Why Public Libraries Close

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#### Summary

This report captures the first systematic look at public library closure on a nationwide basis from 1999 to 2003. It examines why libraries closed during this specific time period, and assesses what the potential impact of such closure was believed to be from the librarians' perspective. This study also presents a methodology using geographic information systems (GIS) to assess possible hidden impacts on some library users and potential library customer markets.

Because so little research has been conducted on public library closures, breadth of study is emphasized over depth of study. As identified by the research team, library staff or designee were contacted regarding every possible public library closure during the time period covered by this study, regardless of library size or location. Detailed chronological information about the library closures was not within the scope of this study but rather librarians were asked to choose from a range of possible reasons for closure and asked to assess the impact of the library's closure.

A major and desired study outcome is to stimulate library and information studies (LIS) researchers' interest not only in closure, but in the broader topic of public library facility location. Answering such questions as, what theories and research can better address location of facilities, are facilities placed equitably and optimally for service and if not, why? How does management decide where to re-open, merge, or build a new facility? How are services re-distributed along with the resources available and within the library's mission? All these questions are directly linked to facility location of which library closure and its impacts on library customer markets is one facet.

As a baseline study on closure, this study raises more questions than answered. Such is the nature of research into areas of previously-limited inquiry. But a nationwide study does offer a broad cross section of reasons why libraries close so we may better understand the phenomena as well as reveal nationwide trends that may merit additional research to prove or disprove their validity.

Some national trends identified during this study and time period include:

1) specific actions to minimize potential impacts of the closure on existing library users are rarely if ever taken. Librarians may benefit from guidelines and recommendations geared to this type of closure

2) during the 1999-2003 time period of this study, the socioeconomic and demographic characteristics of the population within the immediately surrounding 1 mile radius the closed library tended to be poorer, less educated, and with more renters than home-owners when compared to the U.S. population in calendar year 1999 year as a whole. These characteristics are often associated with lower mobility and fewer alternatives for information access. Where these population characteristics prevail, closures could disproportionately impact potential library users who may need the public library more than most, unless actions are taken.

3) migration of America's population to large population centers may be creating problems for rural libraries. These libraries may find it more difficult to replace library staff. The lowered tax base may make it more difficult for these rural library facilities to upgrade and accommodate the latest information technologies. These factors can contribute to closure.

While the national findings are of interest to policymakers, public libraries operate at the local level so the study findings may offer more long term value to practicing librarians, who are anticipating closure of a facility. Better strategies can be developed and shared by libraries facing similar situations with similar customer markets.

Section XI, "Questions to Ask Before Closure" can serve as a guide for library management to gather needed information regarding permanent closures, as well as offer opportunity to share these questions and answers with local funders and stakeholders. Any closure situation can and should incorporate other local relevant data including community-specific demographics, experience of staff, citizen input and pertinent local internal and external factors.

To accurately assess impact, estimated geographic market areas must be established to understand the scope of individual library's customer markets. This can be accomplished by geocoding a library's customer address data (actual customers), overlaying this data on US Census TIGER files and demographic data (all potential customers.) This will also facilitate a view of topographical and cultural barriers library users may experience. The geographic market area can then be fine-tuned by staff knowledge of the community. This process will provide critical data on actual and potential customer markets which may be impacted by closure.

Complementary research then is needed which is longitudinal in nature, tracking what happens to library user markets of a closed public library. For example, do the library users go to a nearby library? How many may not use any public library facility in the future or anymore due to such factors as accessibility problems, or as broadly defined in this study—limited mobility?

Finally, US public libraries are emulated in design and spirit around the globe. The spirit is self-mandated equity of service (there is no national 'law' requiring public libraries or equitable service). Yet service and equity can be diminished when the impact of closure on people in the community is not assessed by library management. And the question of 'who may never use any library again, or have less opportunity?' will likely remain unanswered. To truly fulfill the public library mission—it seems to this research team-we must start down this path—largely uncharted.

#### Public Library Facility Closure: An Investigation of Potential Impacts on Library Customer Markets

#### I. Overview

While there is agreement and some research in the public library profession that the location of a library facility impacts customer<sup>1</sup> markets<sup>2</sup> and their use of libraries, there is little research on how re-siting, opening or closing libraries may also affect use. This study focuses on the impacts of library closure on customer markets and the subsequent geographic market area<sup>3</sup> served. A few early studies indicate how valuable and useful research can be for local library management who accurately anticipates the possible effects of a library closure. One study reports that "the move to the new building brought a dramatic increase in use but a sharp reduction in use by people aged 60 and over (Jones and King, 1979)." Another early study of the Los Angeles public library system reported that while it was believed users would simply go to the next nearest branch, yet there was a loss of 50,000 circulations per year in a highly ethnic community (Hayes and Palmer, 1983). Research is intermittent and all in all few studies are available to guide the profession when closure occurs or is anticipated. More research is needed into the impact of closure on library customer markets. The most valuable studies will be those conducted over time in order to understand real effects, e.g., diminished use by a particular user segment<sup>4</sup>.

Public libraries receive over 90% of funds from local services. As local government monies continue to diminish and officials try to collapse and coalesce public services, library managers will need strong theoretically based research for ensuring the continuation of quality library service during such transitional periods or, if needed, to oppose closure plans. This study hopes to contribute to the 'arsenal available' to help prevent or better guide the closure or relocation of public library facilities.

#### **II. History and Purpose**

This research and subsequent report owe its existence to the City of Salinas, California. Due to the city's financial crisis, the entire library system was to be closed completely in 2005. The potential closure resulted in a resolution by the American Library Association (ALA) opposing such an action (American Library Association, 2005).

Although public outcry and the efforts of a number of officials eventually prevented a complete closure, the senior authors of this study were contacted during the Salinas

<sup>&</sup>lt;sup>1</sup> The term customer will be used interchangeably with the term user in this report.

<sup>&</sup>lt;sup>2</sup> A market is a group of customers with an actual or potential interest in the library's offer.

<sup>&</sup>lt;sup>3</sup> A geographic market area is that area where actual and potential customers for specific goods and services live. Market areas are determined by a variety of factors including customer use behavior, cultural and topographical factors, travel distances to the library and demographic data.

<sup>&</sup>lt;sup>4</sup> A segment is distinct subset of a customer market which behaves in the same way or has similar needs.

Library crisis by the ALA. ALA hoped to obtain critical statistics and information regarding public library closures from the Public Library Geographic Database (PLGDB), an on-line database of all public library outlets<sup>5</sup> in the U.S. maintained by GeoLib of Florida State University, <u>www.geolib.org/PLGDB.cfm.</u>

Unfortunately, such statistics are not readily available or extractable from the PLGDB in its current version or from any other national database. Relevant systematic closure research remains sparse. Questions such as and including: where did these closures occur; why; what were the effects of such closures on the library user population; can (or should) such closures be prevented; and if so how, lack answers for the media, citizens, and other library and information studies (LIS) profession stakeholders.

Recognizing the paucity of answers should another Salinas Library closure scenario arise, the American Library Association contracted with Koontz and Jue on a study to better understand the current state and potential magnitude of the public library closure issue (Koontz and Jue, 2006.) The Online Computer Library Center (OCLC) took interest in the first phase of the closure study and sponsored the second and third phases, which explore why a library closed, as well as attempt to measure and define the potential impact of such closures on library user populations. The time period for the second and third phases of the study occurred from June 2007 – June 2008.

This report is the result of the latter phase of the study. It represents the first systematic look at public library closure on a national basis. It examines why libraries closed and assesses what the potential impact of such closure was believed to be from the librarians' perspective. This study also presents a methodology using geographic information systems (GIS) to better understand the potential impact on library customer markets.

Because so little research has been conducted on public library closures, breadth of study is emphasized over depth of study during these investigations. As identified by the research team, library staff or designee were contacted regarding every possible public library closure during the time period 1999-2003 covered by this study, regardless of library size or location. Detailed chronological information about the library closures was not within the scope of this study but rather librarians were asked to choose from a range of possible reasons for closure and asked to assess the library's closure.

As a baseline study on closure, this study raises more questions than answered. Such is the nature of research into areas with limited prior inquiries. If this report increases additional interest in the broader topic of public library facility location research (e.g., placement of facilities) for optimal service in community, as well as consideration of the potential impacts of closures on segments of actual and potential library users, then this study will serve its purpose.

<sup>&</sup>lt;sup>5</sup> An outlet is a technical term used by the federal compilers of the Federal State Cooperative System, National Center for Education Statistics, U.S Department of Education dataset of public library facilities which are not main or central libraries. Throughout the report the word 'library' will be mostly used instead of outlet. This data set is discussed in Section VIII, Treatment of Data.

#### **III. Introduction**

Since (and by example) the opening of the Boston Public Library in 1854, librarians and library users laud the opening of new libraries and the services provided. Ribbon-cutting ceremonies are publicized. By contrast the polar opposite of the library opening is the library closure. As with the Salinas episode, it may be dramatic and considered negative. Or in some instances the closure may be obfuscated by the opening of a new library which 'replaces' the old one. Yet there are many varying types of closure over the history of the public library. Some are temporary closures, while others are permanent closures. There may also be attempts to provide alternative library services to customers during the closure or there may not be. Some may even view a library closure as indicative of a failing of the library profession or local government. The library is reported closed due to of lack of circulation and library visits.

To date, as there is virtually no systematic national study on public library closures to ascertain number or type of closure and reasons why, it is critical and timely to openly address the phenomenon of public library closure. Disregard and lack of study of the phenomenon and its causes (e.g., change of community or administration, external factors over time), may lead to repeated costly mistakes in library facility management in areas throughout the country.

To better comprehend the potential impacts of library closures, it is important that the reader understand the distinction between a library's legal service area and its geographic market area.

The **legal service area** is the geographic area for which a public library system (or library entity as referred to by the Federal-State Cooperative System) is established to offer services and from which (or on behalf of which) the library derives income, plus any areas served under contract for which the library is the primary service provider (National Center for Education Statistics, 2001).

In contrast, the **geographic market area** of a public library refers to the geographic area from which the actual and potential customers of the library reside. In large library systems with multiple branches, each branch serves a geographic market area that is most likely smaller than the legal service area for the entire library system. It is possible for the geographic market area of a library to include users who reside outside of the legal service area for the library (e.g., using library X just across the river in a different county or state while residing in a city legally served by public library Y whose nearest public library is dozens of miles away).

The distinction between legal service area and geographic market area is critical in fully understanding the importance of library closures. The closure of a single public library outlet within a large library system with many outlets may not impact the library users of that library from an ADMINISTRATIVE standpoint because those users still reside in the same legal service area served by the larger public library system. But the geographic market area for that closed library outlet is dramatically altered (i.e., it no longer exists). The library system administrators may claim that the library users of the closed library are now being served by another library outlet some distance away. But geographic market areas cannot be legally assigned; these can only be defined by the library users. If the library customers of a closed library have limited mobility<sup>6</sup>, there may no longer be any public library services available to them as a result of the closure.

#### Why Study Library Closure

If a library closes, why is that event worthy of research? If a library is remodeled or if a new Internet-ready library facility is built that replaces an outdated library that could only accommodate dial-up access, isn't library service improved? Why worry about past library services?

One answer to these types of questions is, perhaps that it all depends on the type of library closure. If a library is closed due to some unforeseen event and then re-opened in the same exact location after upgrading or remodeling, then the only concern worthy of research might be the amount of inconvenience to library users, or permanent fall-off of use and how to build use 'back to normal.' This model of closure occurs in retail stores due to highway repair, natural disasters and change of co-located anchor stores that may draw people to a location—to name a few.

But if a planned or unplanned library closure results in a permanent lack of service at the location of the original closed library, then the library users and potential users who live within the geographic market area of that original library are affected. Note that this applies to library systems that build upgraded library facilities to replace an outdated library which may just be a few blocks away.

What might be the impact of such closures in these cases? Answer, perhaps none in some instances. If all actual and potential library users that live within the geographic market area of the original library are mobile and have transport to receive library service, a few blocks difference may mean very little.

But if, for example, the original library outlet served library users with very limited mobility or large numbers of elementary school children that could not cross major roads without parental permission, the relocation of an upgraded library facility to just a few blocks away may decrease visits and use by some library customers.

The study of library closures is an attempt to understand the potential impact of library closure on library users that may be 'left behind.' The study provides a framework to identify and, hopefully prevent, a permanent library closure that may save a local government millions of dollars but that may also deny library services to thousands with the fewest alternative resources for information access besides the public library.

<sup>&</sup>lt;sup>6</sup> Mobility is broadly defined as not only limited or lack of physical ability or transport, but also limited motivation to overcome distance or inconvenience can contribute e.g., lack of reading or library habit, or literacy.)

The authors do not claim potential library accessibility problems for all or even some library users is a major problem associated with many or any library closures, especially on a national basis. The only truthful answer is that neither we nor any one else really knows without comparative data— before and after closure. Basic research into this topic is critical for librarians to be aware of issues which may arise when a library closes. Each local situation will have unique effects on library customer markets within the local community.

#### An Initial Classification of Library Closure Types

Perhaps one of the reasons library closure is not discussed more often is the disparate types of library events which are classified as a "closure." A library closure can be planned or unplanned. A planned closure is one that occurs at the discretion of the library entity (system). Perhaps the first type of planned library closure that comes to mind for many is permanent closure of an existing library with no plans to replace that library. The closure could be due to lack of use or interest but lack of funding may also play a critical role.

Another type of planned library closure is closing while the library is being remodeled, either in size or with the latest technologies. Alternatively, it may involve the closure of an existing library while a new replacement facility is being built elsewhere.

An unplanned library closure is one that is unforeseen and almost always out of the control of public librarians. Some are due to natural causes. An extreme example would be the closure of many of the public libraries along the Mississippi and Louisiana coast after Hurricane Katrina in 2005. Another example would perhaps be the unforeseen collapse of a library's roof due to heavy rainfall.

Forced closures due to budgetary shortfalls (such as occurred in Salinas, California) or political reasons also fall more into the unplanned category as circumstances are out of the librarian's direct control. This is more of an intermediate case, however, as librarians may then take action to sway public sentiment in favor of the library.

One of the first needs is a clear and unambiguous classifications of "library closure." Here are two important definitions and a table for reader convenience.

A **temporary library closure** is the closure, planned or unplanned, that results in no net relocation of the library once the temporary closure is over. Examples of temporary library closures could be due to unforeseen natural disasters (e.g., roof collapse due to heavy rains) or planned closures (e.g., library remodeling). Library relocation within a well-defined area may also fall into this category, such as moving the library two blocks away.

A **permanent library closure** is the closure, planned or unplanned, that results in the displacement or elimination of the geographic market area of the library that was closed. Examples include the permanent closure of a library with no replacement of library

services as well as the replacement of an existing library with another library that is not in the same location as the existing one.

	Permanent Closure	Temporary Closure
Planned	Type 1 closure (e.g., outlet	Type 2 closure (e.g., library
	closure with no plans to	remodeling or renovation)
	replace library service or	
	outlet closure with services	
	relocated to new site)	
Unplanned	Type 3 closure (e.g., outlet	Type 4 closure (e.g., minor
	closed due to huge natural	unplanned renovations or
	disaster, political decisions	remodeling due to roof
	without library input)	collapses, water damage,
		etc.)

 Table 1: Classification of Library Closure Types

Note that the type of action that might need to be taken by librarians varies for the different library closure types. For types 2 and 4, there is no net change in the geographic market area for the library outlet in the long run. There may be a need to reassign some services during the temporary closure but there is little possibility of "leaving the library user behind" because long-term there will be no change to the geographic market area being served.

In contrast, type 3 library closures are unique and hopefully very rare events. There is presumably very little that librarians can do to prevent such unforeseen events. Probably the only course of action is to build public support to restore the library services that were eliminated by the unforeseen closure. This may be possible if the closure was due to political reasons but may be less if the entire community has been displaced due to an unforeseen natural disaster such as a hurricane.

Type 1 closures are the most important ones to study perhaps because 1) librarians have the most ability to plan and study the potential impact of these types of closure, 2) these closures have the potential to serve drastically different geographic market areas, and 3) these types of closure provide the ability to receive both potential and actual library user input on their perceived impact of the library closure upon their library usage.

#### **IV. Research Design**

This project includes three major components in the research design: 1) identifying public libraries that potentially closed; 2) collecting the desired data about why those libraries closed; and 3) analyzing data to identify trends, patterns, and potential long-term library issues relative to library closures that should be addressed by public librarians.

As stated earlier, there is no systematically-maintained national database of public libraries which close during a calendar year. Consequently, this study garnered the data

used from the previous study (Koontz and Jue, 2006) using the Federal-State Cooperative System (FSCS) public library outlet files from calendar years 1999 through 2004 to develop an initial list of public library outlets that potentially closed during calendar years 1999 - 2003.<sup>7</sup>

The FSCS was a cooperative effort amongst the American Library Association, the Chief Officers of State Library Agencies (COSLA), and, at the time period covered by this study, the National Center for Education Statistics (NCES) of the US Department of Education. The FSCS maintained and annually updated a database of all public library outlets in the 50 states. A unique FSCS number was assigned to each outlet.<sup>8</sup>

Each annual update is a "snapshot in time." There are no updates between each annual release nor is there a detailed annual report on changes to the library database since the previous release. There is no identification of libraries that closed or moved since the last database. Neither are new libraries that opened since the last update cycle identified.

With these data limitations, the best way to identify potential library closures is to compare the two databases from one year to the next. If a library is listed in one year and then is not listed the following year, it may be inferred that it was closed sometime during the previous year. This year-to-year comparison to identify potential library closures can be done either manually or through computer-automated methods.

A combination of both automated and manual methods of comparison were applied to the FSCS public library outlet files from calendar years 1999 to 2004 to identify potential library outlet closures from 1999 to 2003, a total of four years worth of library closure data. Using the comparison methodology, it is not possible to identify library outlets that may have closed in 2004 until the FSCS file for calendar year 2005 is released. These 2005 data, which were not available while we were conducting our research are now available through IMLS <u>http://harvester.census.gov/imls/data/pls/index.asp</u>

The potential library closures identified through the year-to-year database comparison method were used for the second phase of the study. For each library closure, a combination of Internet searches and telephone calls were made to identify an individual in the local community of the closure who would be knowledgeable about the reasons behind the library closure. Whenever possible, this individual was a public librarian or library director. The research team then administered a survey questionnaire about the specific branch closure with each of these pre-determined individuals or designee. A detailed description of the survey questionnaire portion of the research design is covered in Sections VI and VIII of this report.

The third component of this research was to utilize geographic information system (GIS) software to analyze the patterns associated with library closure. Everyone applauds the

<sup>&</sup>lt;sup>7</sup> There has been a two to three -year lag time in the release of this data.

<sup>&</sup>lt;sup>8</sup> The FSCS is now named the Public Library Statistical Data and managed by the Institute of Museum and Library Services which reports to the US Congress.

opening of better library facilities associated with new library outlets but there is less investigation of potential impacts on library customer markets when a library is closed.

This phase of the research utilized the US Census Bureau's STF-3 files, which are detailed 1999 census statistics broken down to the block group level of detail. Past research indicates that certain STF-3 demographic and socioeconomic statistics are correlated with library usage (Koontz, 1997). These statistics include age, level of educational attainment for persons 25 years and older, number of households living below the poverty levels, and median household income.

These block group-level data were linked to US Census Bureau's digital TIGER files, which are census geographies that can be utilized in a GIS environment. This spatial data layer was overlaid on a buffered map of the 1999 – 2003 closed public library outlets (See Section VIII, Treatment of Data). The demographic statistics associated with the overlaid geographic market areas for the closed public library outlet were then compared with the demographic profiles of the larger US population as a whole to explore whether or not certain population segments may be negatively impacted by public library closures.

#### **Research Questions**

Because rigorous research is not conducted regarding public library closure, there are a number of questions that this research will explore and begin to answer. Some tentative answers were provided in the earlier project by Koontz and Jue (2006). This current study extends the research of that original study and provides more definitive answers to some of the questions. Questions that this study is designed to answer include:

- 1) How many public libraries that were listed in the FSCS database were actually closed between 1999 and 2003?
- 2) What are the primary reasons for the library closures?
- 3) Are there different reasons for closure amongst libraries in urban, suburban or rural settings?
- 4) What are the socioeconomic and demographic characteristics of the population surrounding the closed libraries?
- 5) What were the librarians' perceptions about the impact of those library closures to the library users?
- 6) Do library closures disproportionately affect certain types of libraries?
- 7) Could library closures be disproportionately affecting certain socioeconomic or demographic classes of potential library users (e.g., individuals with limited mobility, low income)?
- 8) What are some possible factors, identified by this study, (e.g., distance, topographical barriers, cultural barriers) which may affect the library users of the closed facility from traveling to another library?
- 9) If a library closure is believed to negative, what do public librarians recommend to prevent such closures from occurring?

#### **V.** The Population

This study investigates two populations. The more obvious one is that of public library facilities which may have closed, but the more indirect one is that of library customer markets.

The initial population set includes libraries that existed long enough to be included in the FSCS annual report of public library outlets in the U.S. but that then initially appeared closed (i.e., its statistics were not reported in the FSCS report in a subsequent year).

Using this comparison of reporting public libraries to attempt to discern public libraries which closed, it became obvious that the non-listing of a public library from one year to another does NOT mean that it closed. This is discussed in more details below in Section XI Findings. But a significant minority of the public libraries that were not listed for a particular year (and hence identified as possibly being closed) insisted that these were not closed at all for the year in question. Many interviewed could not find a plausible reason why they were not listed in the FSCS public library outlet file in that particular year. (There were a few that believed it could be due to non-reporting of the FSCS statistics to the state data coordinator.) When the identified contact person for a public library was certain that the library was not closed, that library was dropped from further study for this project.

When there was actually a closure of some type as confirmed by the contact person for that particular library, the reasons behind the library closure were examined, regardless of whether the closure was permanent or temporary. Demographic analysis was conducted only for the permanently closed libraries.

But a library does not operate in a vacuum. If a library is closed, then the library customer markets served by the closed outlet must also be of interest. The assumption is often made that those library users can find library services at an alternate public library outlet. This may be true for some. But what about those with limited access to transportation (e.g., school children whose parents work long hours and thus have no easy access to transportation) or who live in poverty and cannot afford a car or even mass transportation? These examples are illustrative and reasonable.

While it is impossible to directly measure the impact of a specific library closure on its actual library users from these sets of data, it is possible to evaluate the socioeconomic and demographic characteristics of the potential library user population surrounding the closed public library outlets relative to that of the U.S. as a whole. By doing so, it can be considered whether or not public library closures are "equitable" (i.e., spread out evenly across the entire population spectrum) or whether these recent library closures may be disproportionately impacting a particular set of users (e.g., those in rural libraries as opposed to urban libraries).

#### V. Survey Instrument

The survey instrument is divided into three parts and was administered as a telephone interview. The survey instrument is included as Appendix A.

The first part is the introductory information that was relayed over the phone to the survey participant about the purposes of this study. The name of the participant and their position was collected during this time.

The main part of the survey collected information about the public library closure itself. This portion determined why the library outlet closed and what actions may have been undertaken to replace the library services possibly lost as a result of the branch closure. The survey participant was also asked to rank on an ordinal scale the impact of the library closure on library accessibility and library usage for the users of the closed library outlet.

The third part of the survey questionnaire was an open-ended question on potential library actions taken to prevent library closure assuming such a closure offers negative impact on the library and/or its users.

As this research topic of closure is little explored, respondents were encouraged to share experiences and impressions regardless of whether or not those thoughts were relevant to answering the question at hand. This allowed the researchers to identify other avenues to research and analyses that would not necessarily be brought forth from a rigid and inflexible survey instrument structure.

It should be remembered that not all parts of the survey were administered to every public library called. Specifically, if a survey respondent said that the library in question did not close, the questions in the rest of the survey were not considered applicable and the telephone survey ended.

#### VII. Treatment of Data

The original library data sets from calendar year 1999 through 2004 were downloaded from the Internet at the National Center for Education Statistics' website at <u>http://nces.ed.gov/pubsearch/getpubcats.asp?sid=041#</u>. These have since been moved to <u>http://harvester.census.gov/imls/data/pls/index.asp</u>.

These downloaded data files were individually imported by year into a computer database, with each database then being further broken down by states. The records for each of the individual state tables for each calendar year then were sorted by the FSCSKEY code and then by its FSCS\_SEQ number. This unique combination key for each public library could then be compared across the various years to identify potential library closures from year 1999 through 2003.

Although it is possible to utilize a computer program to compare the libraries from year to year within a state to identify differences, a test of this methodology proved to be unreliable. This is due to library name changes as well as differences in the address and city attribute fields from year to year (e.g., 123 Fifth St. one year, 123 5<sup>th</sup> St, the next, and then perhaps just 123 Fifth the third year).

Consequently, after the initial data manipulation and sorting by computer, the library files for each state from one year to the next were compared manually. If a library outlet that was listed in the prior year was not listed in the current year, that library record was put into a computer spreadsheet of potentially closed library outlets for the current year.

Although this process may sound straightforward, it was not because although the FSCSKEY and FSCS\_SEQ number may be unique across all outlets for a given year, those numbers assignments may change from year to year. For instance, a library with a code of MO0123-001 one year may have a code of MO0999-015 the next year due to administrative changes within the library systems in the state of Missouri.

This initial comparison process resulted in the identification of 438 public library outlets that potentially closed. A paper analyzing the characteristics of these library outlets was published in 2006 (Koontz and Jue 2006).

The next step was to identify a local employee to call for additional information about each of the identified public libraries. If the closure was a library that was part of a larger library system, the director of the larger system was identified as the person to call. If the closure was of a single-branch library system, knowledgeable staff of a nearby system may be identified, or a local city or county official.

It was during this time researchers discovered a large number of the 438 outlets identified as potentially closed were never closed. Further discussions with the identified contact person for each of these "closures" showed that most had no idea on why the library was not listed in the FSCS database for that particular year. A few suggested that it could be due to their non-reporting of the requested FSCS data for that particular year but they remained unsure about this anomaly. There were 192 library outlets that fell into this "unsure why we weren't listed in that year's FSCS report" category out of the original 438 outlets. There was no further processing or analysis done on the libraries in this category.

The survey responses for the remaining libraries that actually closed, whether temporary or permanent closure, were entered into a computer database for further analyses, with the results discussed below in Section X of this report.

For those libraries that actually closed, a latitude and longitude of the library outlet's location was obtained, either through geo-coding the address or through conversations with the library directors. These libraries and accompanying latitude and longitude values were converted into a GIS data layer. A one-mile radius was then created around

each of these libraries, resulting in a two-mile diameter circle with the closed library at the center of the circle.

This library GIS data layer was then overlaid on top of the TIGER block group GIS data layer with its linked STF-3 census data. These data sets were then intersected to create a GIS data layer which could be used to estimate the census statistics for the two-mile diameter circle. These statistics for each closed library outlets could then be examined either individually or in combination with other closed library outlets to try to develop a better picture of the potential impacts of library closure on library users.

Because each library closure happens on a local level for a variety of reasons and this research study did not delve into the detailed events and issues behind each closure, the researchers believe it would be misleading to focus on the specific numbers for specific outlets. Rather, the specific numbers should be aggregated across all the outlets and compared with national numbers and averages to identify the possible trends in public library closure.

#### **VIII.** Assumptions

A key assumption made during the GIS analysis is that *all* the individuals that comprise a census block group are evenly distributed the entire area of the block group. This is necessary in order to estimate how many individuals to count from a block group when a library's one-mile radius market area includes only part of a block group. For instance, if 50% of block group A's geographic area falls within the market area of Library Z, then block group A with a Census count of 50 individuals would have 25 individuals assigned to the market area of Library Z. This assumption is necessary because the SF3 demographic data used by this study is not available for geographic areas smaller than block groups.

One important analysis that the project could not explore, was whether or not the closures made any difference to the likely users of the closed library outlets. As several years elapsed since the library's closure, it would be impossible to conduct surveys of those users within the scope and resources of this research. Instead, an assumption is made that the users most likely to be affected by a library's closure would be those users with limited mobility. Hence, SF3 demographic variables that are correlated with limited mobility (i.e., school-age children, individuals below the poverty level, individual without a high school diploma) were analyzed relative to their proximity to closed libraries. It should be pointed out that the researchers have no evidence that such individuals were actual users of the library outlet prior to the closure and were thus negatively affected by the outlet closure. The researchers assume that individuals with low mobility might potentially use the nearest library and those individuals are not able to easily find alternative libraries. At any local level librarians and staff can identify other or more important data to include in their closure analyses. This study provides a framework for local modeling.

The research team determined a one mile radius employed on a national basis would obtain a reasonable estimate of those who may be impacted by low mobility (Coughlin, 1972; Schlipf, 1973; Palmer, 1981; Hayes and Palmer, 1983; Koontz, 1997, p. 94).<sup>9</sup> Thus, a two-mile diameter circle, with the center being the location of the closed library outlet was overlaid on the U.S. Census block groups in a GIS environment. If this study were conducted by a local community, the radius could be of varying size and more precise to take into account topographical and cultural barriers, and experiential knowledge of staff, to better determine the size of the geographic market area (Koontz, 2002).

#### **IX.** Limitations

As with most nationwide studies in which causal events are usually due to local factors, there are limitations to this study that should be considered when evaluating the relevance of these findings to other studies. This section of this report briefly discusses some of the major ones.

First, this study did not conduct extensive telephone interviews for each library closure. An effort was made to identify and speak with someone most knowledgeable about the history and rationale for each particular closure. Usually that person was in an administrative position within the same or a nearby library system. But it was usually only one individual. Consequently, some of the data and analyses reflect the views and opinions of just that one person. Their views were not corroborated with someone else. A discussion with someone else about that particular library outlet closure may have produced very different ideas about the closure.

Second, because public libraries receive most funding from local government, it is important to remember that each closure was because of local events, be it budget shortfalls, politics, or natural disasters. Thus, the ability to extrapolate this study's findings to national trends or policies may be limited.

Third, it is worth reiterating that the study cannot measure the actual but rather assess the potential impact of public library closures on and to library users. No statistics or library usage figures were collected for any of the closed libraries prior to closure. The demographic analyses are based on potential impacts using the U.S. Census Bureau's SF3 data from calendar year 2000. Collecting library user and use statistics prior to a permanent closure is the most effective method to assess the impact on actual users.

#### X. Findings

The findings include two parts – socioeconomic and demographic characteristics of the permanently closed library's geographic market area within the one mile radius, and the telephone survey results for both the permanent and temporary library closures. The socioeconomic and demographic characteristics of the population provide insight into

<sup>&</sup>lt;sup>9</sup> For a review of literature associated with the effect of distance on library use see pp.32-44 (Koontz1997).

whether or not the permanent library closures affected particular sets of users disproportionately or not. The survey results assess the reasons for closure, whether permanent or temporary. In addition, the participant was asked to rank the impact of the library closure on library accessibility and usage. Participants also offered a variety of suggestions on how to prevent closures which may have a negative impact on users.

#### Population Results

The socioeconomic and demographic analysis was performed using U.S. Census Bureau's SF3 data that intersected one-mile buffers around locations of the 134 permanently closed library outlets. The data included population, poverty, employment, housing, and demographics. Estimated from the data, the total of population impacted by the closures was 948,752, with an average of 7,026 per permanent library closure. Table 2 illustrates some other demographic variables.

Variable	Count	Percentage of	Percentage of the
		Population	U.S. 2000 Population
White	531,759	56%	75.1%
African American	315,966	33.3%	12.3%
American Indian and	4,552	0.4%	0.9%
Alaska Native			
Asian only	30,788	3.2%	3.6%
Native Hawaiian or other	617	0.06%	0.1%
Pacific Islander alone			
Some other race alone	37,913	3.9%	5.5%
2 or more races	26,922	2.8%	2.4%
Hispanic	79,867	8.4%	12.5%

Table 2: Demographics

The percentage of African Americans initially appears to be differentially impacted by library closures in this study's sample. Twenty-one percent more African Americans were impacted by the library closures than their percentage in the total U.S. Census 2000 population. Since the variance of the variable was not calculated for the entire Census, a t-test was not performed to determine the significance of this difference. In addition, eight of the 134 closures were from the following urban areas: Baltimore City (4), housing projects in Chicago (2), and one each from inner city New York City and Detroit. These closures skewed the results accounting for 55% of the African American population in the study.

Variable	Count	Percentage of	Percentage of the
		Population	U.S. 2000 Population
Ages 5 to 9	66,293	6.9%	7.3%
Ages 10 to 14	64,347	6.7%	7.3%
Ages 15 to 17	36,464	3.8%	7.2%
Total Ages 5 to 17	167,104	17.4%	21.8%

Table 3: Age

The children 5 to 17 are impacted less in the study's sample than their percentage in the total U.S. Census 2000 population.

Variable	Count	Percentage of Population	Percentage of U.S. 2000 Population
Households with children under 18	104,143	27.2%	32.8%
non-English speaking households	65,815	17.2%	18.8%

Table 4: Households with children under 18 and non-English speaking households

The number of households surveyed for the two U.S. Census 2000 variables in Table 4 was different, but both variables seem to be slightly less impacted in the sample of library closures as compared to the U.S. Census 2000 averages.

Variable	Count	Percentage of Deputation	Percentage of U.S.
		ropulation	2000 Fopulation
Number of people	152,909	24.2%	12.8%
without a high			
school diploma			
Number of people	86,850	22.8%	19.4%
without earnings			
Number of people	19,593	5.1%	3.4%
with public			
assistance			
Number of people	159,546	16.8%	12.3%
below poverty			

 Table 5: Education and income levels

The percentages of the population of the areas around public library closures in this study are higher for persons without a high school diploma, persons without earnings, persons receiving public assistance, and persons below the poverty level than that of the U.S. population as a whole in Census 2000. These results may reflect the same eight closures that skewed the demographic data, but this finding deserves additional investigations.

Variable	Count	Percentage of Population	Percentage of U.S. 2000 Population
Number of owner occupied housing units	206,769	49%	66.2%
Number of occupied –White	254,996	67%	79.4%
Number of occupied –African American	97,645	25.6%	11.4%

Table 6: Owner occupied housing units and occupants, White and African American

Table 6 illustrates the smaller percentage of owner occupied housing units in this study's sample compared to the entire U.S. Census 2000 population. The owner occupied housing is considerably smaller overall, but the number of white occupied housing is a smaller percentage and African American occupied housing is a greater percentage. Although all these statistics are only descriptive and comparison to the national averages has its flaws, the areas around permanently closed public libraries in this study are in fewer owner occupied neighborhoods, with fewer earnings and education, with fewer children, compared with demographics that reflect the U.S. Census 2000 population.

#### Survey Results

The number of libraries permanently or temporarily closed in the study's sample was 134 and 105 respectively. Of note, several libraries identified as missing from the FSCS data and presumed closed in the study's sample were actually open. Those 192 libraries which claimed to be 'never closed,' perhaps did not report data or there was some other reason for the error. Seven instances of definite FSCS reporting errors occurred in addition to the 192 that claimed the libraries were never closed. These instances occurred when entities that should not have had an FSCS code number stopped reporting their statistics, e.g. private retirement community, library system headquarters that does not serve the public, or other private library. Multiple unknown reasons also led to appearance of potential library closure from the data for libraries that actually never closed.

Of those temporary or permanent closures, 76 were replaced by another library in the same 'neighborhood' or another library in the same system and another 34 were either remodeled or merged with another library. Therefore, only 134 permanent library outlet closures occurred in this study's sample where another library was not built or remodeled to replace it. The reasons for both permanent and temporary closures varied. Table 7 below illustrates the reasons for closure, collected in question three of the survey, and the number of times a library selected the reason. Survey participants often provided multiple reasons for closure, so the count for reasons is larger than the number of participants. In addition, the count is higher because libraries that were still open provided reasons as to why the library might not have been included in the FSCS data one year, due to activities at the library.

Reasons for closure	Count
Remodeled	20
Another library was opened in its place, in the same 'neighborhood	57
Another library was opened within the system funding area but not the proximate neighborhood	19
Merger with another library facility	14

Lack of use	53
Sudden reduce in funding	37
Reduction in hours	0
Reduction in staff	15
Lack of qualified staffing	1
Too expensive to renovate / bring building up to today's building code	15
Political	4
Other	60

Table 7 : Reasons for closure

As Table 7 illustrates several of the permanent closures were either replaced in the same 'neighborhood' or system or merged with another library facility. Lack of use was selected 53 times by far the highest reason for permanent closure without replacement. Often, no Internet and no computers were mentioned as reasons that led to a lack of use. The reduction in staff was often poignantly the passing of a volunteer librarian with no one to replace them. One librarian's sentiment to this happening was "younger people didn't pick up and do." Fifteen occurrences of permanent closure were due to dilapidated buildings or trailers that could not be renovated and had to be replaced. The categories with very small counts may be a result of other reasons taking priority over those reasons, or in the case of political reasons it is plausible librarians may not have seen a direct connection between local politics and the other reasons for closure.

As anticipated by the uniqueness of each library's story, several of the reasons for closure or presumed closure did not fit into the survey question categories. The 'other' category included 60 with some related to FSCS key numbering problems and the remaining resulted from unforeseen reasons why a library might close. For example, eleven times a system's name changed, seven times an individual library's name changed, and in each case, the same buildings were given new FSCS key numbers due to a name change and not any type of closure, move, or remodeling. Some struggling libraries and others that refuse to file FSCS data appear closed although these are still operational.

The unforeseen 'other' reasons for closure included, four libraries that went independent of the original system, three volunteer libraries that stopped reporting data, and three housing projects that closed entirely resulting in the libraries inside closing as well. Hurricanes Katrina and Rita, two tornadoes, and two asbestos problems claimed six permanent closures from the study's sample. The hurricanes and tornadoes, similar to the housing project closures, devastated the entire community, so the library loss coincided with a loss of potential users in the community. Four closed either because the libraries were always a planned temporary location, e.g. while an old library was remodeled or inside a mall. In one extreme Texas instance, a librarian stole all the computers, sold them, and vanished. Thawing permafrost causing an Alaskan island's shoreline to erode and forcing the community to move away was another abnormal reason for closure. The variety of other reasons for library closure is fascinating, but these isolated events may not help most libraries facing closure. Librarian bandits and melting sea ice are not immediate threats to the vast majority of libraries.

The actions taken to mitigate or alleviate the possible loss in library service for a neighborhood varied and were addressed in question four. Table 8 illustrates the totals for both temporary and permanent closures.

Actions taken to mitigate or alleviate the possible loss of library service	Count
No action	99
Increased hour open at a nearby location	12
Opening of a new library	75
Bookmobile service extended	19
Other outreach services extended	17
Increased programs and services at other location(s)	6
Plans initiated for a new library facility in the future	0
Other	11

Table 8: Actions taken to mitigate or alleviate the possible loss of library service for all closures (permanent and temporary)

A more thorough analysis of only the permanent library closures provides a picture of actions taken to alleviate the loss of library services and resources in those communities affected the most with a permanent loss of service. No action occurred in 99 of the 134 permanent library closures, i.e. 66%. Sometimes there was no ability for the libraries to take action, but in other instances, the librarians felt there was no need for action. Bookmobile or other outreach services were extended to areas of a permanent closure in 23 instances, i.e. 17%. Increased programs and services at other library locations occurred in five instances for permanent closures.

For all closures, the opening a new library occurred 75 times, and in these instances the library closure was a positive event because newer libraries attracted more users for the system. Unfortunately, zero participants knew of plans for a new library facility that was not already built. Recall, the sample is from 1999-2004, so in 2007 at the time of the

study most libraries that were going to be replaced were already replaced. The 'other' category produced fewer anomalies in question four, but there were eleven total. In most cases, users were directed to other libraries.

Questions five and six of the survey included Likert scales of both the convenience of those users of a closed facility to get to another library facility and the overall impact on library usage to the community of local users. Question five's average response value was 2.045. The convenience for users to travel was very subjective. Many participants indicated that users would need to "go into town" for everything else, so traveling twenty plus miles for library service was not different. Other participants realized small children and other potential users otherwise hampered with travel would not be able to find new library services. Therefore, the 2.045 average may be misleading.

Question six was more difficult to assess, because the impact on library usage could have been extreme either positively or negatively. Therefore, the 2.56 average response value to question six is again somewhat meaningless. Often times the librarian felt that overall library usage went up with the opening of a new library or remodeling of an old one. "Skyrocketed" is how one librarian put it. In a few instances in rural communities, where no other library services exist the extreme impact was negative.

Finally, question seven asked advice from the librarians for how to prevent negative closures from happening. Some librarians offered wisdom from their personal experiences facing closure. Neighborhood advocacy would help prevent closures. If a neighborhood does not support its library, then who will? Public relations campaigns may notify users that might be unaware of potential library closures to rally support. Still another important point mentioned by librarians was "prior to opening a branch" make sure the library systems can sustain it – opening and closing libraries leads to distrust and confusion from users. Shopping centers might not be the best fit for libraries, if rent changes frequently or it is inconvenient for users to reach. Also it appeared that if the library does control or own the facility, possible closure can not be controlled. Grants that are not recurring should not be used to open libraries.

Another common sense pearl of wisdom is a library must be open hours that are convenient for its users, in one instance banker's hours where no one could get to the library led to its demise. The most critical step libraries can take to prevent closure is to maintain an attractive building with services and resources that people need and can access. Small book rooms without computers and dilapidated and temporary structures will not remain open in most instances. Difficulty parking may deter some users as well. In short, libraries must continually adapt to their environment to remain viable in a community or risk permanent closure.

In summary, it can be seen that public library closures are usually caused by the evolving needs of the local libraries (e.g., remodeling, branch relocations, library mergers) or due to factors that are somewhat outside of the library's direct control (e.g., reduction in funding or staffing). Lack of library use at the closed library is not the primary reason for most public library closures.

Finally, little action is reported relative to accommodating the library users at the closed library. This may be due in part to the fact that librarians' attentions are focused on the imminent changes to be brought about by a new branch, remodeling, or library merger. While this inaction may make sense in some instances, it may not be optimal in the majority of the library closure cases. It seems evident that a lack of research on public library closures, leading to a lack of guidelines or recommendations on how librarians should deal with public library closures lead to less action.

The findings include two parts – socioeconomic and demographic characteristics of the permanently closed library's geographic market area within the one mile radius, and the telephone survey results for both the permanent and temporary library closures. The socioeconomic and demographic characteristics of the population provide insight into whether or not the permanent library closures affected particular sets of users disproportionately or not. The survey results assess the reasons for closure, whether permanent or temporary. In addition, the participant was asked to rank the impact of the library closure on library accessibility and usage. Participants also offered a variety of suggestions on how to prevent closures which may have a negative impact on users.

#### Library outlet closures by Metropolitan Status Code

The US Census Bureau Metropolitan Status Codes (MSC)<sup>10</sup> for libraries are defined by geographic location. The MSC of a library includes three separate codes: central city (CC) within a Metropolitan Area and within city limits; not central city (NC) within a Metropolitan Area, but not within city limits; and not within a Metropolitan Area (NO). The boundaries of a Metropolitan Area vary, however, in most of the country these are population centers over 100,000 and in New England population centers over 50,000. Although the distinctions of urban, suburban, and rural are useful for the reader in the following discussion, the true definitions of the different Metropolitan Areas around libraries' geographic locations have many exceptions to that common distinction. NO areas can be areas without 50,000 people between two large Metropolitan Areas or just outside a Metropolitan Area and in these cases NO libraries however, are in parts of the country at some distance from concentrations of population over 100,000, thus most likely these are in a rural area.

#### Analysis

From 1999-2003, the range of the library closures in this study, the averages for MSC for all libraries were as follows in Table 9.

Metropolitan Status Code (MSC)	Percentage of total libraries
CC (within city limits inside a Metropolitan Area)	23.2%
NC (outside city limits inside a Metropolitan Area)	38.0%
NO (outside of any Metropolitan Area)	38.8%

<sup>&</sup>lt;sup>10</sup> For more information about these US Census Bureau codes please go to http://www.census.gov/population/www/estimates/aboutmetro.html.

Table 9: MSC for total libraries (1999-2003)

In contrast, the permanently closed outlets from this study were as follows in Table 10. Eleven of the 134 permanently closed libraries did not have an MSC.

Metropolitan Status Code (MSC)	Percentage of total libraries
CC (within city limits inside a Metropolitan Area)	22.4%
NC (outside city limits inside a Metropolitan Area)	28.8%
NO (outside of any Metropolitan Area)	48.8%

Table 10. MSC for permanently closed public library outlets

The differences between the national average for all library outlets and those permanently closed from this study were that a greater percentage of NO libraries closed and a smaller percentage of NC libraries closed than representation in the total library outlet population.

To explore these findings further the researchers tabulated the reasons for the library closure for libraries that permanently closed in this study by MSC. Table 11 below shows the results.

Reason for closure	Total	NO	NC	CC
Lack of Use	45	28	11	6
Funding	31	18	4	9
Reduction in Hours	2	2	0	0
Reduction in Staff	14	10	3	1
Lack of Qualified Staff	1	0	1	0
Too expensive to renovate	11	10	1	0
Political	4	3	1	0
Other	15	3	6	6

Table 11: Reasons for permanent closure by MSC.

Most CC closed because of funding. However, lack of use and other miscellaneous reasons were cited as well. A considerable majority of the NC library outlets closed because of lack of use. Lack of use, funding, reduction in staff, and too expensive to renovate were the reasons most frequently cited for NO libraries. More rural areas had difficulty replacing librarians, if they left the area. Locating replacements for retiring librarians is difficult for any region, but in rural areas the labor pool would be predictably smaller. Renovation costs and reduction in funding are issues that rural areas may have more difficulty overcoming when facing closure. Unlike more populated areas that have access to more levels of government for support and greater opportunities for philanthropy, the rural areas make difficult budget decisions with smaller overall funding. This may be why closure due to political reasons was only selected by NO libraries in this study. Smaller communities may have a better understanding of how local politics directly affects the funding of library services.

These initial results require corroboration by more detailed and in-depth research. But the above trends suggest that different library types face different pressures leading to their closure. Libraries that serve areas of denser populations (i.e., the ones with CC or NC metropolitan status codes) may more often deal with shifting population settlement pattern (e.g., a neighborhood goes from predominantly young adults with children to a retirement-age neighborhood) or with traffic patterns (e.g., a main traffic thoroughfare is now difficult to access because of traffic renovations or shopping patterns). These libraries may need to more flexible in the provision of library services in order to stay relevant in the community.

By contrast, rural libraries may rarely face a large influx of new immigrants. The socioeconomic and demographic structure of the local community then is not likely to change dramatically except perhaps for the migration of the young adults to larger population areas. What many are faced with is a declining tax base as America becomes more urbanized. This in turn often leads to declining funds for library services.

Public library closures as well as openings are both signs of the dynamic nature of public library services. Since many closures are due to external conditions outside of a library's direct control, the study of public library closures may help reveal subtle societal forces that more libraries may have to address in the future. The notable differences in reasons among CC, NC, and NO-type libraries that closure during 1999 – 2003 may be forecasting future public library issues for many more libraries. This is a research topic that can perhaps be investigated further and addressed by the ALA, US library and information studies schools, and other library stakeholders.

#### Case Studies

This report will examine a few specific cases in which a library closed and another library was opened to replace it. As stated earlier, such events have potential to leave less mobile library users behind. Some insights and possible considerations for library planners prior to the actual closing of the existing branches and the opening of the new one are offered below.

It should be remembered that these case studies are not exhaustive and time and funding did not allow the researchers to examine all possible instances of library closures and relocations during the 1999 to 2003 calendar years.

#### Case Study 1.

This public library is located about 5 miles from a town of 20,000 residents and is part of a larger library system. The librarian said that the new library opened "across the road." A review of the area showed that, indeed, the new library building is just about five or six buildings from the original. There appeared to be negligible change in geographic market areas as a result of this relocation. Food for thought: *If it is across the road does this affect any populations who may not be able to 'cross the road?* 

Case Study 2.

A library outlet located in a Midwestern state was closed and another built about three miles away as part of an arrangement for the community to join another library system. A review of the socioeconomic and demographic statistics for the census block groups both in the original location as well as the new location showed very little difference as far as racial composition. In fact, the median income for the block groups for both areas was well over \$60,000 in calendar year 1999. Food for thought: *What is unknown but important are there any school age children affected by the move, or other segment that is not determined by US Census analysis who may lack mobility. Experiential knowledge of the librarian is essential.* 

#### Case Study 3.

In a small town in a western state, there were four school community libraries that were also open to the public. The decision was made to open a downtown public library that would be open to the public while the schools would maintain their own internal libraries for students. The new public library was located about midway between all four schools. Because it was a small town, the distance of the public library from each of the schools was just over half a mile. The placement of the public library made sense in that it minimized the distance overall from each of the schools for the public library users, regardless of the direction from which they come. The continued availability of the school libraries for students. If the reverse of this occurred (and it does), adults might not feel comfortable using school library service. Food for thought: *A study prior to any dramatic change should be conducted so as not to assume 'all is well.'* 

#### Case Study 4.

A county and city library outlet decided to merge and built a new and bigger library building in this eastern community. The new and larger branch was located just over one-quarter mile from the original outlet and it was even in the same census block group as before. Food for thought: *This appears satisfactory. Yet in a similar instance, a library was placed a quarter mile across a four lane highway and the children that formerly used the library in the housing project, had no further access to public library service after school as they could not cross the highway.* 

#### Case Study 5.

In this Midwestern state a new library branch was opened to replace an existing branch. The move was over one-mile away by car and involved driving over a major bridge to the other side of the river. An examination of the socioeconomic and demographic characteristics of the block groups showed that there was very little difference between the two locations using a one-mile radius for the geographic market area for each library location. In addition, it was apparent that population growth was primarily occurring on the side of the river to which the library outlet had moved. Food for thought: *Again*,

there was little evidence that a major group of library users would be negatively affected by this relocation of the library outlet. Yet there may be question as to ability or desire to travel across a bridge.

#### Case Study 6.

This library relocation involved the closing of small branch of less than 2000 square feet with a much larger library facility of over 10,000 square feet. The distance from the closed library location to the new location is just under 3 miles. A quick check of the Internet does not show any mass transit serving this rural area. In both locations, the block groups being served have a large African-American population, being over 65% of all the residents. In both locations, approximately 15% of the population is school-age children. For most population characteristics, the differences among the block groups for the old and new library outlets are within a couple of percentage points of each other. But one notable difference is that the new location is located in an area with an estimated 25% poverty level as compared to a higher 35% poverty level in the area where the original outlet was located (i.e., a potential library user population with more limited mobility than those at the new location). The new location is located downtown while the closed outlet was in an outlying smaller town. With lack of mass transit, any lowincome library users of the now-closed library outlet may find it difficult to access library services at the newer and larger library branch. Food for thought: Did some of the users of the closed location quit using the library altogether due to access problems. Hopefully the local library system carefully assessed the needs of the existing library users at the now closed outlet before the relocation was finalized and those users are still coming to the new facility. The school-age children may be especially affected if they were using the public library after their school libraries were closed. But such questions need to be answered BEFORE the library's planned relocation, not after.

#### Case Study Summary.

Sensible library relocations are likely more the norm than ill-advised ones. But these case studies do illustrate some of the issues that should be considered for any planned library closure and relocations. *The fact is without research prior to closure no one can say for sure what the impacts may be.* 

#### XI. Questions to Ask Before Closure

A decade ago twelve questions were posed (Koontz, 1997) based upon the research available at that time. Modifications of the original questions specific based upon this study are listed below. All of these questions are relevant for permanent planned library closures whether a replacement facility is being planned or not. See Table 1 for types of closures.

- 1. What is the geographic market area of the closed library vs. the proposed?
- 2. What are the market characteristics of the population within the market?
- 3. Are the market characteristics expected to change?

4. Are there higher numbers of juveniles, the elderly, or any ethnic groups in close proximity to the library facility?

5. How far is the closest library facility? Is there any topographical or cultural barrier to it?

6. Are there any schools nearby?

7. Is any shopping or other facility planned to be built that may draw more users in?

8. If circulation is low are other types of use such as visits or in-library use recorded that may better measure use?

9. Is the community aware of the services the library provides?

10. Is there outreach or a bookmobile that travels from the library?

11. After a new market analysis is complete, are new services and programs developed and communicated that may better meet the needs of the community?

12. Are the hours of service adequate for the work and leisure lives of community residents?

#### Additional Questions to Ask

1. Is the community aware of the imminent closure? Do you have public advocates?

2. Is the facility adequate and attractive?

3. Is adequate parking available?

4. Are the services provided meeting the needs and wants of the community and how is this assessed?

5. Is there adequate and long-term funding available for any newly planned facility?

6. The impacts of the closure / relocation on library customer markets with the least mobility have been considered as well as ways to overcome any potential problems for those users.

#### **XII. Recommendations**

The results of this study are of historical, current and future interest. Libraries are identified which closed during a certain period of time (historical) and the study offers a framework for a better understanding of why those libraries close (current). But the study gains little ground in terms of understanding how the actual library users of the closed libraries were impacted e.g., whether alternative library services and facilities were obtained, whether library use increased or decreased overall in the library system, or if certain segments suffer diminished access and use (future).

Additionally, to accurately assess impact, estimated geographic market areas must be established to understand the scope of individual library's customer markets. This can be accomplished by mapping and digitizing a library's customer address data (actual customers), overlaying this data on US Census demographic data (all potential customers.) This will also facilitate a view of topographical and cultural barriers they may experience. Finally the geographic market area can then be determined with this data in hand, and staff knowledge of the community. This process will provide critical data on actual and potential customer markets which may be impacted by closure. This study relied upon a one mile radius for reasons discussed in Section VIII Limitations.

Complementary research then is needed which is longitudinal in nature, tracking what happens to library user markets of a closed public library. For example, do the library users go to a nearby library? How many may not use any public library facility in the future or anymore due to such factors as accessibility problems, or as broadly defined in this study—limited mobility?

Additional research and inquiry is also needed as to: a) within what situations is 'no action' a reasonable course of action; and b) for the other situations, what guidelines and recommendations should be provided to librarians on specific actions to take that will minimize any negative impact of the closure on existing library users?

A major and desired study outcome is to stimulate library and information studies (LIS) researchers' interest not only in closure, but in the broader topic of public library facility location. What theories and research can better site facilities? Are facilities placed equitably? If not, why? How does management decide where to re-open, merge, or build a new facility? How are services re-distributed along with resources and within the library's mission? When closure occurs what data is needed to assure few are denied library service? All these questions are linked to closures of libraries and the impact it has on library customer markets.

Another recommended research topic while not directly related to library closure that will facilitate public library facility research that uses the FSCS data files is a re-design of the public library entity (main or central) and outlet (branch) files. At the time of the study these files were being maintained under the guidance of the Federal – State Cooperative System and the U.S. Department of Education. Currently and newly these files are under the management of the Institute of Museum and Library Studies (IMLS) a federal granting and award funding agency reporting to the US Congress. As discussed, the current reporting system is not rigorous enough for a nationwide study unless a researcher is able and willing to call a library system or the state data coordinator to find out about the meaning of missing data records from year to year. The challenge perhaps for IMLS with active support of the LIS profession is to provide resources to states to improve and better gather public library data each year which benefits research that ultimately benefits the customers of the United States' 16,000 public libraries.

Finally, US public libraries are emulated in design and spirit around the globe. The spirit is self-mandated equity of service (there is no national 'law' requiring public libraries or equitable service). Yet service and equity can be diminished when the impact of closure on people in the community is not assessed by library management. And the question of 'who may never use any library again, or have less opportunity?' will likely remain unanswered. To truly fulfill the public library mission—it seems to this research team-we must start down this path—largely uncharted. Library researchers must begin to earnestly study library closure as much as librarians applaud new openings.

#### References

- American Library Association. (2005). *ALA (officially) opposes closure of Salinas Libraries*, accessible on web at <u>http://lisnews.org/node/13175/</u> on May 13, 2008.
- Coughlin, R.E., Taieb, F., & B.H. Stevens. (1972). Urban analysis for branch library system planning. Westport, CT: Greenwood Press.
- Hayes, R., and Palmer, E.S. (1983). The effects upon use of libraries: case studies based on a survey of users of the Los Angeles Public Library Central Library and branches. *Library Research* 5, 67-100.
- Palmer, E.S. (1981). The effect of distance on public library use: a literature survey. *Library Research* 3, 315-334.
- Jones, A. & King, M.B. (1979). The effect of re-siting a library. *Journal of Librarianship* 11, 215-231
- Koontz, C. M., (1997). *Library facility siting and location handbook*. Westport, CT. Greenwood Press.
- Koontz, C. M., (2002). Where do our real customers live? (and why should we care?) *Marketing Library Services*\_16, 4-6.
- Koontz, C. M. & Jue, D.K. (2006). Public library closure: how research can better facilitate proactive management." *Public Library Quarterly*, 25, 43-56.
- National Center for Education Statistics. (2001). *Public library trends analysis: fiscal years 1992 – 1996*. Web page at <u>http://nces.ed.gov/programs/quarterly/Vol\_3/3\_4/q6-</u> <u>2.asp</u>, Accessed on May 7, 2008.
- Schlipf, F.A. (1973). *The geographical distribution of urban public library use and its relationship to the location of branch libraries*. PhD dissertation, University of Chicago.

#### Appendix A

Good morning/afternoon.

I am \_\_\_\_\_\_, from the College of Information, Florida State University. We are working on a research study sponsored by OCLC (Online Computer Library Center) to identify reasons for public library closure. The \_\_\_\_\_\_library in your system was tentatively identified as having either closed in (year)\_\_\_\_\_\_or potentially having a significant break in providing library services The project hopes to gather data that will help other libraries better understand possible reasons for closure and the impacts, positive and negative. Your answers will be kept confidential, and in a secure environment at FSU. The final report will be mailed to you by OCLC. Your agreement to be interviewed constitutes your consent to participate.

If you have any questions about the project please call FSU/IRB at 850 644-8633.

We have three questions—that will take ten minutes of your time. Is this convenient, or would you like for us to call you or someone else back at another time?

# Background information for branch in question to be filled out prior to callSystem NameLibrary NameFSCSAddressPerson Identified as 'Best' to Talk to:Phone and EmailDate

Name of Individual Actually Spoken to and Position Title: Notes regarding this person as necessary

1. Was the library actually permanently closed during \_\_\_\_\_\_to your knowledge? Yes\_\_\_\_\_, if yes go to 3. If no, go to #2.

2. Is it possible that data was simply not turned in that year at the state or local level? Yes\_\_\_\_\_ No\_\_\_\_\_ Other comments\_\_\_\_\_\_

#### 3. Can you identify reasons why the library closed?

- a. \_\_\_\_remodelled
- b.\_\_\_another library was opened in its place, in the same 'neighborhood'
- c.\_\_\_\_another library was opened within the system funding area but not the proximate neighborhood
- d.\_\_\_\_merger with another library facility
- e.\_\_\_lack of use
- f.\_\_\_\_sudden or reduced funding
- g.\_\_\_reduction in hours
- h.\_\_\_reduction in staff
- i. lack of qualified staffing

j. too expensive to renovate / bring building up to today's building code

k. political

l.\_\_\_other

Notes:

# 4. Can you discuss what actions were taken to mitigate or alleviate the possible loss of library service to the neighborhood?

a.\_\_\_no action

- b.\_\_\_\_increased hour open at a nearby location
- c.\_\_\_opening of a new library
- d.\_\_\_\_bookmobile service extended
- e.\_\_\_\_other outreach services extended
- f.\_\_\_increased programs and services at other location(s)
- g.\_\_\_\_plans initiated for a new library facility in the future
- h.\_\_\_other

Notes:

**5**. On a scale of one to five, with one being convenient and five being very inconvenient, how easy do you think it has been for those neighborhood users to get to the alternative library facilities / services you have identified?

1\_\_\_\_2\_\_\_3\_\_\_4\_\_\_5\_\_\_6 (Don't know) \_\_\_\_\_

Why?

6. On a scale of one to five, with one being a minor impact and five being a major impact, what is your perception of the overall impact on library usage to the community of local users who were actively being served by the library at the time of it's closure?

1\_\_\_2\_\_3\_\_4\_\_5\_\_6 (Don't know)\_\_\_\_

7. If you feel the closure had a negative impact, what advice would you offer other librarians in order to prevent closures? For example, would additional collection of library usage data or neighborhood advocacy have helped?

Notes for War Stories: