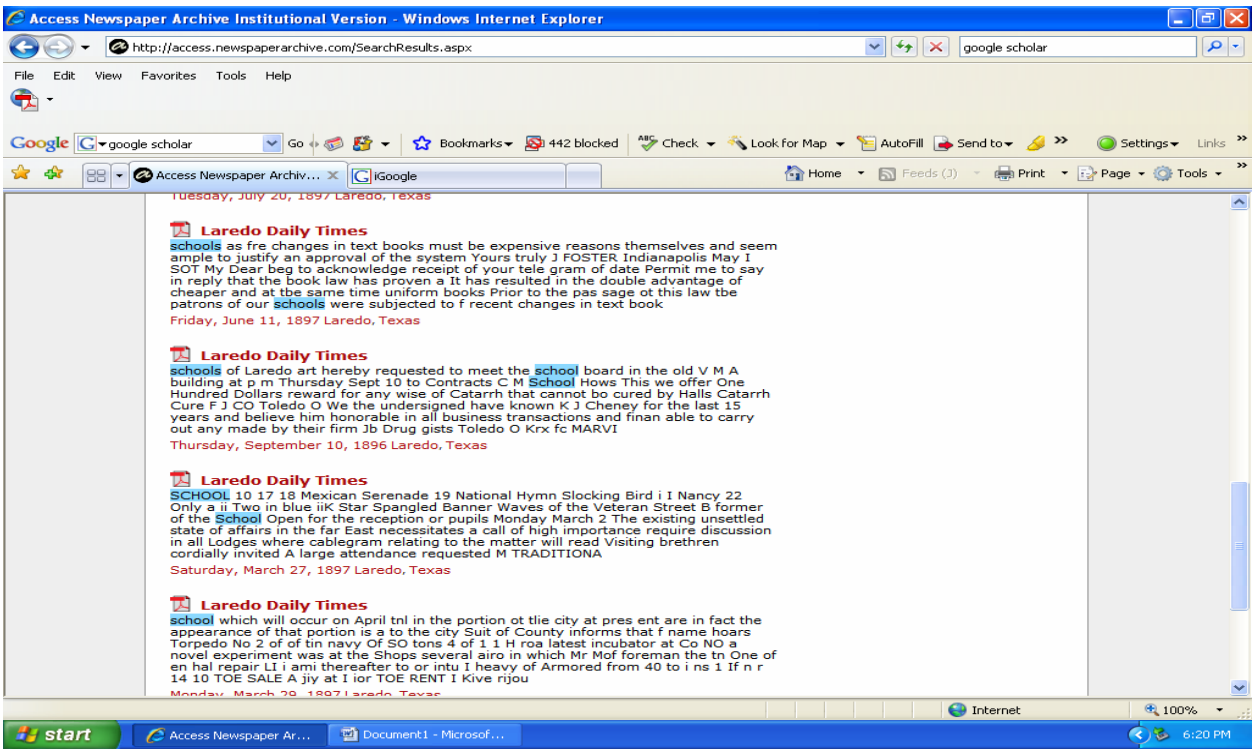


Image 6 - Search results keyword “school”. Search was limited to 1896-1897

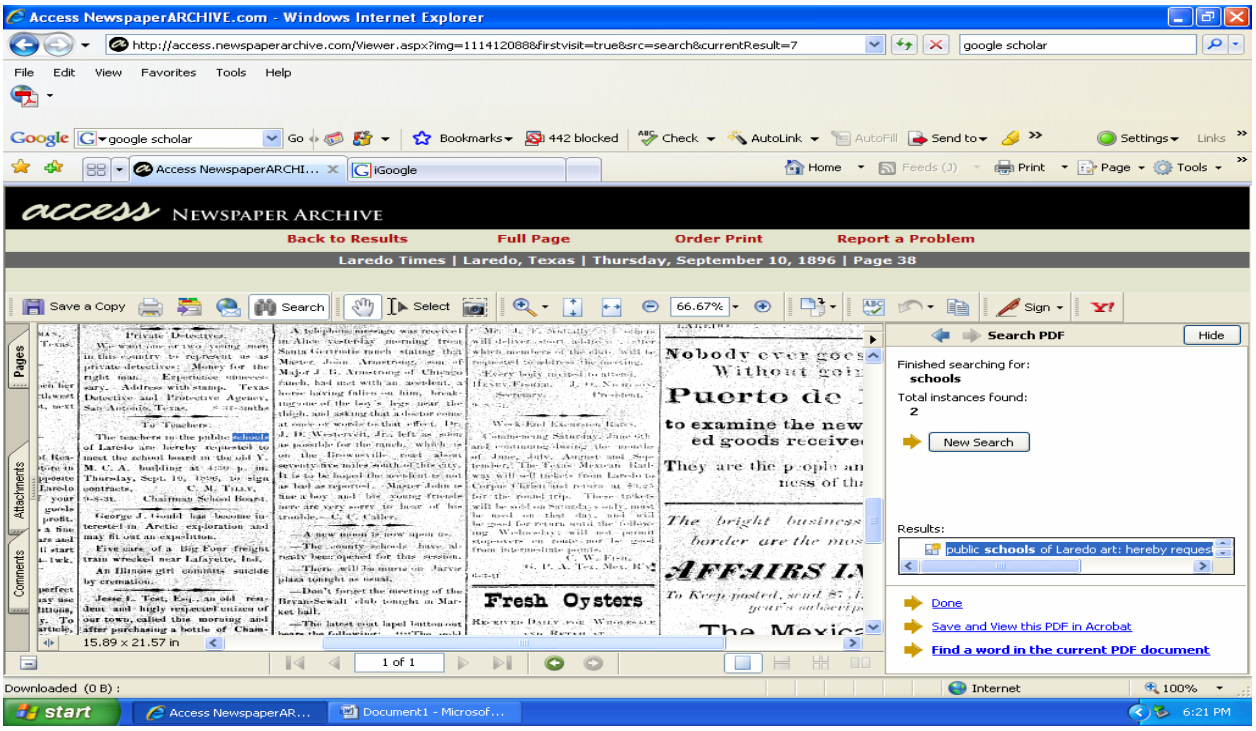
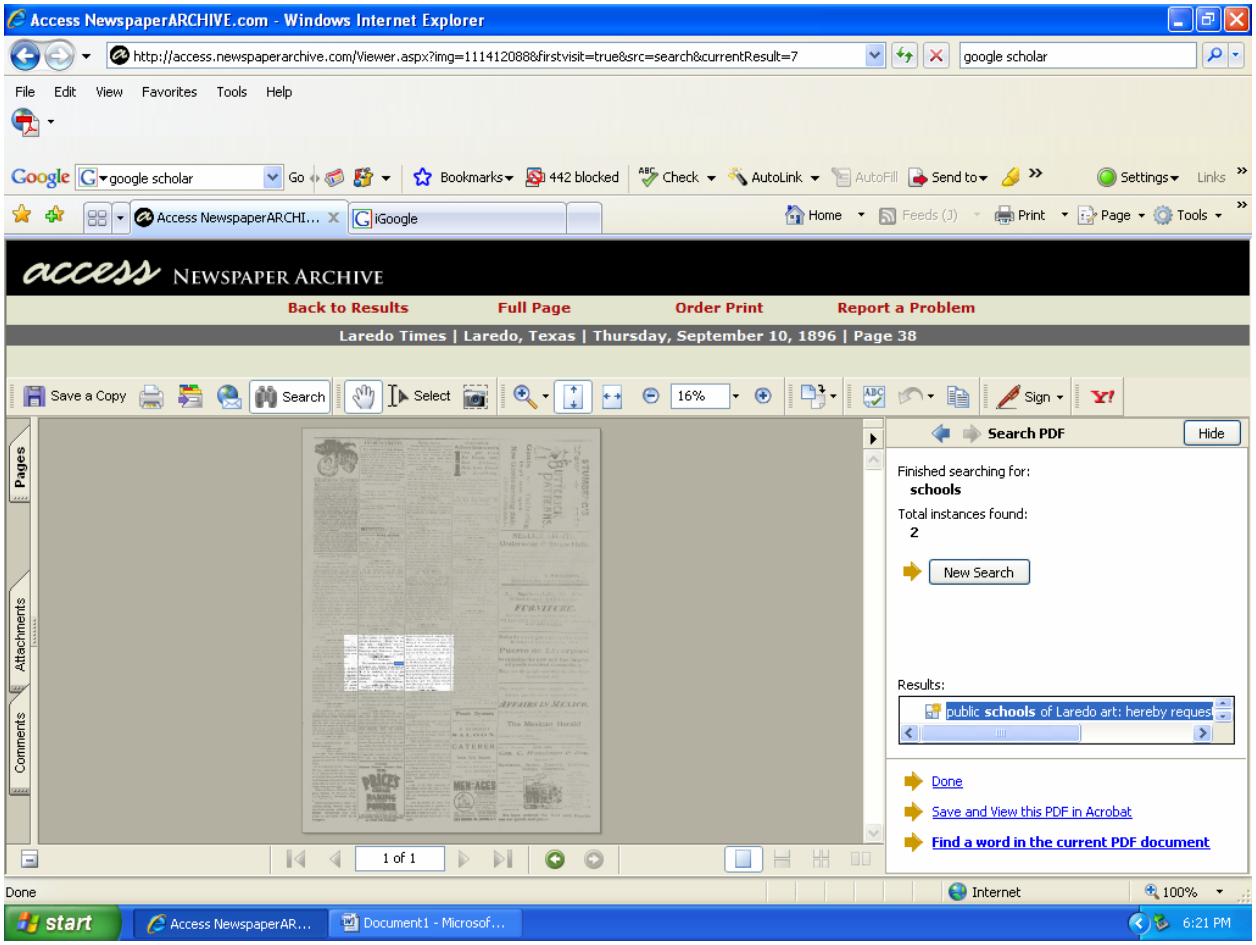


Image 7 – Keyword “school” is highlighted (in blue) in story. Magnification is adjustable.



Inage 8 - The story is highlighted by system when viewing the full page at 16 % magnification

The manual index of the Laredo Times that is proposed in this report can also be uploaded for internet access when ready. CINDEX has several useful add-on modules and utilities that facilitate the electronic publishing of indexes created using this software. One of the most attractive utilities for this project is called HTML/Prep. When used in conjunction with CINDEX, HTML/Prep permits preparing an index for Web availability as an HTML document. This may be particularly applicable to the name index that can be created using CINDEX. A single index can be re-organized into multiple HTML files, one for each letter or group of letters. Letter lists can also be created with links, and can be placed at the top of the index, the top and

bottom, and as a separate page or frame. Similarly, using HTML/Prep, various sets of tags can be used at the top and bottom of files, after each letter, etc. Font, color, background, place buttons, and other HTML features can also be specified using this add-on module to CINDEX. Two examples of indexes created with CINDEX and uploaded to the internet using HTML/Prep can be found here:

Rochester (NY) History
http://www2.libraryweb.org/index.asp?orgid=358&storyTypeID=&sid=&

Congressional Quarterly Weekly Index
http://www.cq.com/flatfiles/weeklyIndex/2005index.htm

Final considerations

This project has been both exciting and challenging. By digitizing and making available through the internet scanned pages covering the first thirty eight years of the *Laredo Times* I was able to -- metaphorically speaking -- give life to thousands of images depicting what Laredo once was. The old and reliable storage medium that microfilm is, gave way to the modern and usable tool that scanned images and the internet provide. Thousands of stories and topics describing daily life in this historic border town are now searchable through a commercial website. All of this is certainly exciting. But the project has also been quite challenging. Timelines originally planned were very difficult to maintain for multiple reasons out of my control. The manual indexing process that was proposed is, at its core, a difficult endeavor to implement unless special funds and trained staff are assigned to it. I mentioned the possibility of applying for grant funds in the future as an option to secure these resources. In the meantime, there are many follow-up activities that can continue to take place, among them:

- To continue the digitization process as permitted by copyright law. Killam Library may continue to digitize microfilm reels available in its collection, thus continuing the process that stopped in 1919 under this grant. Other companies

may be used for the follow-up digitization. One advantage of using Heritage Microfilm continues to be the fact that scanned images can be loaded for internet search using their interface.

- Work with other local libraries and the current publisher of the *Laredo Morning Times* to negotiate the possibilities of joint projects related to coding and retrieval of contents of this local newspaper.

- Outreach work may help obtain more and better copies of issues of the early *Laredo Times*.

These and other activities are promising possibilities that will continue to enhance access to historical documentation vital to understanding how Laredo has evolved in the past 127 years.

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APPENDIX
PROPOSED INITIAL LIST OF SUBJECT HEADINGS
Adapted from the *Indexer's Manual for the Oregon Index*

Accidents
    Firearms
Advertisement
    Transportation
    Banks
Agriculture
    Counties
Alcohol and Drugs
Animals
Anthropology & Archeology
Banks and Finance
Biologists and Naturalists
Books and Publishers
Borderlands
Bridges
Building and Buildings
Business (Commerce)
Catholic Church and Catholicism
Children
Civil Rights
Clergy
Clubs and Organizations
Cold Storage and Refrigeration
Communications
Cookery
Courtship and Marriage
Cowboys
Crimes and Criminals
    Arson
    Assault
    Counterfeiting and Forgery
    Embezzlement
    Extortion
    Fraud
    Incest
    Libel and Slander
    Lynching
    Kidnapping
    Murder
    Prostitution
    Robbery
    Rustling

- Shooting
- Swindling

Natural Disasters
- Flood

Diseases
- Types

Divorce and Desertion
Economic Conditions
Education and Schools
Educators
Elections and Politics
- City
- Congressional Districts
- Congressional Delegate
- County

Electricity
Employment and Labor
Entertainment
Fashion
Feuds
Fires and Fire Prevention
Flowers and Gardening
Forest and Forestry
Holidays and Religious Days
Household Equipment
Hunting and Trapping
Immigration
Insurance
Land and Land Tenure
Railroads
Languages
Law as a profession
Law Enforcement
Law Enforcement Personnel
Libraries
Livestock
- Types

Lumber and Lumbering
Maps
Medical instruction
Medicine
Medicine as a profession
Mental Health
Mexicans in the United States
Military

- Crimes and desertions
- Militia
- Veterans

Military Service as a profession
Mines and Mining
Music
- Musicians

Natural Gas
Negroes
Newspapers
Oil
Parks and Monuments
Periodicals
Pets
- Dogs

Photography
Pollution
Prisons and Prisoners
Prospecting
Protestant and Protestantism
Railroads
- Atlantic and Pacific
- Accidents
- Agents
- Employees
- Schedules
- Tracks
- Fares and Rates
- Equipment
- Freight

Ranches and Farms
Real Estate
Rio Grande
Rio Bravo
Roads and Streets
Sports
- Fishing
- Horse Racing
- Hunting

Suicides
Surveying
Tariff and Customs
Tax and Taxes
Theater
Time Zones
Tourism