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Preservation Resource Guide for Public Works Managers

By Larry N. Sypolt

COVER PHOTO: Restored Louisville Water Tower. Designated a National Historic Landmark in 1971, the 169-foot tower enclosed a water standpipe. The tower represents a Roman column in the Doric order. The base is surrounded by Corinthian columns, nine punctuated by Greek classical figures and one by an American Indian. Photo by Emory L. Kemp.

Preservation Resource Guide for Public Works Managers

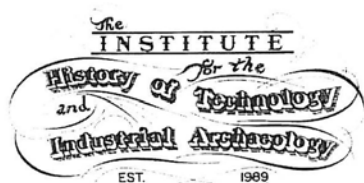
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FOREWORD

Historic preservation as a discipline had its beginnings with Williamsburg in the 1920s. So successful was this venture that, in the minds of many, Williamsburg is historic preservation. So pervasive is this idea that one often hears, "when in doubt use colonial details from Williamsburg." Until recently, preservationists have lavished their efforts on restoring high-style houses and buildings often associated with prominent people.

Currently, however, historians and, in turn, preservation professionals have realized the dominant role public works have played in developing our modern urban society. Cities and towns would cease to function without public works. The preservation and interpretation of our rich public works past often falls on public works agencies from the federal level to humble town authorities. Historic public works include dams, reservoirs, aqueducts, water treatment plants, various utilities such as gas works, electric generating stations and distribution systems and telecommunications. The list also includes such transportation items as streets, highways, railways, canals, navigable waterways, and all of their associated structures. These are the sinews which have proved to be fundamental in developing commerce and industry in the context of urban society and transportation systems.

The preservation of these historic public works is the responsibility of professionals working at all levels of government. Thus, there has developed an urgent need to provide a comprehensive guide to resources and organizations involved in all aspects of preservation of historic public works. As a result of the comprehensive nature of this guide, it may well serve a much larger audience than public works professionals alone.

*Emory L. Kemp
Past President
Public Works Historical Society*

December 16, 1996

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USING THIS GUIDE

This resource guide is intended for use by public works managers who find themselves encountering the world of historic preservation. Most people responsible for the management of public works structures and facilities are unfamiliar with the preservation terms, concepts and regulations that may apply to historic resources in their care. They may become aware of the historical significance and the requirements attached to a particular property only as a result of the activities of a community organization or the local media.

When a public works manager needs to address complex historic preservation issues, this resource guide is an appropriate place to begin. Containing information for accessing valuable resources including a variety of sources and in a variety of formats, this publication is a concise, historic preservation first stop for public works managers.

An understanding of the types of historic preservation information contained in this guide will help readers make more effective use of it. Probably for the first time anywhere, this guide includes an extensive list of key electronic information resources on preservation that can be accessed through the Internet.

This guide contains considerable information on where to search for local and federal records, as well as brief examples of successful historic preservation projects. Also contained in this guide are —

HISTORIC PRESERVATION TERMS

Terms commonly used in historic preservation activities to help readers better understand and communicate with the historic preservation community.

CHECKLISTS FOR DESCRIBING HISTORIC ENGINEERING STRUCTURES

A concise list of the key criteria commonly used to identify and evaluate the historic significance of public works structures and facilities such as roads, streets and highways; bridges; airports; waterways; water supply systems and wastewater treatment systems.

FEDERAL PRESERVATION LAWS AND STATUTES

A list of relevant federal laws and statutes regulating historic preservation activities.

Each law or statute is briefly described and identified by date.

NATIONAL REGISTER BULLETINS PRESERVATION BRIEFS PRESERVATION TECH NOTES

Practical publications developed by the National Park Service and disseminated through State Historic Preservation Offices nationwide. These publications include detailed instruction on such activities as preparing nominations to the National Register of Historic Places, roofing historic buildings and removing graffiti from historic masonry.

MAJOR ORGANIZATIONS

A directory of the most important organizations in the historic preservation field, including addresses, phone numbers, e-mail addresses and Website information where applicable.

STATE HISTORIC PRESERVATION OFFICES

A convenient list of the addresses and phone numbers for each of the state historic preservation offices.

FORMS FOR NOMINATING STRUCTURES TO THE NATIONAL REGISTER OF HISTORIC PLACES

A sample form indicating the exact type of information required to submit an application for nominating historic resources to the National Register of Historic Places.

BIBLIOGRAPHY

Books of particular interest to public works managers needing more information about historic preservation.

While this resource guide cannot meet all the historic preservation needs of public works managers, we do believe it provides an excellent place to begin.

INTRODUCTION

Public works are developed by and for the benefit of the people. Public works provide the physical infrastructure essential to the social and economic development of America. They make human settlements possible and are indispensable to commerce and industry. Public works are broadly defined as —

The physical structures and facilities developed or acquired by public agencies to house government functions and provide water, waste disposal, power, transportation and similar services to facilitate the achievement of common social and economic objectives.¹

Government institutions, land, capital, labor and public support are prerequisites for the development of virtually all public works facilities. Since the nation was founded 200 years ago, states, cities, counties, townships and special districts, as well as various agencies of the federal government, have contracted for the construction of thousands of public works projects. Although publically financed, public works are usually constructed by contractors who employ large numbers of individuals from the private sector.

PRESERVING THE LEGACY

Today, many public works managers are faced with preservation-related questions while performing the daily activities of their office. Although these managers know that preservation policies or regulations exist, they may be unfamiliar with specific details of the policies or regulations or how to find more information about them.

One of the challenges facing public works managers involves the preservation of historic buildings. If the public works project includes federal funds, National Register or National Register-eligible properties, state- or locally-designated properties or properties included in historic districts, the public works manager may be required to include other federal, state or local agencies in the decision-making process. This guide will help the public works manager find information and answers to the questions that arise when dealing with historic properties and the regulations and levels of government involved.

THE PLAYERS

Many organizations provide information on public works, and many of these players are well known to public works managers.

Certainly various federal agencies provide active participation and partnership relating to public works projects. Some of the more prominent ones include the Department of Transportation (with its sub-organizations, the Federal Highway Administration, Traffic Safety Administration, Federal Aviation Administration and Federal Railway Administration); the Environmental Protection Agency; the Department of Energy; Federal Emergency Management Agency; the Department of Defense (including all service branches, especially the Army Corps of Engineers); the Department of the Interior (including the National Park Service); the Department of Agriculture (including the US Forest Service); the Federal Housing Administration; the Federal Power Commission and the General Services Administration.

There are state public works agencies in each of the 50 states, and public works departments in each of the estimated 78,000 units of local government, including counties, townships, special and school districts and municipalities. Universities also provide public works expertise and undertake research in areas of technology, most often through their engineering schools. Finally, there are a number of professional and educational associations such as the American Public Works Association.

Less well known to many public works managers are the agencies and organizations that regulate and support the preservation of historic resources — including public works. This resource guide will familiarize public works managers with the major players in historic preservation.

FREQUENTLY ASKED QUESTIONS

This guide provides many answers to preservation questions most frequently asked by public works managers, including—

- How do I determine if a resource is historically significant?
- Which agencies should I contact?
- With which regulations must I comply?
- Which state and federal guidelines are designed to assist me?
- What codes must I follow?

- What are the advantages to listing a property on the National Register of Historic Places?
- What restrictions apply to National Register properties?
- Whom do I contact first and what type of information should I request?

These questions enter the minds of city managers, engineers and planners, as well as those in historic preservation organizations. State and federal officials also deal with these same matters, although they may or may not come under the same regulations as the person at the local level. However, all must follow certain rules and regulations that encourage the orderly management of our nation's historic resources.

This guide will assist public works managers at all levels of government to obtain necessary information to make their jobs easier.

CHAPTER 1

WHERE TO BEGIN

GUIDING LEGISLATION

Public works managers should understand that the National Historic Preservation Act of 1966, as amended through 1992, is the federal legislation that guides the national system in preserving prehistoric and historic cultural resources. Through this legislation, "...the Secretary of the Interior is authorized to expand and maintain a National Register of Historic Places composed of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering and culture." The Act also establishes formal guidelines for state historic preservation programs including designation of a State Historic Preservation Officer to administer each state preservation program and designation of a state review board. The act also establishes as a priority a comprehensive statewide survey of all cultural resources. Additionally, the SHPO is directed to administer federal assistance for historic preservation activities within each state.²

ABOUT THIS GUIDE

This guide explores some of the ways to identify historic properties, and evaluate those that might be historic but have not been officially designated. The guide provides a methodology for researching properties to determine if they are National Register-eligible as well as applicable preservation laws and regulations. The guide also provides information on the documentation and treatment of historic properties.

Step 1. Listing Verification

Check to see if the public works property is listed. Many cities have a local agency or organization dedicated to documenting and preserving community cultural resources. Contact the local planning department, local historic preservation commission, local historical society or the State Historic Preservation Office to determine if the property in question is listed on either a local and/or a state cultural resource inventory.

Step 2. Researching Historic Properties

Chapters 2, 3 and 4 describe the ways and means to research historic properties.

Step 3. Managing Historic Properties

Beginning with Chapter 5, this guide details the documentation and treatment of historic properties, including public works.

CHAPTER 2

LOCAL AND STATE RECORDS

LOCAL RECORDS

There are several approaches one can take in determining if a resource is historically significant. As mentioned in Chapter 1, many communities have a preservation-allied organization, often with access to local records. Many towns have local heritage commissions appointed by city government to identify historic properties and provide input to the local government on preservation and reuse issues. These groups are usually familiar with historic buildings, properties, districts and public works in their area. In many cases, historical societies have valuable information on the history of the area and may also maintain photographic files and records dealing with local history.

Planning Records

Land use and planning records can also provide detailed historical information on a variety of projects. Public service commission or committee records will produce materials dealing with issues on transportation, sanitation, utilities and streets, as well as parks and recreation. Many times, transportation issues are dealt with separately under a transportation commission or committee. Urban renewal reports can provide information on urban renewal projects that may have affected prehistoric or historic resources.

Tax Records

Depending upon year and locality, tax roles usually can provide information by property owner name — later records may be cross-indexed by address. If tax roles provide owner name only, the property in question may first be listed without improvements, as land acquisition often pre-dates building construction. Improvements to the property may not always refer to the structure being researched. It is helpful to have a general knowledge of construction costs for the time period in question to determine if improvements to the property are consistent with construction costs for age and type of structure being researched.

Permits and Deeds

City court records contain valuable research materials, and records in these public repositories should already be indexed. Start by looking up the name of a notable person associated with the property

and see what records exist pertaining to them. Many times land transactions and building permits will be found. Also, road orders which contain bids for bridges, culverts and rights-of-way will be noted. Records of contracts let by city councils and county courts will contain records of all bids submitted and contracts awarded. Plans are usually required with bids, and if retained, are valuable finds. At the very least, the contractor, plans and specifications should be sought. Beginning and ending dates are normally specified in letting contracts, and may be cited in plans and specifications as well.

The local county court house is another logical place to search for records dealing with public works projects. The county seat would be the responsible party for issuing road orders, bridge building projects and other transportation related works. In many cases, the county court would be the affected government body dealing with water treatment and other public works projects. Reports retained by the county clerk and county commission should contain much of the historic information about contractors, builders and local regulations dealing with all public works structures. The court house should also contain information such as deeds, maps of many different eras, architectural drawings, annual reports, cemetery records, building inspector files, and numerous other files. The county clerk's office may be the best place to begin the investigation.

Various commission and board minutes can also be starting points. Drawings are usually required with bids, and may be found in city records. If these are not stored at a city records facility, contact the project architect's office or the project contractor's office for drawings and specifications. In addition, project dates are usually included on project drawings and contracts.

Directories

Old city directories pre-date telephone directories and can be very helpful. They sometimes reveal when a business or individual first appeared, or when a business closed. These can usually be found at the local library, but city and county assessors offices often keep them for tax use. Gazetteers provide basically the same information and are also useful tools.

Local Libraries

Many libraries have local history collections or local history rooms that contain historical documents and photographs. These rooms are often staffed by a

person knowledgeable in local history. The library reference department might also have publications dealing with preservation issues and laws.

The public library will be able to interlibrary loan (ILL) materials that public works officials need but that are not held in the local library. Many times, the library provides this service on a cost recovery basis (postage, etc.), and sometimes it is free. Check with your local library about library loan policies.

The public library can also provide research services online. Library staff may conduct on-line searching or provide computers on a sign-up basis for individuals to undertake their own research. Chapter 4 addresses electronic resources that might assist in on-line research.

If your local community has a university or college with a library, that institution will hold materials that are normally not found in the local public library. Institutional libraries might also be partial or full repositories of government documents and publications. Selected libraries are full government document depositories, which means that they are sent all items produced by the federal government. Many other institutional libraries are partial depository libraries, which means they accept only selected materials produced by the government. These libraries should be checked for the type of materials held in their collections. They can be very helpful in providing preservation legislation information.

Local newspapers are a valuable resource when conducting local history research. Prominent community members are often mentioned in local newspapers. Special editions and industrial editions to the local newspaper may also provide information on the property or individual(s) being researched.

Local Newspapers

Preservation of local newspapers has become a national priority in recent years. The United States Newspaper Project is a program sponsored by the National Historic Publications and Records Commission. NHPRC provides grants to states to survey and inventory all known newspapers in a state and microfilm as many issues as can be located. The microfilm is then housed at one or more repositories in that state for research purposes. Hopefully, all known surviving newspapers in each state will be documented and filmed for permanence. Information about state repositories can be obtained by contacting the National Historic Publications and Records

Commission, National Archives Building, 8th & Pennsylvania Avenue, NW, Washington, DC 20408; or telephone 202-501-5600.

One problem when dealing with many records is the format in which they have been preserved. Newspapers are retained on microfilm, as are many city, county and other records. Microfilm is only as good as the person who produces it and the best copy of the records at the time of microfilming. Besides the problem of quality, the time spent reading microfilm or microfiche can sometimes be substantial.

STATE RECORDS

Records such as National Register nominations and cultural resource surveys are available from the State Historic Preservation Office.

The National Historic Preservation Act of 1966, as amended through 1992, legislated the formation of preservation programs in all US states and territories including an officer in each state to administer the program. In some states the State Historic Preservation Office is located within a state historical society or association. The State Historic Preservation Office functions as the primary contact for the federal preservation program and local preservation programs by disseminating federal funds for historic preservation projects and administering the Certified Local Government program for comprehensive survey and inventory of statewide historic resources as well as nominations to the National Register of Historic Places. For more information, see Appendix J, State Historic Preservation Offices.

Certified Local Governments

In 1980, amendments to the National Historic Preservation Act established the Certified Local Government program that required each state preservation program to develop a mechanism for the certification of local governments in the state. The program's purpose is to expand the existing federal-state preservation partnership to include local governments and citizens. The program was intended to give local governments a formal role in the national historic preservation program and the National Register of Historic Places nomination process.

The program has several additional goals, among which are to foster local preservation activities by providing financial and technical assistance to participating local governments and to develop a

broader base of support for the State Historic Preservation Office. The National Historic Preservation Act, as amended, requires state preservation programs to pass on ten percent of the state's annual appropriation from the Historic Preservation Fund to its Certified Local Governments.

Under federal regulations, states develop their own certification procedures and submit them to the National Park Service for approval. State preservation programs began certifying local governments in 1985; by June 1991, some local governments had been certified in all 50 states. Federal regulations require certified local governments to —

- enforce appropriate state or local legislation for the designation and protection of historic properties;
- establish an adequate and qualified historic preservation review commission by state or local legislation;
- maintain a system for the survey and inventory of historic properties;
- provide for adequate public participation in the local historic preservation program; and
- satisfactorily perform the responsibilities delegated to them under the National Historic Preservation Act.

Interested local governments wanting to become certified apply to the SHPO. The SHPO then reviews the application and, if acceptable, forwards it to the National Park Service for final approval.

CLGs play a special role in reviewing and commenting on National Register nominations. Before a property within CLG jurisdiction may be nominated by the SHPO for inclusion on the National Register, the SHPO must notify the local historic preservation commission, the chief elected local official, and the owner of the property. After providing opportunity for public comment, the historic preservation commission is expected to prepare a report as to whether or not, in its opinion, the property meets the criteria of the National Register. The chief elected local official is also expected to provide a recommendation on the eligibility of the property. Subject to appeal, if both decide the property is ineligible, the SHPO can take no further action on the nomination.³

Additional information on Certified Local Governments can be found in —

- *Local Preservation-A Compendium of Technical Assistance Material on Local Preservation* (Washington, DC: US Department of the Interior, 1987).
- *Preservation Planning Manual: Local Historical Commissions. Their Role in Local Government* (Massachusetts Historical Commission, 1987).
- *National Register Bulletins*. See Appendix D for more information.
- *Preservation Briefs*. See Appendix E for more information.

NATIONAL MAIN STREET CENTER

Main Street managers may assist in researching, documenting or designating historic properties, including public works.

The National Main Street Center, operated through the National Trust since 1977, provides direct, on-site technical assistance to towns, cities and urban neighborhoods; publishes a wide range of training materials; offers membership in the National Main Street Network; sponsors an annual convention; offers a professional certification program; and organizes the Great American Main Street Awards annual competition.

The National Main Street Center helps communities of all sizes revitalize their traditional and historic downtowns and neighborhood commercial districts — their main streets — and serves as the nation's clearinghouse for information, technical assistance, research and advocacy on preservation-based commercial district revitalization.

Contact the National Main Street Center for information on Main Street programs in your state and community. For more information about the National Main Street Program or other National Trust for Historic Preservation programs, see Appendix H, National Trust for Historic Preservation.

CHAPTER 3

FEDERAL RECORDS

The public works manager probably has one of the hardest jobs at any level of public service. Sections 106 and 110 of the National Historic Preservation Act of 1966, as amended through 1992, (which are discussed in Chapter 5) place great responsibilities on federal officials when dealing with prehistoric and historic properties. Their task becomes even larger because of vast resources and records.

CORPS OF ENGINEERS

Record Group 77

The Corps of Engineers, Record Group 77 at the National Archives, is one example of how records are scattered. The Corps of Engineers is one of the largest public works organizations in the world. It manages river transportation, dams, locks, and major construction projects for the Army at military installations worldwide. The Corps is divided into several administrative levels. The smallest level is the district office which usually encompasses several counties in a manageable geographic area. The next level is the division office, which is comprised of several districts. The division offices report to the office of the Chief of Engineers in Washington. Each level keeps records of its activities.

In addition to the records at each level, records are distributed to the National Archives and Records Administration and their regional offices. The old and new records of the Army are divided between two locations. Records newer than 50 years are housed at the new Archives II facility at College Park, MD. Records over 50 years old are housed at the National Archives building in Washington, DC. Archives II also houses most of the maps, prints and photographs in the collection.

Each regional office of the National Archives also keeps Corps records. These records are transferred to the regional repositories on a regular basis. For a simple history research project, the researcher maybe dealing with six research sites. Some of the materials are duplicated at some sites, but the researcher cannot assume all materials have been reviewed until all sites have been consulted.

To make the national search for materials easier, the National Archives has an on-line index. The NARA database is accessible through <gopher.nara.gov> or <<http://www.nara.gov>>. The Record Groups provides

a brief outline of records housed at each location. Also, each regional office has an inventory of their holdings online. This allows the researcher to see if any records are held at the site before arranging a visit. *Remember that some documents might not be found in the most obvious place.*

Some projects might have been constructed by the Corps of Engineers, but sponsored by another agency, such as the Works Projects Administration. Records of the WPA should be searched for information, as well as any other agency that may have participated in the project.

NATIONAL ARCHIVES RECORDS

One problem that occurs in searching National Archives records is that of parent agencies changing names and responsibilities for departments.

An example of this change is the Bureau of Public Roads (Record Group 30). In 1939, this agency was transferred from the Department of Agriculture to the Federal Works Administration and renamed the Public Roads Administration. Transferred to the Department of Commerce in 1949, it was again renamed the Bureau of Public Roads until the establishment of the Department of Transportation in 1966, when the name was again changed to the Federal Highway Administration (RG 406). Changes such as these tend to confuse researchers who are unaware of the chain of administrative changes.

Another example of this name change is the Public Buildings Service. This agency was formed in 1853 as part of the Department of the Treasury Construction Branch as the Bureau of Construction. In 1933, it was transferred to the Public Building Branch of the Procurement Division. In 1939, the Public Buildings Administration was created by the Federal Works Agency by combining the Public Buildings Branch and the National Park Service's Branch of Building Management. In 1949, it was abolished with the establishment of the General Services Administration, which now manages properties owned and occupied by the federal government.

Contacting the civil works archivist at each of the National Archives centers puts the researcher in touch with the archivist most familiar with the holdings of that center. This archivist is usually a specialist who has a working knowledge in the area of engineering or public works construction and can recommend where to find needed information. A listing of the National Archives and Records

Administration Regional Services Facilities is found in Appendix I.

FEDERAL DOCUMENT INDEXES

There are many aids to finding documents produced by the federal government. Several indexes have been produced over the years to help the researcher. The federal government is the largest publisher of information in the nation, so many access points may be needed to find materials produced over the last 200 years.

Poore's

To begin, *Benjamin Poore's Descriptive Catalogue of the Government Publications of the United States, September 5, 1774-March 4, 1881* is a bibliography in chronological order of all federal documents for that period. There is no index of serial volume numbers or the Congress and Session relating to the documents, only a date record and brief description. This catalog was issued as Senate Miscellaneous Document 67, 48th Congress, Second Session.

Ames'

Poore's catalogue was followed by Dr. John Ames' *Comprehensive Index to the Publications of the United States Government, 1881-1893*. This index was issued in two volumes and arranged alphabetically by subject, key word in title and personal name. Serial set numbers are given. This index was issued as House Document 754, 58th Congress, Second Session.

Checklist of US Government Documents

Following Ames' index was the *Checklist of United States Public Documents, 1789-1909*. This checklist reproduced the shelflist of the Public Documents Library and is arranged by classification number in three sections: Congressional edition by serial set number, departmental edition by Superintendent of Documents classification number and miscellaneous publications of Congress.

Catalog of the Public Documents of Congress

Beginning with the 53rd Congress, the Printing Act of 1895 provided that the Superintendent of Documents would publish a comprehensive index of public documents from each session. The index continued in print from 1893 through 1940. Its official title was *Catalog of the Public Documents of*

the Congress and of All Departments of the Government of the United States. This was the most comprehensive official bibliographic source for the period. Also included were serial set volume numbers where reference material could be located. Entries include author, government author, subject and frequently title as well as proclamations, executive orders and periodicals.

The Monthly Catalog of United States Government Publications appeared in 1895. It is a list of every publication printed during a month, where it is obtainable and its cost. Prior to July 1976, the Monthly Catalog was arranged alphabetically, either by issuing agency or department — with the exceptions of the publications of Congress, which were divided by form and issuing entity. After July 1976, the Monthly Catalog began using Library of Congress subject headings.

US Congressional Serial Set

The *US Congressional Serial Set* contains documents and reports issued by the Senate and House of Representatives. Many of the reports contain the entire text, measured drawings and photographs submitted to Congress. The Serial Set was established in 1817 to provide a uniform system for Congressional publishing. A serial number, or accession number, is assigned to the spine of each volume and becomes the locating device. Number one was assigned in 1817 and the numbering continues today.

The *Serial Set* contains volumes that are unique to each Congress, such as the Annual Report of the Chief of Engineers and Annual Report of the Secretary of the Interior. Separate volumes contain reports on river and harbor acts and documentation on floods and other related disasters. An example of the Serial Set would be number 10330, which contains information on all river and harbor legislation, listed alphabetically by river. The dates, congresses, sessions and document numbers appear for each survey and subsequent legislation related to it through 1935. A second volume, number D103.22:R52/972, updates this information to 1970.

Congressional Series

The Tables of and Annotated Index to the Congressional Series of United States Public Documents lists all publications from 1817 through 1893. The first section replicated the *Checklist of United States Public Documents, 1881-1893* and gives the serial set number. The second section is a

useful reference by subject and name, with accompanying serial set numbers.

Index to the Reports and Documents

Following the *Tables* was the *Index to the Reports and Documents of the Congress, With Numerical Lists and Schedules of Volumes, 1895-1933*. This is an alphabetical subject listing of congressional documents and reports contained in the serial set.

Numerical Lists

The *Index* was superseded by the *Numerical Lists and Schedule of Volumes (1933-1980)* which is a listing of congressional reports and documents in sequence shown by volume in the serial set. There is no subject access.

Serial Set Index

Finally, there is the *CIS U.S. Serial Set Index, 1789-1969*. This definitive work encompasses some 330,000 publications issued over the period and is accessed by subject and keyword, numerical lists of report numbers and a schedule of serial volumes.

Federal documents provide information on all transactions of the government. In searching federal documents, it should be kept in mind that the senator or congressional representative who introduced the bill will have related information in his or her personal records and archives. These must be explored and researched as well. These papers might be in private, public or university libraries in the representative's home district. Presidential libraries also contain information relevant to legislation and projects undertaken during a president's administration. A search of possible congressional material in a presidential library must be made in the event that the president served in Congress.

LIBRARY OF CONGRESS

The Library of Congress contains millions of books and related print, audio, photographic and other materials. The Library of Congress catalog is available online at <<http://www.lcweb.loc.gov>>. From the menu screen, follow the directions to free public access of the on-line catalog. Title, subject, author, and call number searches are available. *Government Reports Announcements and Index*, SuDoc number C51.9/3:, or Call Number T1.G6, is an index of reports issued by the federal government. Reports from all departments and agencies are indexed in these monthly volumes. Reference

numbers refer the researcher to the proper citation of the report and ordering information. An annotation is also provided for each entry. *The Congressional Record*, formerly the *Congressional Globe*, is a daily log of all that is said in Congress. Everything that comes before the two houses is included in the *Congressional Record*. Each session of Congress lasts two years, and the last volume of the *Congressional Record* for each Congress contains a History of Bills section. An index precedes this section pointing the researcher to the proper Senate or House bill. The history of the bills provides information on the introduction of legislation, joint sponsorship, committee meetings and reports and all relevant information through bill passage.

MANUSCRIPTS

Another good reference for archival material is the *National Union Catalog of Manuscript Collections*. This publication lists archival holdings in public and private repositories that are not cataloged in the National Archives. Listings are by subject, principal person, project and title, with a brief annotation of holdings and location. These government sources are recommended for the comprehensive information they contain on legislation dealing with public works projects. House, Senate and Executive documents provide a starting place for research. With this information, the researcher can access complete text documents dealing with public works.

REGIONAL DEPOSITORY LIBRARIES

Many of the records listed above can be found in US Government Regional Depository designated libraries. Each state has at least one regional depository library, and several selective depository libraries. Regional Depository Libraries are required to take and maintain every item shipped to them that is published by the Government Printing Office. Selective Depository Libraries are required to take only what they select to keep in their holdings, so they may not have a complete collection of federal documents. Regional Depository Libraries are generally located at major universities throughout the country. Contact the local public library or college/university library for information on the closest Regional Depository Library.

Federal government information can be located online through the University of Michigan federal government Website, <<http://www.lib.umich.edu/libhome/Documents.center/govweb.html>>.

CHAPTER 4

ELECTRONIC RESOURCES

The World Wide Web can provide valuable information on archival holdings around the country. The Web offers search tools to find information on any subject imaginable. To obtain access to the Web, a user must connect to the Internet through a service provider such as America Online, the Microsoft Network or other Internet service providers. There is usually a monthly charge for a specified number of hours of usage, with additional hours costing extra. Check what is available in your local area as different providers offer many different types of services.

Once you are logged onto the Web, the possibilities are endless. Frequently used search engines include Alta Vista, Lycos, Starting Point, Web Crawler, World Wide Worm and Yahoo. See Appendix N, Searching the Internet: Directories and Indexes, for more information.

After selecting a search engine, type key words in the search field, then click on the search button. A list of Websites will be displayed. These addresses are "hot" linked, which means you can click on the Website address and automatically be linked to that Website.

THE FEDERAL GOVERNMENT ONLINE

The Internet has rapidly become a useful tool in obtaining information from public as well as private sources. There are many ways to access information from all departments of the government. One resource for researchers is the Library of Congress Website which links to government agency databases and library catalogs at <<http://www.lcweb.loc.gov>>.

<Wiretap.spies.com> produces menus for information on historical documents of the US from the time of independence to the present. It also provides access to the *Citizens Guide to Using the Freedom of Information Act*, *Fair Credit Reporting Act*, presidential documents from the *Federal Register*, historic speeches and addresses, treaties and international agreements, United Nations resolutions and the *World Factbook*.

The National Archives and Records Administration also has a listing of archival resources on the Web. The NARA home page can be accessed at <<http://www.nara.gov>> or <[Gopher://gopher.nara.gov](mailto:gopher://gopher.nara.gov)>, then choose <Other Gopher Services/Archival Resources>, then choose from Maryland State Archives, New York State

Archives and Records Administration, Rhode Island State Archives, National Association of Government Archives and Records, List of Manuscript and Archives Repositories (Johns Hopkins University), Guide to Archives on the Internet (University of Michigan), and Conservation Online (Resources for Conservation Professionals).

Other NARA online quick access locations:

CLIO

<<http://www.nara.gov>>
<gopher://gopher.nara.gov>

NARA Audiovisual Information Locator Database

<<http://www.nara.gov/nara/nail.html>>

Government Information Locator Service

<<http://www.nara.gov/gils/gils.html>>

Federal Register (Full text daily)

<<http://cos.gdb.org/repos/fr/fr-intro.html>>

Full Text of US Government Manual

<<http://www.access.gpo.gov/nara/>>

Reference Inquiries by e-mail

<inquire@nara.gov>

The *U.S. Government Manual 1995-forward*, available online as cited above, is a 900+ page manual providing up-to-date information on the missions, programs and activities of federal agencies, as well as the names of top officials in each agency, and a list of senators and representatives. It also provides extensive and useful data about the legislative, judicial and executive departments with comprehensive name and subject/agency indexes. A special feature of the book is the "Sources of Information" section, listing addresses and telephone numbers for each agency for employment, government contracts, publications, films and other services available to the public. Another important feature of the Manual is the detailed section on federal agencies that have been terminated, transferred or had changes in name since March 1933.

The Johns Hopkins University selection will include archives from the American Library Association, Library of Congress (Motion Pictures and TV), NARA, Texas State Archives, Wisconsin State Historical Society and others. For direct access to the Johns Hopkins University menu enter, <gopher://musicbox.mse.jhu.edu> then choose <Other Gophers and the Other Archives>.

The US Geological Survey gopher system provides information about the agency, publications and information about geology, hydrology, cartography and geographic information systems, <gopher info.er.usgs.gov>.

PRESERVATION RESOURCES ONLINE

There are many different Websites that offer various types of information on preservation projects, including —

National Park Service

<<http://www.cr.nps.gov>>

National Center for Preservation Technology and Training

<<http://www.ncptt.nps.gov>>

Public Works Historical Society

<<http://www.pubworks.org>>

There are many more federal and private Websites of interest to public works officials —

TRANSPORTATION SITES

American Public Transit Association

<<http://www.apta.com>>

Bridge Engineering

<<http://www.best.com/~solvers/bridge.html>>

Federal Highway Admin TechCenter — Pavement/Bridge/Safety/Traffic (DOT)

<<http://www.dot.gov/dotinfo/fhwa/hta/fhwahta.html>>

Intelligent Transportation Systems — ITS

<<http://www.itsonline.com>>

Infrastructure Technology Institute — Northwestern University

<<http://iti.acns.nwu.edu>>

Intelligent Transportation Systems

<<http://www.io.com/~itsol/index>>

Local Transportation Assistance Program

<<http://patriot.net/~ltap.html>>

MC Trans Software Center

<<http://www-mctrans.ce.ufl.edu>>

National Transportation Statistics

<<http://www.bts.gov/>>

PC Trans Software Center

<<http://kuhub.cc.ukans.edu/~pctrans/index.html>>

Saskatchewan Transportation Site

<<http://www.engr.usask.ca/tc/index.html>>

Transportation Research Board

<<http://www.nas.edu/trb/trb.html>>

Washington State DOT

<<http://www.wsdot.wa.gov/>>

WATER WORKS SITES

American Water Works Association

<<http://www.awwa.org/>>

SW Florida Water Management District

<<http://www.dep.state.fl.us/swfwmd>>

Texas Water Resources Institute

<<http://twri.tamu.edu>>

Trenchless Technology

<<http://sunburn.uwaterloo.ca/nasttsc>>

WasteWater Virtual Library

<<http://www.halcyon.com/cleanh2o/ww/welcome.html>>

WaterWiser Water Resources

<<http://www.waterwiser.org>>

ENGINEERING AND ENVIRONMENT SITES

Civil Engineering School — Princeton University

<<http://dragon.princeton.edu/~dhh>>

Civil Engineering School — Purdue University

<<http://www.ecn.purdue.edu>>

Civil Engineering Virtual Library — Georgia Tech

<<http://www.ce.gatech.edu/WWWCE/home.html>>

Engineering and Technology — Galaxy Website

<<http://galaxy.einet.net/galaxy/Engineering-and-Technology.html>>

Schwarze American Sweeper Forum

<<http://www.schwarze.com/asforum.html>>

ADVOCACY

American Resources Information Network

<<http://www.worldweb.net/~arin>>

Greenbelt Alliance

<<http://www.rahul.net/gba>>

Planning Commissioners Journal: "Takings" Resource Page

<<http://www.webcom.com/~pcj/takings.html>>

ARCHEOLOGY

Archigopher

<gopher://libra.arch.umich.edu>

ArchNet

<<http://spirit.lib.uconn.edu/ArchNet/ArchNet.html>>

National Archaeological Database

<<http://galaxy.einet.net/hytelnet/FUL052.html>>

Society for American Archaeology Bulletin

<<http://alishaw.sscf.ucsb.edu/SAABulletin/>>

Southwestern Archaeology Web Site

<<http://www.swanet.org>>

ARCHITECTURE AND PLANNING

American Institute of Architects

<<http://www.aia.org>>

Architecture/Building

<<http://www.unlv.edu/library/ARCH/index.html>>

ArchiWeb

<<http://www.archiweb.com>>

ArtSource

<<http://www.uky.edu/Artsource/artsourcehome.html>>

Virtual Library — Architecture and Landscape Architecture

<<http://www.clr.toronto.edu:1080/VIRTUALLIB/arch.html>>

Planning and Architecture Related Internet Resources

<http://arch.buffalo.edu:8001/internet/h_pa_resources.html>

or

<<http://www.clr.toronto.edu:1080/VIRTUALLIB/arch.html>>

International Institute for Sustainable Development

<<http://iisd.iisd.ca/>>

The Center for Understanding the Built Environment

<<http://www.webcom.com/~pcj/cube.html>>

ARCHITECTURAL CONSERVATION

Conservation OnLine

<<http://palimpsest.stanford.edu>>

Conservation Information Network

<<http://sul-server-2.stanford.edu/waac/wn/wn09/wn09-3/wn09-304.html>>

CULTURAL RESOURCES

American Cultural Resources Association

<<http://www.mindspring.com/~wheaton/ACRA.html>>

Cultural Resource Management and Government Agencies

<<http://spirit.lib.uconn.edu/ArchNet/Topical/CRM/CRM.html>>

HISTORIC PRESERVATION

National Trust for Historic Preservation

<<http://www.nthp.org>>

National Trust Library

<<http://www.itd.umd.edu/UMS/UMCP/NTL/ntl.html>>

Preserve Net

<<http://www.preservenet.cornell.edu/>>

Internet Resource Guide to Heritage Conservation, Historic Preservation and Archeology

<http://www.ncptt.nps.gov/pttinfo_about_fs.stm>

Working With Section 106

<<http://achp.gov/work106.html>>

36CFR Part 61 (Procedures for Approved State and Local Government Historic Preservation Programs)

<<http://www.lib.uconn.edu/ArchNet/Topical/CRM/USdocs/36CFR61.html>>

HISTORY

Institute for Historical Research

<<http://ihr.sas.ac.uk/ihr/bbs.ihr.html>>

University of Kansas Guide to Worldwide History Sources

<http://history.cc.ukans.edu/history/WWW_history_main.html>

History Computerization Project

<<http://www.directnet.com/history/>>

INTERNATIONAL PRESERVATION

International Council on Monuments and Sites

<<http://www.icomos.org>>

World Heritage

<<http://www.unesco.org/whc/welcome.htm>>

MUSEUMS AND THE ARTS

International Council of Museums

<<http://www.icom.org/ICOM/>>

The Getty Research Institute for the History of Art and the Humanities

<<http://www.getty.edu/gri/>>

NATURAL RESOURCES

Sierra Club

<<http://www.sierraclub.org/>>

The Trust for Public Land

<<http://www.igc.apc.org/tpl>>

NON-PROFIT MANAGEMENT

Impact On-line

<<http://www.webcom.com/~iol>>

OTHER SITES

Committee for the National Institute for the Environment

<<http://csf.colorado.edu/mail/cnie/current/0076.html>>

Federal Emergency Management Agency

<<http://www.fema.gov/homepage.html>>

National Energy Information Center

<<http://www.eia.doe.gov>>

LISTSERVS

The listserv is an important research tool because it puts you in touch with many subscribers at institutions around the world and provides a forum for topical exchange. Messages requesting information on particular projects may be posted, and subscribers are free to respond. Following are those listservs of potentially greatest interest to public works managers (obtained from *The Internet*

Resource Guide to Heritage Conservation, Historic Preservation and Archeology).

AAT-L

AAT-L is a listserv for current and/or future users of the Art and Architecture Thesaurus. The purpose of this listserv is to facilitate timely discussion of matters of mutual interest between subscribers and to provide a more expeditious route of communication between the AAT office and AAT users. To subscribe, use the following address, <listserv@uicvm.cc.uic.edu>, leave the subject line blank and in the body of the message, type the single line, <Subscribe AAT-L Your Name>.

ACRA-L

The discussion list of the American Cultural Resources Association began in November 1995. The list is designed as a place for people interested in ACRA's lobbying efforts and for those who wish to discuss current issues. To subscribe, use the following address, <majordomo@mindspring.com>, and in the body of the message, type the single line, <subscribe acra-L>.

AIA-L

The AIA List is a moderated list operated by the Archaeological Institute of America. AIA-L is intended to facilitate discussion of the broadest possible range of archeological issues, and provides a forum for discussions of technical and computer questions. To subscribe, use the following address, <majordomo@cc.brynmawr.edu>, and in the body of the message, type the single line, <Subscribe AIA-L Your Name>.

AmArt-L

AmArt-L is a moderated discussion list devoted to scholarly and intellectual discussions of specific interest to historians and scholars of American art. AmArt-L addresses American art, artifacts, architecture and related topics from the colonial period to the present. Scholars from other fields with similar interests are welcome to subscribe. The list was initiated in November 1994. To subscribe, use the following address, <listserv@cunyvm.cuny.edu>, and in the body of the message, type the single line, <Subscribe AMART-L Your Name>.

ANTHRO-L

ANTHRO-L is a general anthropology electronic bulletin board designed to allow discussion on any

topic related to any part of the wide realm of anthropology and related disciplines. It is archived at the University of Sidney, Australia.

<<http://www.anatomy.su.oz.au/danny/anthropology/anthro-l/archiv/index.html>>. To subscribe, use the following address, <listserv@ubvm.cc.buffalo.edu>, and in the body of the message, type the single line, <ANTHRO-L Your Name>.

ARCH-L

The Archaeology List is unmoderated and was formed to facilitate discussions of archeological problems, especially those concerned with research and excavations. ARCH-L logs and related files are available at <<http://tamvml.tamu.edu/ARCH-L>>. To subscribe, use the following address, <listserv@listserv.tamu.edu>, and in the body of the message, type the single line, <Subscribe ARCH-L Your Name>.

ARCH-METALS

This list provides a forum for discussion of all aspects of archeo-metallurgy and the dissemination of data related to all aspects of ancient metallurgy and metal artifacts, the applications of material science to archeo-metallurgy, and the development of methodologies to the study of archeo-metallurgical debris. To subscribe, use the following address, <mailbase@mailbase.ac.uk>, and in the body of the message, type the single line, <Join arch-metals Your Name>.

ARCHIVES

Archives (Archives and Archivists list) is for those involved or interested in archival theory and practice. To subscribe, use the following address, <listserv@miamiu.muohio.edu>, and in the body of the message, type the single line, <Subscribe ARCHIVES Your Name>.

ARCLIB-L

This e-mail discussion list for librarians of European architectural schools was originally established for Irish and UK architectural librarians. The list was re-established in November 1994 as a European discussion group at the Interuniversity Computing Center (CINECA) in Italy. To subscribe, use the following address, <listserv@icineca.cineca.it>, and in the body of the message, type the single line, <subscribe ARCLIB-L Your Name>.

ARTIFACT

The electronic forum for the exchange of views and information on the study of material culture, ARTIFACT was created in response to a suggestion made at the Material Culture Caucus at the 1993 American Studies Association. Its purpose is to bring together the broadly scattered community of material culture scholars. To subscribe, use the following address, <listserv@umdd@umd.edu>, and in the body of the message, type the single line, <Subscribe ARTIFACT Your Name>.

ARCHITRON

ARCHITRON is the mailing list for the distribution of architecture's electronic journal. To subscribe, use the following address, <listserv@kentvm.kent.edu>, and in the body of the message, type the single line, <Subscribe arcitron Your Name>.

BUILT-ENVIRONMENT

This list provides a forum for the discussion of issues within the built environment, encompassing building, surveying, architecture and civil/mechanical/services engineering. To subscribe, use the following address, <mailbase@mailbase.ac.uk>, and in the body of the message, type the single line, <Subscribe built-environment Your Name>.

CAAH

CAAH is a list for professional art and architectural historians. It is a moderated list meaning you must contact the listowner, Marilyn Lavin, <MALAVIN@pucc.princeton.edu> to enroll, providing information on your architectural or art historical specialty and your university affiliation.

CIDOC-L

The mailing list of CIDOC, the International Documentation Committee of the International Council of Museums, serves as a focus for the documentation interests of museums and similar organizations. CIDOC-L is intended to serve as an electronic forum for the discussion of all issues related to the field of museum documentation both for members of CIDOC and all others who are professionally involved in the organization's sphere of activities. To subscribe, use the following address, <listserv@nrm.se>, and in the body of the message, type the single line, <Subscribe cidoc-l Your Name>.

Conservation DistList

Conservation DistList is a moderated forum for professionals engaged in the conservation of cultural materials. Although librarians make up most of its users, the scope of participation has broadened to include all fields of conservation. To subscribe, use the following address, <consdist-request@lindy.stanford.edu>, and in the body of the message, type the single line, <Subscribe Cons Dist Your Name>.

GAARCH-L

This is the Georgia Archaeology list. To subscribe, use the following address, <listserv@sun.cc.westga.edu>, and in the body of the message, type the single line, <Subscribe GAARCH-L yourname>

GISARCH

This mailbase discussion list is intended for the discussion of issues relating to the archeological use of Geographic Information Systems. To subscribe, use the following address, <mailbase@mailbase.ac.uk>, and in the body of the message, type the following two-line message, line 1 <subscribe gisarch Your Name> and line 2<stop>.

HERITAGE

This mailing list, begun in late December 1993, was initiated by Heritage Interpretation International in cooperation with Massey University in New Zealand. It is designed for all interpreters, heritage managers, academics, and students interested in the interpretation and presentation of the world's heritage. To subscribe, use the following address, <listserv@massey.ac.nz>, and in the body of the message, type the single line noting capitalization, <SUBSCRIBE HERITAGE Your Name>.

HISTARCH

This listserv began in April 1994 for historical archeology. HISTARCH is designed to facilitate communication between people interested in such topics as New World Colonial archeology, material culture studies and archeological method and theory. To subscribe, use the following address, <listserv@asuvm.inre.asu.edu>, and in the body of the message, type the single line, <Subscribe HISTARCH Your Name>.

H-AMSTUDY

This is a moderated forum for the discussion of issues within the history field of American studies as well as a conduit for all kinds of field-related activities. Thus notices about conferences, jobs, and fellowships will be reviewed and published on the list. Information about on-line library resources, new databases, CD-ROMS, and demo-files about anonymous ftp, etc. will also be made available. To subscribe, use the following address, <listserv@uicvm.uic.edu>, and in the body of the message, type the single line, <Subscribe H-AMSTUDY Your Name>.

H-LOCAL

This discussion list was begun in November 1994 for state and local history and museum studies. H-LOCAL was established to link its members in a discussion of teaching, research, methodology, and public presentation of state and local history. To subscribe, use the following address, <LISTSERV@MSU.EDU>, and in the body of the message, type the single line, <Subscribe H-LOCAL Your Name, college/org>.

HTECH-L

This is the discussion group for the history of technology. To subscribe, use the following address, <listserv@sivm.si.edu>, and in the body of the message, type the single line, <Subscribe HTECH-L Your Name>.

ICOM-Announce

ICOM-Announce is intended to provide the electronic network community with a source of information about the activities of the International Council of Museums. List members will receive announcements about the availability of ICOM documents on archive sites on the Internet, as well as general news and information about ICOM's scheduled events. To subscribe, use the following address, <listserv@doc.nrm.se>, and in the body of the message, type the single line, <Subscribe ICOM-ANNOUNCE Your Name>.

ICOM-L

The International Council of Museums Discussion List is intended to provide an open forum for the discussion of ICOM's activities. It is the primary feedback channel for commentary about material posted on ICOM-Announce. To subscribe, use the following address, <listserv@nrm.se>, and in the

body of the message, type the single line, <subscribe ICOM-L Your Name>.

LARCH-L

This is the Landscape Architecture Electronic Forum. To subscribe, use the following address, <listserv@listserv.syr.edu>, and in the body of the message, type the single line, <sub: LARCH-L Your Name>.

MATERIALS-L

The purpose of MATERIALS-L is to facilitate discussion about the use, reliability and application of current methods for testing the suitability of materials for use in storage, exhibition and conservation of archival, artistic and historic works, and to facilitate cooperative research into more reliable, quantitative and systematic approaches to materials testing.

MATERIALS-L will be of interest to persons who are responsible for the care and preservation of archival, artistic and historic works, and is directly accessible to those who are actively involved in materials testing (e.g., conservation scientists, conservators, collection managers). Those who are actively involved in materials testing and would like to subscribe to MATERIALS-L may do so by providing the following information via e-mail to <james.s.martin@williams.edu>: NAME, E-MAIL ADDRESS, TITLE (OR JOB), POSTAL ADDRESS, PHONE, FAX, TESTING METHODS, RESEARCH AREAS, REASON FOR SUBSCRIBING TO MATERIALS-L.

MUSEUM-L

The Museum Discussion List, begun in April 1991, is a general-interest list for museum professionals and others interested in museum-related issues. See the MUSEUM-L FAQ at <ftp://darwin.nmmh-abq.mus.nm.us/misc/museum-l-faq.txt.> and the list archive at <gopher://ucmp1.Berkeley.EDU/11/MLists/museuml>. In September 1994 the list was gatewayed to <Usenet as bit.listserv.museum-l>. To subscribe, use the following address, <listserv@home.ease.lsoft.com>, and in the body of the message, type the single line, <Subscribe MUSEUM-L Your Name>.

MUSEUM-ED

MUSEUM-ED is an open, unmoderated discussion list which serves as a forum for museum educators. Topics for discussion are broad. To subscribe, use the

following address, <STPROC@MTN.ORG>, and in the body of the message, type the single line, <SUBSCRIBE MUSEUM-ED Firstname Lastname>.

NAGPRA-L

This is a discussion list for issues relating to the Native American Graves Protection and Repatriation Act of 1990. To subscribe, use the following address, <majordomo@world.std.com>, and in the body of the message, type the single line, <Subscribe nagpra-l>.

NAUTARCH

This mailing list was begun in November 1994 for issues relating to nautical and maritime archeology. This is not an automated listserv. To subscribe, send a brief message requesting that you be subscribed to <NAUTARCH-REQUEST@Santafe.Edu>.

NHCOLL-L

This listserv is co-sponsored by the Society for the Preservation of Natural History Collections and the Association for Systematic Collections. Begun in January 1995, NHCOLL-L discusses issues relating to the preservation and care of natural history collections. To subscribe, use the following address, <listproc @ucmp1.berkeley.edu>, and in the body of the message, type the single line, <SUBSCRIBE NHCOLL-L Your Name>.

NCSHPO

This electronic mailing list began in May 1995 for the National Conference of State Historic Preservation Officers. At the present time, subscriptions to the list are limited to state historic preservation offices only. SHPO staff who wish to subscribe should use the following address, <listserver@relay.doit.wisc.edu>, and in the body of the message, type the single line, <Subscribe ncsppo Your Name>.

NYHIST-L

The New York State history electronic discussion list deals with all aspects of New York State history and is intended to be a forum for announcements, discussion, and research inquiries and referrals. The list is open to students and professionals from many fields as well as to those who are simply interested in New York history. It is provided as a public and professional service by New York State Archives and Records Administration. To subscribe, use the following address,

<LISTPROC@UNIX10.NYSED.GOV>, and in the body of the message, type the single line, <sub NYHIST-L Yourfirstname Yourlastname>.

PRESED-L

This listserv was created by the Association for Library Collections and Technical Services of the American Library Association to supplement the Preservation Course and Workshop Instructors Discussion Group of the Preservation and Reformatting Section. To subscribe, use the following address, <listserv@uicvm.uic.edu> and in the body of the message, type the single line, <subscribe PRESED-L Your Name>.

PRESERVATION-L

This discussion forum began in April 1995 for individuals with an interest in architectural restoration and preservation. The list welcomes both professional and non-professional participants. To subscribe, use the following address, <majordomo@majordomo.netcom.com>, and in the body of the message, type the single line, <Subscribe preservation-l>.

PUBLHIST

This is an electronic mailing list for public historians. To subscribe, use the following address, <publhist-request@husc3.harvard.edu>, and in the body of the message, type the single line, <Subscribe PUBLHIST>.

ROCK-ART

This electronic mailing list is for the discussion of petroglyphs, pictographs, and other forms of rock art. To subscribe, use the following address, <listserv@asvm.inre.asu.edu>, and in the body of the message, type the single line, <Subscribe ROCK-ART Your Name>.

SUB-ARCH

This underwater archeology discussion list, begun in June 1995, is unmoderated and covers all aspects of underwater archeology including theory, methodology, and conservation of artifacts. SUB-ARCH is aimed at the professional and/or academically-oriented underwater archeologist. To subscribe, use the following address, <LISTSERV@ASUVM.INRE.ASU.EDU>, and in the body of the message, type the single line, <SUBSCRIBE SUB-ARCH>.

URBAN-L

This electronic mailing list provides for information exchange on urban planning. To subscribe, use the following address, <listserv@vm3090.ege.edu>, and in the body of the message, type the single line, <Subscribe URBAN-L Your Name>.

USICOMOS

Begun in May 1995, US/ICOMOS is the mailing list of US/ICOMOS, the US National Committee of the International Council on Monuments and Sites. It is open to all members of US/ICOMOS and others interested in the international aspects of heritage conservation and standards-setting. To get the most out of the list, subscribers are encouraged to join the organization. To subscribe, use the following address, <majordomo@world.std.com>, and in the body of the message, type the single line, <Subscribe usicomos>.

XYLHIST-L

This list is for the discussion of historical xylosiology — the history and archeology of timber-framed construction and roofs. XYLHIST-L was begun in October 1994. To subscribe, use the following address, <listserv@bloxwich.demon.co.uk>, and in the body of the message, type the single line, <Subscribe xylhist-L Your Name>.

CHAPTER 5

NATIONAL DOCUMENTATION PROGRAMS

For historic public works, documentation is an important aspect of cultural resources management.

There are four national programs that document cultural resources — the National Register of Historic Places, the National Historic Landmarks program, the Historic American Building Survey, and the Historic American Engineering Record.

NATIONAL REGISTER OF HISTORIC PLACES

The National Historic Preservation Act of 1966 established the National Register of Historic Places to be implemented through a state-administered survey program in archeology, history and architecture.

The National Register is the nation's list of properties important in the history, architectural history, archeology, engineering and culture of the United States. It is maintained by the National Park Service, and expanded through nominations by individuals, organizations, state and local governments and federal agencies.

The National Register includes buildings and structures, such as houses, commercial buildings and bridges. It also includes sites such as battlefields, parks and archeological sites. It includes districts, groups of buildings, structures or sites that make up a whole, such as a neighborhood, or industrial complex. It also includes objects — not portable objects, but large immovable properties such as fountains or monuments.

The National Register can be used for a variety of purposes related to planning and public awareness. Information maintained in the National Register can be incorporated into comprehensive plans, area plans and project and tourism development plans. They can also be incorporated into Geographic Information Systems maps that amalgamate environmental and planning data.

National Register documentation can also be made part of heritage education programs to foster an understanding of history and pride in the community at the local level.

National Register Bulletins, *How To Apply the National Register Criteria for Evaluation*, and *Guidelines for Completing National Register of Historic Places Forms* provide detailed explanations of guidelines for understanding the National Register and examples of each step in the evaluation process.

The following criteria are excerpted from *How To Apply the National Register Criteria for Evaluation*, and *Guidelines for Completing National Register of Historic Places Forms* and are designed to guide states, federal agencies, and the Secretary of the Interior in evaluating potential entries for the National Register —

- The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and
- that are associated with events that have made a significant contribution to the broad patterns of our history; or
- that are associated with the lives of persons significant in our past; or
- that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- that have yielded, or may be likely to yield, information important to prehistory or history.

Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance in the past 50 years shall not be considered eligible for the National Register. However, such properties *will qualify* if they are integral parts of districts that do meet the criteria, or if they fall within the following categories —

- A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

- a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his or her productive life; or
- a cemetery that derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or
- a property achieving significance within the past 50 years if it is of exceptional importance.⁴

Besides meeting one or more of the above criteria, a property must also have integrity of location, design, setting, materials, workmanship, feeling and association in order to be eligible. This means that if a property has been seriously compromised by severe alterations, it may be ineligible for listing. It should also be remembered, though, that alterations to a property may themselves have historical value or significance, reflecting changes of style, changing construction techniques or changing social or cultural processes.

NATIONAL HISTORIC LANDMARKS

National Historic Landmarks are recognized as our Nation's most important historic and cultural resources. They are buildings, historic districts, structures, sites and objects that possess exceptional value or quality in illustrating or interpreting the heritage of the United States. When the National Historic Landmarks program was enacted in 1935, it was designed, in part, to identify nationally significant properties that might be considered for inclusion in the National Park System.

The National Historic Landmarks program surveys only sites of national significance based on a series of historic theme studies, from prehistoric archeology, agriculture, and architecture through literature, the military, politics, religion and science. When the National Register came into existence, all National Historic Landmarks were incorporated into that list. The National Register and National Historic Landmarks lists are published in the Federal Register,

and are also on file at State Historic Preservation Offices.⁵

HISTORIC AMERICAN BUILDING SURVEY HISTORIC AMERICAN ENGINEERING RECORD

In 1933, the National Park Service, the American Institute of Architects and the Library of Congress joined together to create the Historic American Building Survey. It was part of the New Deal for America for getting people back to work. Various other agencies, such as the Federal Writers Project, Federal Theater Project and the Index of American Design were begun in the 1930s, but the HABS program is the only one of these programs still in existence.

HABS was the government's first attempt to systematically record America's historic built environment through graphic and written records. It has employed and provided on-the-job training for students of architecture, historians, photographers and others in principles of design, construction and technology and provides a resource for writers, researchers and scholars in many fields.

In 1969, the Historic American Engineering Record was established by an agreement between the National Park Service, the American Society of Civil Engineers and the Library of Congress. Later the American Society of Mechanical Engineers joined the agreement. Today the HABS/HAER collection is jointly administered and continues to grow.

The HABS/HAER collection as of March, 1998 —

• Number of structures	35,182
• Number of drawings	53,251
• Number of photographs	192,949
• Number of transparencies	2,296
• Number of data pages	123,610

HABS/HAER publishes and widely distributes research findings from their documentation projects. Frequently, the records, both graphic and written, are published by HABS/HAER, established private presses, HABS/HAER cooperative partners, and project sponsors. These publications are available to the public through many universities, local and national historical societies, State Historic Preservation Offices, the Government Printing Office, or in some cases, from HABS/HAER.

HABS/HAER STANDARDS AND GUIDELINES

HABS/HAER standards and guidelines are designed to define acceptable documentation for inclusion in the HABS/HAER collection at the Library of Congress. The standards are used to create the following products —

- HABS/HAER recording projects;
- mitigation documentation in accordance with the National Historic Preservation Act of 1966, as amended through 1992, (16 U.S.C. 470 et seq.); and
- documentation donated to the HABS/HAER collection.

For more information on HABS/HAER guidelines see Appendix C, HABS/HAER Supplemental Information.

HABS/HAER RECORD GROUP 515 AT THE NATIONAL ARCHIVES

Record Group 515, the Records of the Historic American Buildings Survey/Historic American Engineering Record, was formally established in July 1992 as a permanent collection of HABS/HAER administrative records spanning 1933 to the present. The Record Group contains documents such as the original handwritten memorandum drafted by Charles E. Peterson founding HABS in 1933, the Tripartite Agreement for the HAER program which was established in January 1969, HABS and HAER administrative correspondence, project files, HABS activity reports, minutes of Advisory Board meetings, HABS/HAER publications, posters, audio and visual materials, and administrative photographs. These records are a particularly valuable resource to those interested in HABS and HAER recording programs and their impact on the historic preservation movement in the United States. They complement the formal HABS/HAER Collection of measured drawings, photographs and histories maintained at the Library of Congress, Prints and Photographs Division. For more information on Record Group 515, see Appendix C, HABS/HAER Supplemental Information.

There are four criteria levels of HABS/HAER documentation. If a full HAER project documentation is requested, measured drawings on mylar, large-format photography and historical text are required and can be costly to produce. It is necessary to get a clear understanding of what level

of documentation is requested. See the table on page 25 for specific level requirements.

DOCUMENTING PUBLIC WORKS

Consultants are available for documentation work; Members of the Society of Industrial Archeology, American Institute of Architects and other organizations are available on a consulting basis. Many SHPOs maintain a list of consultants qualified to consult on HABS/HAER documentation projects. For more information on consultants, see Appendix J, State Historic Preservation Offices.

SUMMARY
PERFORMANCE STANDARDS OF THE HISTORIC AMERICAN BUILDINGS SURVEY/HISTORIC AMERICAN ENGINEERING RECORD (HABS/HAER)
 (SECRETARY OF THE INTERIOR'S STANDARDS FOR ARCHITECTURAL AND ENGINEERING DOCUMENTATION, FEDERAL REGISTER, SEPTEMBER 29, 1983, PP. 44730-44734)

STANDARDS	I. CONTENT				II. QUALITY				III. MATERIALS				IV. PRESENTATION				
	REQUIREMENTS	"DOCUMENTATION SHALL ADEQUATELY EXPLICATE AND ILLUSTRATE WHAT IS SIGNIFICANT OR VALUABLE ABOUT THE HISTORIC BUILDING, SITE STRUCTURE OR OBJECT BEING DOCUMENTED."				"HABS AND HAER DOCUMENTATION SHALL BE PREPARED ACCURATELY, FROM RELIABLE SOURCES WITH LIMITATIONS CLEARLY STATED TO PERMIT INDEPENDENT VERIFICATION OF INFORMATION."				"HABS AND HAER DOCUMENTATION SHALL BE PREPARED ON MATERIALS THAT ARE READILY REPRODUCIBLE FOR EASE OF ACCESS, DURABLE FOR LONG STORAGE, AND IN STANDARD SIZES FOR EASE OF HANDLING."				"HABS AND HAER DOCUMENTATION SHALL BE CLEARLY AND CONCISELY PRODUCED."			
CRITERIA	LEVEL	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
		A. MEASURED DRAWING		FULL SET OF MEAS. DWGS.	SEE PHOTOS BELOW	SKETCH PLAN	INVENTORY CARD	MEASURED DRAWINGS ARE TO BE PRODUCED FROM RECORDED, ACCURATE MEASUREMENTS. THOSE PORTIONS DRAWN FROM EXISTING DRAWINGS OR OTHER SOURCES SHOULD BE SO IDENTIFIED AND SOURCES LISTED.	8x10" PHOTO-COPY MATERIAL	8x10" PHOTO-COPY	INK ON BOND PAPER	INK ON BOND PAPER	INK ON BOND PAPER	INK ON BOND PAPER	INK ON BOND PAPER	MECH. LETTERING EQUIVALENT	ADEQUATE DIMENSIONS ON ALL SHEETS
B. PHOTOGRAPHS		LARGE FORMAT PHOTOGRAPHS EXTERIOR & INTERIOR				PHOTOGRAPHS SHALL CLEARLY DEPICT THE APPEARANCE OF THE PROPERTY AND AREAS OF SIGNIFICANCE. ALL VIEWS ARE TO BE PERSPECTIVE-CORRECTED AND FULLY CAPTIONED.	19x24" OR 24x36" PHOTO-COPY	8x10" PHOTO-COPY	8 1/2 x 11" INVENTORY CARD	PRINTS SHALL ACCOMPANY ALL NEGATIVES MUST BE ARCHIVALLY PROCESSED. NO R/C PAPER	4x5" OR 5x7" OR 8x10"	35mm FILM	35mm B&W	DUPLICATE PHOTOS WITH A SCALE WITH A SCALE STICK	MIN. OF ONE PHOTO WITH A SCALE (PRINCIPAL FACADE)		
C. WRITTEN DATA		HISTORY AND DESCRIPTION IN NARRATIVE OR OUTLINE FORMAT		ONE PAGE SUMMARY	INVENTORY CARD	BASED ON PRIMARY SOURCES INCLUDE: — METHODOLOGY — NAME OF RESEARCH & DATE OF RESEARCH — SOURCES — FRANK ASSESSMENT OF SOURCES AND THEIR LIMITATIONS				CLEAN COPY FOR XEROXING	ARCHIVAL BOND REQUIRED	8 1/2 x 11"					TYPED ON INVENTORY CARD
D. OTHER		OTHER MEDIA CAN AND HAVE BEEN USED. CONTACT HABS/HAER OFFICE BEFORE EMPLOYING A MEDIA OTHER THAN THOSE SPECIFIED ABOVE.															
TESTS		INSPECTION BY HABS/HAER OFFICE STAFF. DOCUMENTATION NOT MEETING HABS/HAER STANDARDS WILL BE REFUSED.															
COMMENTARIES		KIND AND AMOUNT OF DOCUMENTATION SHOULD BE APPROPRIATE TO THE NATURE, AND SIGNIFICANCE OF THE BUILDING, SITE, STRUCTURE OR OBJECT BEING DOCUMENTED.				THE PRINCIPLE OF INDEPENDENT VERIFICATION IS CRITICAL IN ASSURING HIGH QUALITY OF HABS/HAER MATERIALS.				BASIC DURABILITY PERFORMANCE STANDARD IS 500 YEARS.				HABS/HAER ARE MOST WIDELY USED OF SPECIAL COLLECTIONS AT THE LIBRARY OF CONGRESS.			

HABS/HAER Documentation Requirements

CHAPTER 6 STANDARDS FOR PRESERVATION, REHABILITATION, RESTORATION AND RECONSTRUCTION

When considering work on historic properties, the public works manager should understand the types of treatments that may be appropriate for historic public works.

Within the national system of historic preservation, *The Secretary of the Interior's Standards for the Treatment of Historic Properties* are the national standards for preserving our architectural and engineering heritage. This chapter is arranged in four parts listing the standards for preservation, rehabilitation, restoration and reconstruction of historic properties and discuss building materials, interior and exterior features, and provide recommendations for their treatment. Following, by category, are the standards—

STANDARDS FOR PRESERVATION

- "A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
- The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
- Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection and properly documented for future use.
- Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.

- The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color and texture.
- Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken." ⁶

The expressed goal of the standards for preservation is retention of the building's existing historic fabric including form, features and detailing. Protection, maintenance, and repair are emphasized while replacement is minimized. As always, a historic preservation specialist should be consulted before preservation efforts begin.

STANDARDS FOR REHABILITATION

- "A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.
- The historic character of a property will be retained and preserved. The removal of distinctive materials or alterations of features, spaces and spatial relationships that characterize a property will be avoided.
- Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing



Rehabilitated Donner Summit Bridge. (October 1995)

features will be substantiated by documentary or physical evidence.

- Chemical or physical treatment, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- New additions, exterior alterations, or related new construction will not destroy historic materials, features and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale, proportion and massing to protect the integrity of the property and its environment.
- New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment will be unimpaired." ⁷

Of the four treatments, rehabilitation makes possible an efficient contemporary use through alterations and additions. Latitude is given to replace extensively deteriorated, damaged or missing features using either traditional or substitute materials. Identification, retention and preservation of character-defining features is stressed. An historic preservation specialist trained in application of the

Standards should be consulted before undertaking rehabilitation of a historic resource.

REHABILITATION CASE STUDY ⁸ DONNER SUMMIT BRIDGE, OLD HIGHWAY 40, NEVADA COUNTY, CA

The Donner Summit Bridge was constructed during 1925-1926 on Old Highway 40. It was built in the Sierra Nevada Mountains at Donner Pass near Soda Springs, CA, elevation 6,970 feet. The bridge is located on a significant transcontinental transportation corridor that was used by wagon trains, oxen, travelers on foot, travelers on horseback and by the railroad during the 1800s. Automobiles began using the route in the 1900s.

The bridge is historically significant because it overlooks the site where the ill-fated Donner Party was trapped in the snow during the winter of 1846-1847. In memory of the tragedy of the Donner Party, officials named the route over the Sierra Nevada the Donner Summit Pass, and, in turn, the bridge was named the Donner Summit Bridge.

The bridge was designed as an open spandrel concrete arch bridge with baluster window railings. The bridge is 241 feet long with a 24 foot wide deck. It is on a seven percent grade and is super elevated at about a maximum of ten percent.

The Nevada County Department of Transportation decided to significantly repair the bridge in 1985. Environmental concerns precluded the introduction of fill to construct a replacement bridge. During hearings on the project, it was decided the bridge should be rehabilitated and the deck and railings rebuilt using the original design in order to preserve the historic character of the bridge. The scenic setting of the bridge also influenced this decision.

The railing design was the most significant point of controversy in the rehabilitation. To preserve the original appearance of the bridge, Nevada County proposed reconstructing the window type railing in its original form. After much research, a design called Texas T-411, which integrated safety and integrity, was approved. This design retained the original appearance of the railing and incorporated a new observation platform similar to the old one. Marks in the railing from the original form boards were duplicated by hand.

The bridge project was managed by Tom Miller, Nevada County Director of Transportation. The designer was Wei Koo and Associates of Roseville and Orange, CA. The construction contract was awarded on May 17, 1995, and work started

immediately. The total cost of the project was \$2,651,000, which included \$1,697,500 in construction costs and \$498,500 in engineering costs. Funding was from a unique combination of sources, which included Federal Highway and Bridge Rehabilitation Funds, a special California State Park grant, Nevada County Local Transportation Funds and Federal Aid to Secondary Funds.

The Donner Summit Bridge rehabilitation was completed in October 1995, in accordance with Secretary of the Interior's Standards. It is an outstanding example of bridge and highway design integrated into a scenic highway route. With its graceful design, its location in the high Sierra Nevada Mountains and its magnificent view of Donner Lake, the historic bridge is one of the most spectacular bridges in California.

REHABILITATION CASE STUDY ⁹ PORT OF BELLINGHAM- FAIRHAVEN STATION, BELLINGHAM, WA

Adaptive reuse is a form of rehabilitation which sympathetically adapts an historic structure to



Port of Bellingham (WA) Fairhaven Station

accommodate a new use while retaining the character-defining features and spaces of the structure. Adaptive reuse can be more cost effective than new construction.

The Port of Bellingham decided to combine available local and state funds to enhance transportation services in Whatcom County and preserve a building of local historic significance. The Fairhaven Station is the last remnant of an integrated compound that included a warehouse, a can and box factory, cannery and shipyard. By linking the new train station to the Bellingham Cruise Terminal, the project produced one of the states newest multimodal facilities, or transportation centers, by creating a new focus for various modes of travel including Amtrak, Greyhound Bus Lines, the Whatcom Transit Authority, the Alaska Marine Highway, San Juan Island and Victoria, British Columbia passenger ferries, airport and local taxi service.

The project consisted of the rehabilitation of a 20,000 square-foot building, design and construction of a track side passenger boarding area, design and construction of a covered walkway connecting to the cruise area and parking areas. Chosen for the project were architects Merrit and Pardini and contractor Tiger Construction, Ltd. The projected completion date was June 30, 1995, at a cost of \$3,882,000.

Involving the Public

Public meetings were held with the community to explain the project; and special events were held, such as walk throughs of the new trains, to generate excitement in the community for the new train station. Ground breaking ceremonies and an inaugural run, carrying dignitaries from the United States and Canada, were held. To develop an appreciation for the historical significance of the building, the port worked with the Whatcom Museum of History and Art to produce an indoor mural depicting the history of the Bellingham-based Pacific American Fisheries Company, which operated canneries throughout Alaska from this site and shipped products throughout the world.

On Time and Within Budget

The strict five-month timeline was adhered to despite several setbacks, including having to construct a new foundation under the existing building on an area of old waterfront fill with a high water table. The project successfully preserved the historic flavor of the old building while modernizing it to meet seismic requirements. This entailed rehabilitating an un-

reinforced masonry building with an entirely new structural system within the existing walls. Also, upon exposing the interior of the building, the contractor had to reorient existing structural members to accommodate the seismic design.

The building needed to be functionally linked to the Bellingham Cruise Terminal, a marine transportation facility 150 yards away. This was accomplished with a covered walkway thematically linked with design elements of the cruise terminal built in 1989. Beauty and durability was achieved in public transportation areas using materials such as terrazzo. The overall quality of design was recognized by a recent award from the American Institute of Architects, as well as local awards for landscaping of the grounds. Another innovation was to reorient the approach to the building. The previously inaccessible street frontage was opened to foot traffic, with additions of covered walkways and a light tower. Until now, entry was gained through the off-street western side.

The project was completed on time and within budget due to coordination efforts by all parties involved. The port established a team management structure which consisted of the project owners (port and state DOT), inspectors, contractors, on-site owners' representatives and technical support. With on-site owners' representatives and the ports on-site engineer, the port assumed on-site responsibility for project management. Weekly, on-site meetings were held, with problems assigned for immediate resolution. A formal, computerized tracking system was employed to schedule various construction activities. Problems could be resolved almost as soon as they occurred.

STANDARDS FOR RESTORATION

- "A property will be used as it was historically or be given a new use which reflects the property's restoration period.
- Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces and spatial relationships that characterize the period will not be undertaken.
- Each property will be recognized as a physical record of its time, place and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection and properly documented for future research.

- Materials, features, spaces and finishes that characterize other historical periods will be documented prior to their alteration or removal.
- Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.
- Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color texture and, where possible, materials.
- Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties or by combining features that never existed together historically.
- Chemical or physical treatment, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- Designs that were never executed historically will not be constructed."¹⁰

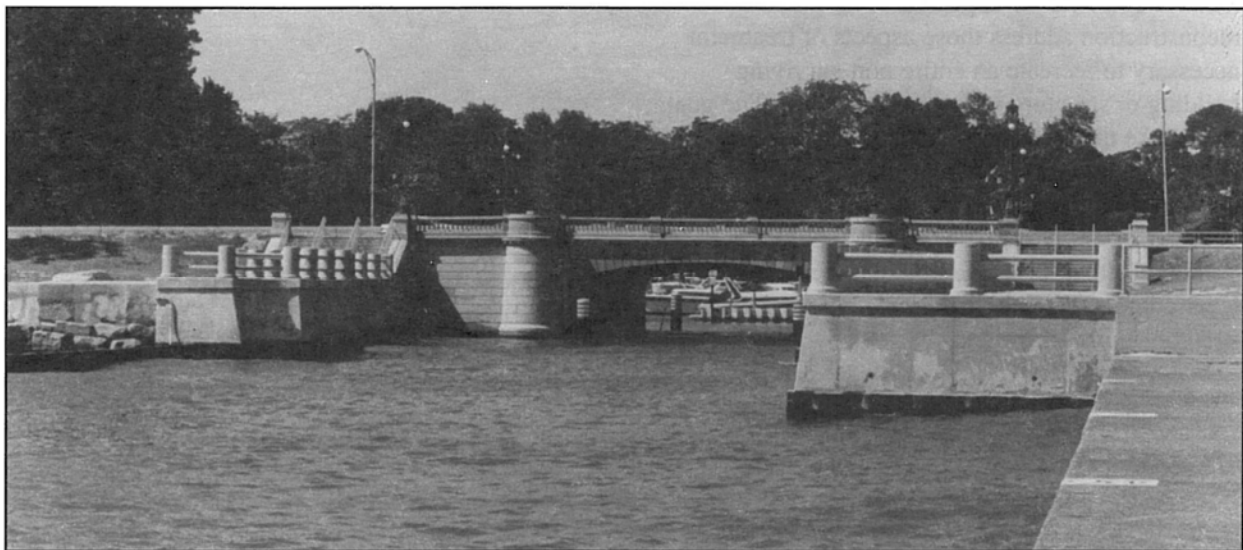
Rather than maintaining and preserving a building as it has evolved over time, the expressed goal of the standards for restoration is to make the building appear as it did at a particular and significant time in

its history. As opposed to other treatments, the scope of restoration can include removal of features from other periods and missing features from the restoration period can be replaced, based on physical and documentary evidence, using traditional materials or compatible substitute materials.

RESTORATION CASE STUDY ¹¹ LAKE SHORE DRIVE BRIDGE OVER 59TH STREET INLET, CHICAGO, IL

The original 59th Street Inlet Bridge was built in 1895, as part of the World's Columbian Exposition park improvements. The bridge is a single span, multiarch, steel girder structure seated on limestone abutments. The fascia girders are covered with self-supporting limestone arches to give the appearance of a stone structure. There are rounded turrets at the spring line of the arches, block modillion cornices, balustrade railings and four rectangular, round-ended sculpture bases all made from limestone.

The bridge is listed on the National Register of Historic Places, and as such, was restored in accordance with The Secretary of the Interior's Standards for the Treatment of Historic Properties. Much of the existing limestone was inventoried and reused to preserve the historic character of the bridge. The remaining deteriorated stones were replaced by new limestone, and ashlar granite was reinstalled up to the expected high water mark. The east dock walls on the north and south sides of the bridge were replaced with new stone railings and bollards. New landscaping was provided in these areas. Four



Lake Shore Drive Bridge at 59th Street Inlet

historic light standards were created to replicate the ones used during the Columbian Exposition and subsequently removed from the bridge.

Because of the historic significance of the bridge, every individual stone was documented during the project planning phase. All the stones to be reused were inventoried during construction and restored to the bridge. The deteriorated stones were replaced with limestone and granite of the same dimensions from quarries that supplied the original stone.

This restoration included the recreation of the original historic light standards that were originally part of the bridge. The light standard fabricator, Robinson Iron Works, Alexander City, AL, used historic photographic documentation to recreate the light poles. Each of the light poles has an ornamental base and is topped with a circular crown that originally held an arc lamp; two ship prows extended from each post, which once held incandescent lamps. The Chicago Department of Transportation, working with the Chicago Park District, restored the park area located north and east of the bridge site which had become overgrown and was strewn with rubble. The Park District prepared restoration plans, and the area is now a welcomed addition to the bridge site and affords an area for picnicking and other recreation.

Construction started on June 29, 1994, and was completed on May 26, 1995, at a cost of approximately \$5 million. The project was completed in two phases while the bridge remained open to vehicular traffic. Southbound traffic was detoured to local streets outside the project area while northbound traffic was shifted back and forth on one half of the bridge.

The success of the project was accomplished by the accurate documentation of the stonework which was removed from the bridge. Frequent meetings were required to coordinate this work to insure that project documentation and preservation requirements were met. Stone cleaning and repair were reviewed to insure that the historic stonework was properly conserved.

The project was designed by the engineering firm of Meridian Engineering and Planners Incorporated in association with the architectural firm Hasbrouk, Peterson, Zimoch, Sirirattumrong. The construction manager was Globetrotters. Engineering, Inc.

STANDARDS FOR RECONSTRUCTION

- "Reconstruction will be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture, and such reconstruction is essential to the public understanding of the property.
- Reconstruction of a landscape, building, structure or object in its historic location will be preceded by a thorough archeological investigation to identify and evaluate those features and artifacts which are essential to an accurate reconstruction. If such resources must be disturbed, mitigation measures will be undertaken.
- Reconstruction will include measures to preserve any remaining historic materials, features and spatial relationships.
- Reconstruction will be based on the accurate duplication of historic features and elements substantiated by documentary or physical evidence rather than on conjectural design or the availability of different features from other historic properties. A reconstructed property will recreate the appearance of the non-surviving historic property in materials, design, color and texture.
- A reconstruction will be clearly identified as a contemporary re-creation.
- Designs that were never executed historically will not be constructed."¹²

Whereas the standards for restoration provide guidance on restoring, or returning building features to an earlier appearance, the standards for reconstruction address those aspects of treatment necessary to recreate an entire non-surviving building or structure with new materials. The goal is to make the building or structure appear as it did at a particular and significant time. With reconstruction, there is little or no extant historic material prior to treatment, and in some cases, nothing visible. It is essential that reconstruction is based upon detailed historical documentation and conjecture is avoided.

CHAPTER 7

OTHER CONSIDERATIONS

Other factors must be considered when dealing with preserving historic public works. Sections 106 and 110 of the National Historic Preservation Act as amended, building codes, preservation tax incentives and Americans with Disabilities Act compliance are only a few considerations.

NATIONAL HISTORIC PRESERVATION ACT SECTIONS 106 and 110

Federal agencies have additional responsibilities when dealing with historic structures. Section 110 of the National Historic Preservation Act of 1966, as amended through 1992, states that "The heads of all federal agencies shall assume responsibility for the preservation of historic properties which are owned or controlled by such agency. Prior to acquiring, constructing, or leasing buildings for purposes of carrying out agency responsibilities, each federal agency shall use, to the maximum extent feasible, historic properties available to the agency. Each agency shall undertake, consistent with the preservation of such properties and the mission of the agency and the professional standards established pursuant to Section 101(f), if any preservation may be necessary to carry out this section." ¹³

Section 110 further states that, in cooperation with the State Historic Preservation Officer for the state involved, each federal agency will establish a program to locate, inventory and nominate all properties under the agency's control to the National Register. Each federal agency will also initiate measures to assure that where, as a result of federal action, an historic property is to be significantly altered or demolished, steps will be taken to properly record and document the property.

Section 106 of the same Act requires that the head of any federal agency having direct or indirect jurisdiction over a proposed federal undertaking in any state, and the head of any federal department or independent agency having authority to license any undertaking shall afford the Advisory Council on Historic Preservation reasonable opportunity to comment on such undertakings. The Advisory Council has the authority to review all federal programs dealing with historic structures and to act accordingly on each. Where there is a chance of any adverse affects to a historic property, building, structure or object, steps must be taken to avoid,

reduce or otherwise mitigate adverse impact to National Register listed and eligible resources.

Section 106 applies to all federal undertakings. These include all federally-funded, permitted or licensed projects, whether or not actually carried out by a federal agency. For example, local housing rehabilitation programs that use Community Development Block Grant funds which are funded through HUD, are required to go through the Section 106 process when properties involved are listed on or eligible for National Register listing.

A historic resources assessment is required if an undertaking affects a property that is at least 50 years old to determine its National Register eligibility.

PROCEDURES FOR COMPLETING SECTION 106 REVIEW

Step 1. Identification and Evaluation

In this step, an action is identified as an undertaking for purposes of Section 106, and for potential historic properties identified and evaluated. An action is an undertaking if it results in changes in the character or use of any historic property. Once potential historic properties are identified, they are evaluated for eligibility to the National Register, using National Register criteria. The agency's determination of eligibility is then reviewed by the SHPO. If the SHPO concurs with the agency's determination of eligibility, the property is treated accordingly for purposes of Section 106.

Step 2. Assessment of Effects

Once historic properties are identified, the agency then determines whether the proposed undertaking will have any effect on any identified historic properties. This is done in consultation with the SHPO. A proposed undertaking has an "effect" if it may alter the characteristics that qualify the property for the National Register. This effect is an "adverse effect" if the proposed undertaking will diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. Such effects may include not only physical destruction or damage, but isolation of the property from its setting. The introduction of out-of-character elements, allowing deterioration through neglect, or the transfer of the property are also considered adverse effects.

If no effect is found, the agency must notify the SHPO and interested parties and provide appropriate documentation for its finding. If an effect is found, but it is not adverse, then the agency can obtain SHPO's concurrence and notify the Advisory Council on Historic Preservation, or submit its findings directly to the ACHP.

If the effect is found to be an adverse effect as a result of the undertaking, then the agency proceeds to the next step.

Step 3. Consultation

Consultation is a process in which the agency, the SHPO and the ACHP attempt to agree on an approach that avoids, minimizes or mitigates adverse effects on historic properties. Typically, consultation takes place between the agency and the SHPO; the ACHP may be invited or unilaterally decides to join. The purpose of consultation is to consider means of mitigating or reducing adverse effects. Typical mitigation measures may include design changes to eliminate adverse effects, documentation using HABS/HAER standards where substantial change or destruction of the resource is unavoidable, or the relocation or salvage of a resource. The consultation process, when successful, results in a Memorandum of Agreement. This agreement specifies how the undertaking will be carried out, while mitigating the adverse effects. If the consultation process fails, no MOA is produced and the ACHP is required to comment.

Step 4. Council Comment

Under Section 106, the ACHP may comment on federal undertakings affecting historic resources. When an MOA is reached during the consultation process, acceptance of the MOA by the ACHP serves as its comment. However, if no MOA is reached because consultation has failed, then the agency must request council comment. The ACHP then provides written comments to the agency, the SHPO and other interested parties.

Step 5. Proceeding with the Undertaking

Finally the agency proceeds with the project in accordance with the MOA if one has been reached. If no MOA is reached, the agency is required to take the ACHP comments into account in the undertaking.

Step 6. Alternate Approaches

The Section 106 regulations provide three alternative means to comply with Section 106—

- Programmatic agreements among an agency, the ACHP and one or more SHPO's, and others
- Comparable regulations developed by an agency and approved by the ACHP
- An agreement between the ACHP and a state, which substitutes a state review system for the 106 process.

Step 7. State Review Process

Many states have their own review procedure, established by the SHPO. The SHPO may enter into agreement with the ACHP, allowing state review processes to substitute for Section 106 procedures. Federal agencies have the option of going through the state review process or normal Section 106 review.¹⁴

BUILDING CODES

The first step in meeting code requirements is to determine which code is applicable in any given location. The three major codes that most of the nation adhere to are the Standard Building Code used in the southern US, the Uniform Building Code used in the west and the Basic Building Code (soon to be named National Building Code) produced by the Building Officials and Code Administrators and used in the northeastern and midwestern US.

BOCA has taken the lead in a new provision entitled *Repair, Alteration, Addition, and Change of Use of Existing Buildings*,¹⁵ which allows individual code requirements to be waived as long as the safety factor is equivalent to that of the new building code. BOCA has also published a *Basic/National Existing Structure Code* which applies to existing structures and dictates that alterations and repairs may be made to existing structures without requiring the existing structure to comply to new construction codes, as long as it complies to the *Code Enforcement Guidelines for Rehabilitation of Existing Structures* issued by HUD. In California, and some other states, the State Historical Building Code provides alternatives to meeting new construction codes for qualified historic buildings.

Historic buildings which have been properly designated historically significant may not be subject to these codes. These structures may fall in a grey area where they may be repaired for the purpose of historic preservation or restoration without being required to conform to the existing code as long as

they receive approval from the local or state certifying official. Again, a problem exists in defining what is a historically significant building, with different communities having different definitions. Checking the local and state codes in your area will give a better idea of the requirements you must fulfill.

A booklet offering advice for preservationists faced with code compliance issues is provided by the National Trust for Historic Preservation. *Safety, Building Codes and Historic Buildings*, by Marilyn Kaplan, covers the evolution of the building regulatory system, addresses common code compliance problems faced with old and historic buildings, explains existing rehabilitation codes and suggests regulatory and attitude changes. For more information see Selected Bibliography.

PRESERVATION TAX INCENTIVES

Many states provide reductions in property and other taxes to encourage preservation projects with historic structures and commercial properties. The federal government also provides preservation tax incentives in the form of a rehabilitation tax credit and a charitable contribution deduction.

"Since 1976, the Historic Preservation Tax Incentives have produced the following benefits for the nation—

- more than 27,000 historic properties have been rehabilitated and saved
- the tax incentives have stimulated private rehabilitation of over \$18 billion
- more than 149,000 housing units rehabilitated and 75,000 housing units created, of which over 30,000 are low and moderate-income units." ¹⁶

Preservation tax incentives are available for any qualified project that the Secretary of the Interior designates a certified rehabilitation of a certified historic structure. A certified historic structure is any building that is listed individually on the National Register of Historic Places, or located in a registered historic district and certified as being of historic significance to the district. A certified rehabilitation is a rehabilitation of a certified historic structure that is certified as being consistent with the historic character of the property and, where applicable, the district in which it is located. The Internal Revenue Code limits the tax credits for rehabilitation to depreciable buildings — buildings used in a trade or business or held for the production of income, such as commercial or rental residential properties. For purposes of charitable contributions only, certified

historic structures need not be depreciable buildings to qualify.

Per the Tax Reform Act of 1986, a 20 percent tax credit for the substantial rehabilitation of historic buildings for commercial, industrial and rental residential purposes, and a 10 percent tax credit for the substantial rehabilitation for nonresidential purposes of buildings built before 1936 is allowed. A straightline depreciation period of 27.5 years for residential property and 31.5 years for nonresidential property for the depreciable basis of the rehabilitated building is reduced by the amount of the tax credit claimed.

The availability of income tax reduction varies by state, so check with the State Historic Preservation Office about available programs. Rehabilitation tax credits apply only to certified rehabilitations, which are approved by the National Park Service as being consistent with the historic character of the structure or district in which the structure is located. Form 10-168, Historic Preservation Certification Application, should be requested from the State Historic Preservation Office. There is a fee for certification, which is dependent on total rehabilitation costs. Certain criteria must be met for the certification to be approved.¹⁷

For more information on federal preservation tax incentives visit Heritage Preservation Services online, <http://www2.cr.nps.gov/tps/tax/tax_p.htm>.

AMERICANS WITH DISABILITIES ACT COMPLIANCE ¹⁸

When dealing with historic properties, local building codes may make special exceptions for work conducted on historic properties. Local and state codes in the area in question should be consulted to determine accessibility requirements. For examples, the State of California has adopted a state code, the State Historical Building Code, which sets out procedures when dealing with a qualified historic structure or property. The code not only permits the retention of a structure's original fabric if no life-threatening hazards are created, but also allows the local enforcement authority to use alternatives to disabled access as long as reasonably equivalent access is assured. In extreme conditions, exemption from the access provision may be possible, but only if the fabric or significant aspect of the building would be destroyed by meeting these requirements, and equivalent services are offered for the handicapped in a non-exempt location.

For more information, Preservation Brief 32, *Making Historic Properties Accessible*, is available electronically, <http://www2.cr.nps.gov/ns_search/tps/briefs/brief32.htm> or see Appendix E, Preservation Briefs/Preservation Tech Notes.

ENDNOTES

1. Public Works Historical Society, APWA Website, <<http://www.pubworks.org>>.
2. National Park Service. *Federal Historic Preservation Laws* (Washington, DC: US Department of the Interior, 1992), p 7.
3. National Register Bulletin, *Certified Local Governments* (Washington, DC: US Department of the Interior, 1992), pp 42-43.
4. National Register Bulletin, *How to Apply the National Register Criteria for Evaluation* (Washington, DC: US Department of the Interior), p 1.
5. *National Historic Landmarks, Illustrating the Heritage of the United States and National Landmarks Assistance* (Washington, DC: US Department of the Interior).
6. Weeks, Kay D. and Anne E. Grimmer. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* (Washington, DC: US Department of the Interior, 1995), p 18.
7. Ibid., p 62.
8. *Donner Summit Bridge Report* (Sacramento, CA: APWA Chapter), p 33.
9. Public Works Project of the Year Award application, *Port of Bellingham-Fairhaven Station*, 1993, p 43.
10. Weeks, Kay D. and Anne E. Grimmer, p 118.
11. Public Works Structure of the Year Award application. *Lake Shore Drive Bridge Over 59th Street Inlet* (Chicago, IL: APWA, 1996), p 66.
12. Weeks, Kay D. and Anne E. Grimmer, p 216.
13. National Register Bulletin, *Certified Local Governments*, pp 42-43.
14. Ibid.
15. Kass, Stephen L. *Rehabilitating Older and Historic Buildings* (New York: John Wiley and Sons, Inc., 1985).
16. <http://www2.cr.nps.gov/tps/tax/tax_p.htm>.
17. *Preservation Tax Incentives for Historic Buildings* (Washington, DC: US Department of the Interior, 1987), pp 2-12.
18. Preservation Brief 32, <<http://www2.cr.nps.gov/ns-search/tps/briefs/brief32.htm>>.

GLOSSARY

AASLH — American Association for State and Local History

ACHP — Advisory Council on Historic Preservation

BUILDING — As defined by the National Register of Historic Places, a building is a resource "...such as a house, barn, church, hotel or similar construction, [and] is created principally to shelter any form of human activity." Building may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or house and barn.

CLG — Certified Local Government

CODE OF FEDERAL REGULATIONS (CFR) — The part containing the National Register Criteria is usually referred to as 36 CFR 60, and is available from the National Park Service.

CULTURAL RESOURCE — Any district, site, building, structure or object significant in American history, architecture, archeology, engineering or culture at the national, state or local level.

DISTRICT — As defined by the National Register of Historic Places, "a district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development." Examples of districts include residential, commercial and business districts; large farms, estates, ranches and plantations; civic centers, canal systems and large landscaped parks.

EVALUATION — Process by which the significance and integrity of a historic property are judged eligible for National Register listing.

HABS/HAER — Historic American Building Survey/Historic American Engineering Record

INTEGRITY — The unimpaired ability of a property to convey its historic significance.

IDENTIFICATION — Process through which information is gathered about historic properties.

INVENTORY — A repository of information on specific properties evaluated as significant.

LISTING — The formal entry of a property in the National Register of Historic Places.

MOA — Memorandum of Agreement

MULTIPLE PROPERTY LISTING — A group of historic properties related by a common theme, general geographical area and period of time for the purpose of National Register documentation and listing.

NEPA — National Environmental Policy Act of 1969, as amended through 1992. Instructs Federal agencies to consider impacts of projects on environmental, historic, cultural and other kinds of resources, and requires Environmental Impact Statements (EIS).

NHL — National Historic Landmark is a historic property evaluated and found to be of national significance and designated as such by the Secretary of the Interior.

NHPRC — National Historic Publications and Records Commission

NTHP — National Trust for Historic Preservation

OBJECT — As defined by the National Register of Historic Places, "the term 'object' is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment." Examples of objects include sculpture, monuments and fountains.

PRESERVATION — The process of sustaining the form and extent of a structure essentially as it now exists. Preservation aims at halting further deterioration and providing structural stability but does not contemplate significant rebuilding.

PRESERVATION PLAN — A series of activities through which goals, priorities and strategies for identification, evaluation, registration and protection of historic properties are developed.

PROPERTY — A property is an area of land containing a single historic resource or a group of resources, and constituting a single entry in the National Register of Historic Places.

RECONSTRUCTION — The process of reproducing by new construction the exact form and detail of a vanished structure, or part thereof, as it appeared at a specific period of time.

REHABILITATION — The process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use.

RESOURCE — Any building, structure, site or object that is part of or constitutes a historic property.

RESTORATION — The process of accurately recovering the form and details of a property as it appeared at a particular time by removing later work and by replacing missing original work.

SHPO — State Historic Preservation Officer is the official designated by the governor to administer the state's historic preservation program and the duties described in 36CFR Part 61 including nominating properties to the National Register.

SITE — As defined by the National Register of Historic Places, "a site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure."

STABILIZATION — The act or process of applying measures designed to reestablish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.

STRUCTURE — As defined by the National Register of Historic Places, "the term 'structure' is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter." Examples of structures include bridges, dams, boats and ships, railroad cars and locomotives and aircraft.

SURVEY — A comprehensive gathering of detailed data on the historical and physical character of a community or region through fieldwork and historical research.

APPENDIX A

CHECKLIST FOR DESCRIBING STRUCTURES OF ENGINEERING OR INDUSTRIAL SIGNIFICANCE

Railroads, Subways and Related Resources

- Dates of construction
- Principal engineers
- Distance (length in miles)
- Terminus points
- Grade: Highest and lowest points
- Type of track/gauge (standard or narrow)
- Major buildings and structures along right-of-way that are included within the boundaries
- Historic rolling stock
- Cuts and earthfills
- Dimensions of trolleys
- Power system
- Alterations

Roads, Highways and Parkways

- Dates of construction
- Distance (length in miles)
- Principal engineers and, if any, landscape architects
- Topography
- Width of roadway, shoulders and rights-of-way
- Number and type of bridges, culverts and tunnels
- Major cuts and earthfills
- Grade of highest and lowest points and super elevation
- Surface material
- Types of entrances, exits and intersections
- Traffic control system
- Sloping of banks
- Walls, guardrails and curbing
- Plantings and other landscape features
- Associated buildings within the boundaries, including gatehouses, tollbooths and refectories
- Significant vistas
- Alterations

Canals and Waterways

- Dates of construction
- Principal engineers

- Elevation at terminus points and the summit level
- Number and type of locks
- Source of water supply
- Average speed and type of navigation (steamboat, towpath or bateau)
- Typical lock dimensions
- Typical boat dimensions
- Wharves and docks
- Lengths in both canalized and slackwater miles
- Historical summary (original aims of company, etc.)
- Alterations

Airports

- Dates of construction
- Length of runways
- Surface materials
- Principal engineers
- Air traffic tower (dimensions, height, materials, etc.)
- Communications system
- Hangars
- Terminals
- Historic aircraft
- Alterations

Bridges

- Dates of construction
- Manufacturer (if prefabricated)
- Engineers
- Association with particular railroad, road, or other transportation route
- Substructure (structure below deck)
 - Height above featured span
 - Material of abutments and piers
- Deck and superstructure (above deck)
 - Type of truss, arch, etc.
 - Materials and dimensions of deck
 - Number of spans and length
 - Construction depth
 - Width of road
- Alterations

Trestles and Viaducts

- Dates of construction
- Number of spans and lengths
- Engineers
- Association with particular railroad, road or other transportation route
- Number of piers (bents)
- Materials of construction

- Double or single track
- Manufacturer and/or contractor
- Feature spanned (river, valley, gorge, etc.)
- Width
- Major height (water level to deck level)
- Alterations

Tunnels

- Dates of construction
- Engineers
- Association with particular railroad, road or other transportation route
- Feature traversed
- Length
- Dimensions of bore
- Double or single track (if a railroad tunnel)
- Materials of construction (liner, portals, etc.)
- Ventilation system
- Engineering problems encountered
- Alterations

Lighthouses

- Dates of construction
- Engineers
- Approximate dimensions of lighthouse; dimensions at base and top, height of focal plane above sea level
- Material used in construction: Brick, stone, iron, wood-painted, etc.
- Form of lighthouse: Conical, octagonal, rod or steel screw pile tower
- Distinguishing architectural details
- Type of illuminant and lenses used: Existing and previous source; shape of lantern panes; range of light beam
- Special signalling equipment: Fog horns, radio signals, etc.
- Associated buildings and structures within the boundaries, including the keeper's house, oil house, sheds and cisterns
- Alterations

Water Supply and Control Systems

- Dates of construction
- Construction materials
- Principal engineers
- Flood control systems
- Water distribution systems
- Filtration systems
- Settling tanks

- Associated buildings and structures (gatehouses, dams, pumping station, reservoirs, etc.)
- Purpose (public water, irrigation, flood control, etc.)
- Alterations

Power Dams

- Dates of construction
- Construction materials
- Principal engineers
- Levee dimensions
- Floodway dimensions
- Gates
- Channel dimensions
- Storage reservoir
 - Slope
 - Size
 - Grade
 - Section
- Waterwheel type (overshot, for example)
- Penstocks
- Power generators
 - Number of kilowatts
- Alterations

Power Generating Plants

- Dates of construction
- Construction materials
- Principal Engineers
- Source of power: Coal fired, steam, nuclear, hydroelectric, etc.
- Buildings and structures comprising facility
- Alterations (See also Power Dams and Electrical Systems)
- Electrical Systems
- Dates of construction
- Construction materials
- Wiring (type, placement above or below ground)
- Substations
- Towers for power lines (dimensions, type, etc.)
- Light fixtures
- Transformer boxes
- Switches
- Alterations (See also Power Dams and Electrical Systems)

Electrical Systems

- Dates of construction
- Principal engineers
- Wiring (type, placement above or below ground)
- Substations

- Towers for power lines (dimensions, types, etc.)
- Light fixtures
- Transformer boxes
- Switches
- Alterations (See also Power Generating Plants)

Heavy Power Machinery

- Dates of construction
- Cylinder bore and stroke
- Horsepower
- R.P.M. (Revolutions per minute)
- Pounds per square inch (of steam)
- Manufacturer
- Materials
- Type of valves and gear
- Type of crosshead guides
- Type of connecting rod ends
- Type of crank
- Method of drive (rope, direct, etc.)
- Flywheel diameter and face
- Type of condenser
- Uses of exhaust steam
- Changes to engine
- Boiler history, if known
- Earlier power sources on site
- Alterations

Sanitary Systems

- Dates of construction
- Construction materials
- Principal engineers
- Settling tanks
- Piping system
- Filtration system
- Alterations (See also Water Supply and Control Systems)

Mines and Other Extraction Facilities

- Dates of construction
- Construction materials
- Construction firm
- Principal mining engineers
- Mineral content
- Type of mine (open-pit, etc.)
- Mine dimensions
- Materials and type of conveyance systems (trams, railroads, etc.)
- Shafts, tunnels, pits, and other structures
- Tailings
- Alterations

Mills, Factories and Other Processing Facilities

- Dates of construction
- Construction materials
- Principal engineers
- Power source (see Power Generating Plants and Heavy Power Machinery)
- Buildings and structures (dimensions, functions, construction materials, physical layout, etc.)
- Site transportation systems (railroad spurs, loading and shipping docks, etc.)
- Alterations

APPENDIX B FEDERAL PRESERVATION LAWS AND STATUTES

MAJOR LEGISLATION

Antiquities Act of 1906

This is the nation's first general historic preservation law which authorized the president to designate as national monuments, "historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest" situated on federal property. Influenced by widespread looting and destruction of prehistoric sites in the southwestern US, this act also established protective regulations for archeological sites situated on public lands.

National Park System Organic Act, 1916

This act established the National Park Service as a bureau of the Department of the Interior with jurisdiction over nine previously designated national monuments. Subsequent legislation expanded the scope of federal preservation activity and with this, the National Park Service became the administrative agency for the nation's historic preservation program.

National Historic Sites Act of 1935

This act expanded the role of the federal government in national preservation activities and authorized the Secretary of the Interior to designate National Historic Landmarks; to conduct surveys and research on archeological sites; to acquire, restore, maintain and operate historic properties; and to interpret these resources to the public. The act also provided a permanent legislative basis for the HABS program begun two years earlier to document the nation's architectural heritage.

National Historic Preservation Act of 1966 Amended 1980, 1992

This act represents a fundamental shift in federal preservation policy, increasing federal involvement in preservation activities nationwide and establishing the organizational structure for the program. Established in 1966 was the National Register of Historic Places, a basic inventory of America's historic built environment including, "districts, sites, buildings, structures, and objects significant in American history, architecture, archeology,

engineering and culture." The act also established procedures for the participation of state and local government agencies in the nation's historic preservation program including provisions for granting federal funds to state and local governments in support of historic preservation. Sections 106 and 110 of the act established protection for designated historic resources. The act also established the Advisory Council on Historic Preservation. Significant amendments to the act were passed in 1980 and 1992, requiring owner consent for listing on the National Register, establishing the National Museum for the Building Arts, and establishing the National Center for Preservation Technology and Training.

National Environmental Policy Act, 1969

This act established national policies for the protection of the environment and declared the responsibilities of the federal government to include the preservation of, "important historic, cultural, and natural aspects of our natural heritage."

Executive Order 11593, "Protection and Enhancement of the Cultural Environment"

This order further directed the same agencies to uphold their responsibilities for historic resources within their administrative jurisdiction as has been directed by the 1966 National Historic Preservation Act directing further survey and protection of historic resources owned by the federal government.

Archeological and Historic Preservation Act of 1974

This act authorized the Secretary of the Interior and other federal agencies to preserve or salvage historic and archeological resources threatened by dam construction projects.

Archeological Resources Protection Act, 1979

This act protects archeological resources on public and Indian lands.

Native American Graves and Repatriation Act, 1990

This act provides for the protection of Native American graves, burial mounds and cultural property.

OTHER FEDERAL LAWS AND REGULATIONS PERTAINING TO HISTORIC PRESERVATION

Reservoir Salvage Act, 1960

Established policies for the preservation of historical and archeological resources that might otherwise be irreparably lost or destroyed as the result of dam construction and other federal building projects.

Department of Transportation Act, 1966

This act protects historic sites from being adversely affected by federal transportation projects.

Demonstration Cities and Metropolitan Development Act, 1966

This act authorized funding for preservation projects under HUD, urban renewal and housing programs.

Amtrak Improvement Act, 1974

This act included provisions to promote the preservation and reuse of historic railroad terminals.

Housing and Community Development Act of 1974

This act consolidated urban grant programs under a single Community Development Block Grant Program.

Public Buildings Cooperative Use Act of 1976

This act directed General Services Administration to acquire historic structures for federal office use and to promote mixed public uses of historic buildings.

Housing and Community Development Act of 1977

This act established the Urban Development Action Grant Program.

American Indian Religious Freedom Act of 1978

This act declared the protection and preservation of Native Americans' religious freedoms to be a national policy.

FEDERAL LEGISLATION CONCERNING HISTORIC PRESERVATION TAX INCENTIVES

Since 1976 the Internal Revenue Code has included incentives to stimulate investment in income-producing historic buildings. Under the Tax Reform Act of 1986, owners and some lessees of historic buildings were entitled to a 20 percent income tax credit on the cost of rehabilitating such structures for income-producing uses. To qualify, the project must be designated by the Secretary of the Interior as a certified rehabilitation of a certified historic structure. In addition, the Internal Revenue Code also permits a 10 percent tax credit for the rehabilitation of non-historic, non-residential buildings built before 1936. No investment tax credit exists for owner occupied residences.

The Internal Revenue Code also permits income and estate tax deductions for charitable contributions of partial interests in historic property, principally easements. In most cases, the property donated must be given in the interest of preserving a historically important land area or a certified historic structure,

Detailed, current information about federal historic preservation tax incentives is accessible at http://www2.cr.nps.gov/tps/tax/tax_p.htm.

FEDERAL REGULATIONS GOVERNING NATIONAL HISTORIC PRESERVATION PROGRAMS

36 CFR Part 60

National Register of Historic Places

36 CFR Part 61 -

Procedures for approved state and local government historic preservation programs

36 CFR Part 63

Determination of eligibility for inclusion in the National Register of Historic Places

36 CFR Part 68

The Secretary of the Interior's Standards for Historic Preservation Projects

36 CFR Part 73
World Heritage convention

36 CFR Part 78
Waiver of federal agency responsibilities under
Section 110 of the National Historic Preservation
Act

36 CFR Part 800
Protection of Historic Properties-Advisory
Council on Historic Preservation

36 CFR Part 801
Historic preservation requirements of the Urban
Development Action Grant Program

40 CFR Part 1500
Guidelines for the preparation of Environmental
Impact Statements

41 CFR Part 101
Federal property management regulations

REGULATIONS GOVERNING NATIONAL HISTORIC LANDMARKS

36 CFR Part 65
National Historic Landmark Program

REGULATIONS GOVERNING THE FEDERAL ARCHEOLOGY PROGRAM

43 CFR Part 3
Preservation of American antiquities

43 CFR Part 7
Protection of archeological resources

43 CFR Part 79
Curation of federally-owned and administered
archeological collections

REGULATIONS GOVERNING FEDERAL TAX INCENTIVES

36 CFR Parts 1 and 602
Investment tax credit for qualified rehabilitation
expenditures

26 CFR Parts 1, 20, 25, 602
Tax credit for qualified conservation
contributions

36 CFR Part 67
Historic preservation certifications

REGULATIONS CONCERNING OTHER MAJOR FEDERAL HISTORIC PRESERVATION PROGRAMS

23 CFR Part 771
Environmental Impact and Related Procedures
(DOT-Federal Highway Administration)

40 CFR Parts 1500-1517
Regulations of the Council on Environmental
Quality

41 CFR Part 101-17 -
Assignment and utilization of space (GSA)

41 CFR Part 101-20 -
Management of building and grounds (GSA)

This information is drawn from *Federal Historic
Preservation Laws, Keeping Time: The History and
Theory of Preservation in America, Landmark Yellow
Pages, and The American Mosaic: Preserving A
Nation's Heritage*.

Access to many federal historic preservation laws is
available online —

National Park Service
<<http://www.cr.nps.gov/linklaws.htm>>

ArchNet
<<http://spirit.lib.uconn.edu/ArchNet/Topical/CRM/crmusdoc.html>>

Preserve/Net Law Index
<<http://www.preservenet.cornell.edu/law/plawmain.htm>>

APPENDIX C

HABS/HAER SUPPLEMENTAL INFORMATION

The HABS/HAER database is accessible on the Internet, <<http://www.cr.nps.gov/habshaer/database.htm>>.

The following HABS/HAER Guidelines are available from HABS/HAER, National Park Service, 1849 C Street, NW, Washington, DC 20013-7127; by telephone, 202-343-9618.

- *Recording Structures and Sites with HABS Measured Drawings*
- *HABS Historical Reports*
- *HAER Field Instructions*
- *Specifications for the Production of Photographs*
- *Transmitting HABS/HAER Documentation*

A new book that lists all of the structures and properties in the HABS/HAER database was published in 1994, *America Preserved: A Checklist of Historic Buildings, Structures and Sites*, and includes a comprehensive checklist of the Historic American Buildings Survey/Historic American Engineering Record structures and sites recorded since 1933. The new checklist has been expanded and for the first time, each entry includes the type of documentation and the number of items for each category — the number of measured drawings, photographs and descriptive historic data. To help users locate materials easily and quickly, the Library of Congress shelf list numbers are included.

In 1995, the HABS/HAER database became accessible on the Internet through the National Center for Preservation Technology and Training's Website, <<http://www.ncptt.nps.gov>>. The list contains ordering instructions for prints, drawings and text; an alphabetical listing by state of property names, addresses, types of documentation and Library of Congress shelf list numbers.

For more information on Record Group 515 contact the National Archives at College Park, 8601 Adelphi Road, College Park, MD, 20740-6001; by telephone, 301-713-6800

For more information about catalogued HABS/HAER documents, contact Prints and Photographs Reading Room, Library of Congress, 101 Independence Avenue, SE, Washington, DC,

APPENDIX D NATIONAL REGISTER BULLETINS

National Register Bulletins are developed by the National Park Service and are available from your State Historic Preservation Office. See Appendix J, State Historic Preservation Offices, or visit the National Register Website, <<http://www.cr.nps.gov/nr/nrpubs.html>>.

The Basics

How to Apply the National Register Criteria for Evaluation
How to Complete the National Register Registration Form
How to Complete the National Register Multiple Property Nomination Form
Researching a Historic Property

Property Types

How to Apply National Register Criteria to Post Offices
How to Evaluate and Nominate Designated Historic Landscapes
Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places
Guidelines for Evaluating and Nominating Properties that have Achieved Significance Within the Past Fifty Years
Guidelines for Evaluating and Documenting Properties Associated with Significant Persons
Guidelines for Evaluating and Nominating Aids to Navigation
Guidelines for Evaluating and Registering Historic Archeological Sites and Districts
Guidelines for Evaluating and Documenting Traditional Cultural Properties
Guidelines for Identifying, Evaluating and Registering America's Historic Battlefields
Guidelines for Evaluating and Registering Cemeteries and Burial Places
Guidelines for Identifying, Evaluating and Registering Historic Mining Properties

Technical Assistance for Preparing Nominations

Definition of National Register Boundaries for Archeological Properties
Defining Boundaries for National Register Properties

How to Improve the Quality of Photographs for National Register Nominations

Other Guidance

Guidelines for Local Surveys: A Basis for Preservation Planning
Examples of National Register Nomination Documentation: Concise Documentation

APPENDIX E

PRESERVATION BRIEFS

PRESERVATION TECH NOTES

Preservation Briefs and Preservation Tech Notes are produced by the National Park Service, Heritage Preservation Services, and are available from your State Historic Preservation Office (See Appendix J, State Historic Preservation Offices), or visit the National Park Service's Heritage Preservation Service's free publications Website, <<http://www2.cr.nps.gov/freepubs/htm>>.

PRESERVATION BRIEFS

1. The Cleaning and Waterproof Coating of Masonry Buildings
2. Repointing Mortar Joints in Historic Brick Buildings
3. Conserving Energy in Historic Buildings
4. Roofing For Historic Buildings
5. The Preservation of Historic Adobe Buildings
6. Dangers of Abrasive Cleaning to Historic Buildings
7. The Preservation of Historic Glazed Architectural Terra-Cotta
8. Aluminum and Vinyl Siding on Historic Buildings: The Appropriateness of Substitute Materials for Resurfacing Historic Wood Frame Buildings
9. The Repair of Historic Wooden Windows
10. Exterior Paint Problems on Historic Woodwork
11. Rehabilitating Historic Storefronts
12. The Preservation of Historic Pigmented Structural Glass (Vitrolite and Carrara Glass)
13. The Repair and Thermal Upgrading of Historic Steel Windows
14. New Exterior Additions To Historic Buildings: Preservation Concerns
15. Preservation of Historic Concrete: Problems and General Approaches
16. The Use of Substitute Materials on Historic Building Exteriors
17. Architectural Character - Identifying The Visual Aspects of Historic Buildings as an Aid to Preserving Their Character
18. Rehabilitating Interiors in Historic Buildings - Identifying Character - Identifying Elements
19. Repair and Replacement of Historic Wooden Shingle Roofs
20. The Preservation of Historic Barns
21. Repairing Historic Flat Plaster - Walls and Ceilings
22. The Preservation and Repair of Historic Stucco
23. Preserving Historic Ornamental Plaster
24. Heating, Ventilating, and Cooling Historic Buildings: Problems and Recommended Approaches
25. The Preservation of Historic Signs
26. The Preservation and Repair of Historic Log Buildings
27. The Maintenance and Repair of Architectural Cast Iron
28. Painting Historic Interiors
29. The Repair, Replacement, and Maintenance of Historic Slate Roofs
30. The Preservation and Repair of Historic Clay Tile Roofs
31. Mothballing Historic Buildings
32. Making Historic Properties Accessible
33. The Preservation and Repair of Historic Stained and Leaded Glass
34. Applied Decoration for Historic Interiors: Preserving Composition Ornament

- 35. Understanding Old Buildings: The Process of Architectural Investigation
- 36. Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes
- 37. Appropriate Methods for Reducing Lead-Paint Hazards in Historic Houses
- 38. Removing Graffiti form Historic Masonry
- 39. Holding the Line: Controlling Unwanted Moisture in Historic Buildings
- 40. Preserving Historic Ceramic Tile Floors
- 41. Seismic Retrofit of Historic Buildings

PRESERVATION TECH NOTES

- Doors No. 1: Historic Garage and Carriage Doors: Rehabilitation Solutions
- Exterior Woodwork No. 1: Proper Painting and Surface Preparation
- Exterior Woodwork No. 2: Paint Removal from Wood Siding
- Exterior Woodwork No. 3: Log Crown Repair and Selective Replacement Using Epoxy and Fiberglass Reinforcing Rods
- Exterior Woodwork No. 4: Protecting Woodwork Against Decay Using Borate Preservatives
- Finishes No. 1: Process-Printing Decals as a Substitute for Hand Stenciled Ceiling Medallions
- Historic Interior Spaces No. 1: Preserving Historic Corridors in Open Space Office Plans
- Historic Interior Spaces No. 2: Preserving Historic Office Building Corridors
- Maintenance No. 1: Preventative Care for Classical Lighthouse Lenses
- Masonry No. 1: Substitute Materials: Replacing Deteriorated Serpentine Stone with Pre-Cast Concrete
- Masonry No. 3: Water Soak Cleaning of Limestone

- Masonry No. 4: Non-Destructive Evaluation Techniques for Masonry Construction
- Mechanical Systems No. 1: Replicating Historic Elevator Enclosures
- Metals No. 1: Conserving Outdoor Bronze Sculpture
- Metals No. 3: In-kind Replacement of Historic Stamped-Metal Exterior Siding
- Museum Collections No. 1: Museum Collection Storage in a Historic Building Using a Prefabricated Structure
- Metals No. 4: Relocating and Retrofitting Historic Iron Bridges
- Temporary Protection No. 1: Temporary Protection of Historic Interiors During Construction and Repair
- Windows No. 11: Installing Insulation Glass in Existing Wooden Sash Incorporating the Historic Glass
- Windows No. 17: Repair and Retrofitting Industrial Steel Windows
- Windows No. 18: Aluminum Replacement Windows with True Divided Lights, Interior Piggyback Storm Panels, and Exposed Historic Wooden Frames

APPENDIX F PRESERVATION-ALLIED ORGANIZATIONS

Advisory Council on Historic Preservation

1100 Pennsylvania Avenue, NW, Suite 809
Washington, DC 20004
202-606-8505
E-mail <achp@achp.org>
Web <<http://www.achp.gov>>

Alliance for Historic Landscape Preservation

82 Wall Street, Suite 1105
New York, NY 10005

American Association for State and Local History

530 Church Street, Suite 600
Nashville, TN 37219-2325
615-255-2971
E-mail <aaslh@aaslh.org>
Web <<http://www.aaslh.org>>

American Association of Fund Raising Councils

25 West 43rd Street, Suite 820
New York, NY 10036
212-354-5799
E-mail <aafrd@compuserve.com>
Web <<http://www.aafrd.org>>

American Association of Museums

1575 Eye Street, NW, Suite 400
Washington, DC 20005
202-289-1818
Web <<http://www.aam-us.org>>

American Council for the Arts

1000 Vermont Avenue, NW, 12th Floor
Washington, DC 20005
202-371-2830
Web <<http://www.artsusa.org>>

American Historical Association

400 A Street, SE
Washington, DC 20003-3889
E-mail <aha@theaha.org>
Web <<http://chnm.gmu.edu/aha>>

American Institute for Conservation of Historic and Artistic Works

1717 K Street, NW, Suite 301
Washington, DC 20006
202-452-9545
E-mail <infoaic@aol.com>
Web <<http://palimpsest.stanford.edu/aic>>

American Institute of Architects

1735 New York Avenue, NW
Washington, DC 20006
202-626-7300
Web <<http://www.aia.org>>

American Planning Association

122 South Michigan Avenue, Suite 1600
Chicago, IL 60603
312-431-9100
E-mail <apa@planning.org>
Web <<http://www.planning.org>>

American Society of Interior Designers Historic Preservation Commission

1430 Broadway
New York, NY 10018
212-546-3480
Web <<http://www.interiors.org>>

American Society of Landscape Architects

636 Eye Street, NW
Washington, DC 20001-3736
202-898-2444
Web <<http://www.asla.org/asla>>

Archaeological Institute of America

656 Beacon Street
Boston, MA 02215-2010
617-353-9361
E-mail <aia@bu.edu>
Web <<http://csaws.brynmawr.edu:443/aia.html>>

Association for Preservation Technology

PO Box 3511
Williamsburg, VA 23187
540-373-1621

Center for Corporate Public Involvement

1001 Pennsylvania Avenue, NW
Washington, DC 20004
202-624-2425

National Building Museum

410 F Street, NW
Washington, DC 20001
202-272-2448
E-mail <leddy@nbm.org>
Web <<http://www.nbm.org>>

National Conference of State Historic Preservation Officers

444 North Capitol Street, NW, Suite 342
Washington, DC 20001
202-624-5465
Web <<http://sso.ncshpo/index.htm>>

National Council for Preservation Education

c/o David Ames, President
University of Delaware
Center for Historic Architecture and Design
135 Newark Hall
Newark, DE 19716
302-831-1050

National Council of Preservation Executives

c/o Henry McCartney, President
Landmarks Society of Western New York
133 South Fitzhugh Street
Rochester, NY 14608
716-546-7029

National Council of State Housing Agencies

444 North Capitol Street, NW, Suite 438
Washington, DC 20001
202-624-5899

National Endowment for the Arts

1100 Pennsylvania Avenue, NW
Washington, DC 20506
202-682-5442
Web <<http://arts.endow.gov>>

National Endowment for the Humanities

1100 Pennsylvania Avenue, NW
Washington, DC 20506
202-606-8400
E-mail <info@neh.gov>
Web <<http://www.neh.fed.us>>

National Maritime Alliance

99 Commercial Street
Bath, ME 04530-2564
207-443-4550

National Parks and Conservation Association

1776 Massachusetts Avenue, NW, Suite 200
Washington, DC 20036
E-mail <[npca@npca.org](mailto:nzca@npca.org)>
Web <<http://www.nzca.org/home/nzca>>

National Recreation and Park Association

22377 Belmont Ridge Road
Ashburn, VA 20148
703-858-0784
E-mail <info@nrpa.org>
Web <<http://www.nrpca.org/home/nrpca>>

Natural Resources Defense Council

40 West 20th Street
New York, NY 10011
212-727-2700

E-mail <nrdcinfo@nrdc.org>
Web <<http://www.nrdc.org/nrdc>>

Nature Conservancy

1815 North Lynn Street
Arlington, VA 22209
703-841-5300
Web <<http://www.tnc.org>>

Organ Historical Society

PO Box 26811
Richmond, VA 23261
804-353-9226

Organization of American Historians

112 North Bryan Street
Bloomington, UN 47408
812-855-7311
E-mail <oah@oah.indiana.edu>
Web <<http://www.indiana.edu/~oah>>

Partners for Livable Places

1429 21st Street, NW
Washington, DC 20036
202-887-5990
E-mail <partners@livable.com>
Web <<http://www.livable.com>>

Partners for Sacred Places

1616 Walnut Street, Suite 2310
Philadelphia, PA 19103
215-546-1288
E-mail <partners@sacredplaces.org>
Web <<http://www.sacredplaces.org>>

Preservation Action

1350 Connecticut Avenue, NW, Suite 401
Washington, DC 20036
202-659-0915
E-mail <preservationaction@worldnet.att.net>
Web <<http://www.preservenet.cirnell.edu.presaction/home.htm>>

Railroad Station Historical Society

430 Ivy Avenue
Crete, NE 68333
402-826-3356

Sierra Club

85 Second Street, Second Floor
San Francisco, CA 94105-3441
415-977-5500
E-mail <information@sierraclub.org>
Web <<http://www.sierraclub.org>>

Small Town Institute
PO Box 517
Ellensburg, WA 98926
809-925-1830

Society for American Archaeology
900 2nd Street, NE, Suite 12
Washington, DC 20002-3557
202-789-8200
E-mail <headquarters@saa.org>
Web <<http://www.saa.org>>

Society for Historical Archaeology
PO Box 30446
Tucson, AZ 85751-0446
602-886-8006
E-mail <sha@azstarnet.com>
Web <<http://www.azstar.com/~sha>>

Society of Architectural Historians
1365 North Astor Street
Chicago, IL 60610-2144
312-573-1365
E-mail <info@sah.org>
Web <<http://www.sah.org>>

Trust for Public Land
116 New Montgomery Street, 4th Floor
San Francisco, CA 94105
415-495-4014
E-mail <mailbox@tpl.org>
Web <<http://www.tpl.org>>

Urban Land Institute
1025 Thomas Jefferson Street, NW, Suite 500W
Washington, DC 20007-5201
202-624-7000
Web <<http://www.uli.org>>

US Committee, ICCROM
c/o Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 809
Washington, DC 20004
202-606-8505

US Committee, ICOMOS
401 F Street, NW, Room 331
Washington, DC 20001
202-842-1866
Web <<http://www.icomos.org/usicomos>>

**US Department of Housing and Urban
Development**
451 7th Street, SW
Washington, DC 20410

202-708-1422
Web <<http://www.hud.gov>>

**US Department of the Interior
Bureau of Indian Affairs**
Office of Trust and Economic Development
1849 C Street, NW
MS 1340-MIB
Washington, DC 20240
202-208-3711
Web <www.doi.gov/bureau-indian-affairs.html>

US Lighthouse Society
244 Kearney Street, 5th Floor
San Francisco, CA 94108
415-362-7255
Web <<http://www.maine.com/lights/uslhs.htm>>

APPENDIX G

NATIONAL PARK SERVICE

NATIONAL PARK SERVICE

Web <<http://www.nps.gov>>

Within the National Park Service, the office of the Associate Director for Cultural Resource Stewardship and Partnerships is responsible for administering national preservation and conservation programs. Under the Associate Director are three national centers: the National Center for Recreation and Conservation, the National Center for Cultural Resource Stewardship and Partnership Programs, and the National Center for Preservation Technology and Training. The latter two national centers are responsible exclusively for cultural resource matters. Component programs of these national centers are listed below.

NATIONAL CENTER FOR CULTURAL RESOURCE STEWARDSHIP AND PARTNERSHIP PROGRAMS

1849 C Street, NW
Washington, DC 20240

The National Center for Cultural Resource Stewardship and Partnership Programs includes the following offices — American Indian Liaison Office, Partnership Liaison Office, Museum Management Program, National Register/National Landmark Programs, History and Education, Park Historic Structures and Cultural Landscapes, HABS/HAER, Heritage Preservation Services, and Archeology and Ethnography Program. Public works managers may be particularly interested in the work of the following three offices.

Heritage Preservation Services

Technical Preservation Services

For technical preservation information including Preservation Briefs and Preservation Tech Notes.
202-343-9574
E-mail <hps-info@nps.gov>
Web <<http://www2.cr.nps.gov>>

HABS/HAER

202-343-9618
Web <<http://www.cr.nps.gov/habshaer>>

National Register

For information on the National Register including National Register Bulletins.
202-343-9559
E-mail <nr_reference@nps.gov>
Web <<http://www.cr.nps.gov/nr>>

NATIONAL CENTER FOR PRESERVATION TECHNOLOGY AND TRAINING

NSU Box 5682
Natchitoches, LA 71497
318-357-6464
Facsimile 318-357-6421
E-mail <ncptt@ncptt.nps.gov>
Web <<http://www.ncptt.nps.gov>>

NCPTT is configured in three components — Research, Training and Information Management — , and operates three programs — the Preservation Technology and Training Grants program, the Preservation Technology and Training Projects program, and the Preservation Technology and Training Publications program.

APPENDIX H

NATIONAL TRUST FOR HISTORIC PRESERVATION REGIONAL AND FIELD OFFICES

The National Trust for Historic Preservation headquarters is located in Washington, DC, with regional and field offices throughout the US. For more information on NTHP programs, publications, funding and advocacy, contact the appropriate regional or field office for your state, or visit the NTHP Website, <<http://www.nthp.org>>.

NTHP Headquarters

National Trust for Historic Preservation
1785 Massachusetts Avenue, NW
Washington, DC 20036
202-588-6000
800-944-6847
E-mail <resource@nthp.org>
Web <<http://www.nthp.org>>

Midwest Regional Office

53 West Jackson Blvd., Suite #1135
Chicago, IL 60604
312-939-5547
E-mail <mwro@nthp.org>
Serves: Illinois, Indiana, Iowa, Michigan, Minnesota,
Missouri, Ohio, Wisconsin

Mountains/Plains Regional Office

511 16th Street, Suite 700
Denver, CO 80202
303-623-1504
E-mail <mpro@nthp.org>
Serves: Colorado, Kansas, Montana, Nebraska, North
Dakota, South Dakota, Wyoming

Northeast Regional Office

7 Faneuil Hall Marketplace
Boston, MA 02109
617-523-0885
E-mail <nero@nthp.org>
Serves: Connecticut, Maine, Massachusetts, New
Hampshire, New York, Rhode Island, Vermont

Northeast Field Office

1785 Massachusetts Avenue, NW
Washington, DC 20036

202-588-6000
Serves: Delaware, New Jersey, Pennsylvania

Southern Regional Office

456 King Street
Charleston, SC 29403
803-722-8552
E-mail <soro@nthp.org>
Serves: Alabama, Florida, Georgia, Kentucky,
Louisiana, Mississippi, North Carolina, South
Carolina, Tennessee, West Virginia

Southern Field Office

1785 Massachusetts Avenue, NW
Washington, DC 20036
202-588-6000
Serves: Maryland, Puerto Rico, Virginia, Virgin
Islands, Washington, DC

Southwest Office

500 Main Street, Suite 606
Fort Worth, TX 76102
817-332-4398
E-mail <swro@nthp.org>
Serves: Arkansas, New Mexico, Oklahoma, Texas

Western Regional Office

1 Sutter Street, Suite 707
San Francisco, CA 94104
415-956-0610
E-mail <wro@nthp.org>
Serves: Alaska, Arizona, California, Hawaii, Idaho,
Nevada, Oregon, Utah, Washington, Guam,
Micronesia,

APPENDIX I NATIONAL ARCHIVES AND RECORDS ADMINISTRATION REGIONAL SERVICES FACILITIES

Visit the National Archives and Records Administration online, <<http://www.nara.gov>>.

Northeast Region

Frederick C. Murphy Federal Center
380 Trapelo Road
Waltham, MA 02154-6399
781-647-8104
E-mail <center@waltham.nara.gov>
Web <<http://www.nara.gov/regional/boston.html>>

10 Conte Drive
Pittsfield, MA 01201-8230
413-445-6885
E-mail <center@pittsfield.nara.gov>
Web <<http://www.nara.gov/pittsfield.html>>

201 Varick Street
New York, NY 10014-4811
212-337-1300
E-mail <archives@newyork.nara.gov>
Web <<http://www.nara.gov/regional/newyork.html>>

Building 22
Military Ocean Terminal
Bayonne, NJ 07002-5388
201-823-7241
E-mail <center@bayonne.nara.gov>
Web <<http://www.nara.gov/regional/bayonne.html>>
This facility is scheduled to close April 1999.

Mid-Atlantic Region

900 Market Street
Philadelphia, PA 19107-4292
215-597-2303
E-mail <archives@philarch.nara.gov>
Web <<http://www.nara.gov/regional/philacc.html>>

14700 Townsend Road
Philadelphia, PA 19154-1096
215-671-9027
E-mail <center@philfrc.nara.gov>
Web <<http://www.nara.gov/regional/philane.html>>

Southeast Region

1557 St. Joseph Avenue
East Point, GA 30344-2593
404-763-7477
E-mail <center@atlanta.nara.gov>
Web <<http://www.nara.gov/regional/atlanta.html>>

Great Lakes Region

7358 South Pulaski Road
Chicago, IL 60629-5898
773-581-7816
E-mail <center@chicago.nara.gov>
Web <<http://www.nara.gov/regional/chicago.html>>

3150 Springboro Road
Dayton, OH 45439-1883
937-225-7236
E-mail <center@dayton.nara.gov>
Web <<http://www.nara.gov/regional/dayton.html>>

Central Plains Region

2312 East Bannister Road
Kansas City, MO 64131-3011
816-926-6920
E-mail <center@kansascity.nara.gov>
Web <<http://www.nara.gov/regional/kansas.html>>

Southwest Region

PO Box 6216
Fort Worth, TX 76115-0216
817-334-5515
E-mail <center@ftworth.nara.gov>
Web <<http://www.nara.gov/regional/ftworth.html>>

Rocky Mountain Region

PO Box 25307
Denver, CO 80225-0307
E-mail <center@denver.nara.gov>
Web <<http://www.nara.gov/regional/denver.html>>

Pacific Region

PO Box 6719
Laguna Niguel, CA 92607-6719
714-360-2624
E-mail <archives@laguna.nara.gov>
Web <<http://www.nara.gov/regional/laguna.html>>

1000 Commodore Drive
San Bruno, CA 94066-2350
650-876-9001
E-mail <center@sanbruno.nara.gov>
Web <<http://www.nara.gov/regional/sanfranc.html>>

Pacific Alaska Region

6125 Sand Point Way, NE
Seattle, WA 98115-7999
206-526-6501
E-mail <center@seattle.nara.gov>
Web <<http://www.nara.gov/regional/seattle.html>>

654 West Third Avenue
Anchorage, AK 99501-2145
907-271-2145
E-mail <archives@alaska.nara.gov>
Web <<http://www.nara.gov/regional/anchorag.html>>

National Personnel Records Center

Civilian Records Facility
111 Winnebago Street
St. Louis, MO 63118-4199
Facsimile 314-425-5719
E-mail <center@cpr.nara.gov>

Military Records Facility
9700 Page Avenue
St. Louis, MO 63132-5100
Facsimile 314-538-4005
E-mail <center@stlouis.nara.gov>

APPENDIX J STATE HISTORIC PRESERVATION OFFICES

For more information about State Historic Preservation Offices and Officers, visit the National Park Service Website, <<http://www.cr.nps.gov/shpo>>.

ALABAMA

Alabama Historical Commission
468 South Perry Street
Montgomery, AL 36130-0900
334-242-3184

ALASKA

Department of Natural Resources
Division of Parks and Outdoor Recreation
3601 C Street, Suite 1278
Anchorage, AK 99503-5921
907-269-8715

AMERICAN SAMOA

Department of Parks and Recreation
Government of American Samoa
Pago Pago, AS 96799
684-633-2384

ARIZONA

State Historic Preservation Office
Office of Historic Preservation
Arizona State Parks
1300 West Washington
Phoenix, AZ 85007
602-542-4009

ARKANSAS

Arkansas Historic Preservation Program
323 Center Street Little Rock, AR 72201
501-324-9880
E-mail <info@dah.state.ar.us>

CALIFORNIA

Office of Historic Preservation
Department of Parks and Recreation
PO Box 942896
Sacramento, CA 94296-0001
916-653-6624

COLORADO

Colorado Historical Society
1300 Broadway
Denver, CO 80203-2137
303-866-3355

CONNECTICUT

Connecticut Historical Commission
59 South Prospect Street
Hartford, CT 06106
203-566-3005

DELAWARE

Delaware State Historic Preservation Office
Division of Historical and Cultural Affairs
15 The Green
Dover, DE 19901
302-739-5685

DISTRICT OF COLUMBIA

Historic Preservation Division
Department of Consumer and Regulatory Affairs
614 H Street, NW, Suite 1120
Washington, DC 20001
202-727-7120

FEDERATED STATES OF MICRONESIA

Office of Administrative Services
Division of Archives and Historic Preservation
FSM National Government
PO Box PS 52
Palikir, Pohnpei, HFSM 96941
011-691-320-2343

FLORIDA

Division of Historical Resources
500 South Bronough Street
Tallahassee, FL 32399-0250
850-488-1480

GEORGIA

Department of Natural Resources
Historic Preservation Division
57 Forsyth Street, NW, Suite 500
Atlanta, GA 30303
404-656-2840

GUAM

Historic Resources Division
Department of Parks and Recreation

PO Box 2950
Agana Heights, GU 96919
011-671-475-6259

HAWAII

Department of Land and Natural Resources
State Historic Preservation Division
1151 Punchbowl Street
Honolulu, HI 96813
808-548-6550

IDAHO

Idaho State Historical Society
210 Main Street
Boise, ID 83702
208-334-3890

ILLINOIS

Illinois Historic Preservation Agency
Preservation Services Division
Old State Capitol Plaza
Springfield, IL 62701-1512
217-785-9045

INDIANA

Division of Natural Resources
402 West Washington Street
Indiana Government Center, South, Room 274
Indianapolis, IN 46204
317-232-1646
E-mail <dhp_a_at_dnrln@ima.isd.state.in.us>

IOWA

State Historical Society of Iowa
600 East Locust Street
Des Moines, IA 50319-0920
515-281-4358

KANSAS

Kansas State Historical Society
Cultural Resources Division
6425 Southwest 6th Avenue
Topeka, KS 66615-1099
913-2272-8681

KENTUCKY

Kentucky Heritage Council
300 Washington Street
Frankfort, KY 40601
502-564-7005

LOUISIANA

Office of Cultural Development
Department of Culture, Recreation and Tourism
PO Box 44247
Baton Rouge, LA 70804
504-342-8200

MAINE

Maine Historic Preservation Commission
55 Capitol Street, Station 65
Augusta, ME 04333
207-287-2132

REPUBLIC OF THE MARSHALL ISLANDS

Interior Affairs and Historic Preservation Office
PO Box 1454
Majuro, MH 96960
011-692-625-4642
E-mail <cnmihpo@itecnmi.com>

MARYLAND

Division of Historic and Cultural Trust
Department of Housing and Community
Development
100 Community Place
Crownsville, MD 21032-2023
410-514-7600
E-mail <mdshpo@ari.net>

MASSACHUSETTS

Massachusetts Historical Commission
Massachusetts Archives Facility
220 Morrissey Boulevard
Boston, MA 02125
617-727-8470

MICHIGAN

State Historic Preservation Office
717 West Allegan Street
Lansing, MI 48918
517-373-0511

MICRONESIA

Federated States of Micronesia
Office of Administrative Services
Division of Archives and Historic Preservation
FSM National Government
PO Box PS 35
Palikir, Pohnpei, FSM 96941
691-320-2343

MINNESOTA

State Historic Preservation Office
Minnesota Historical Society
345 Kellogg Boulevard, West
St. Paul, MN 55102-1906
612-296-2747

MISSISSIPPI

Mississippi Department of Archives and History
PO Box 571
Jackson, MS 39205-0571
601-359-6850
E-mail <msshpo@mdah.ms.us>

MISSOURI

Historic Preservation Program
State Department of Natural Resources
PO Box 176
Jefferson City, MO 65102
314-751-7732

MONTANA

Montana Historical Society
PO Box 201202
Helena, MT 59620-1202
406-444-7715

NEBRASKA

Nebraska State Historical Society
PO Box 82554
Lincoln, NE 68501
402-471-4787

NEVADA

Division of Museums, Library and Arts
100 South Steward Street
Carson City, NV 89710
702-687-6360

NEW HAMPSHIRE

Division of Historic Resources and State Historic
Preservation Office
PO Box 2043
Concord, NH 03302-2043
603-271-3483

NEW JERSEY

Historic Preservation Office
Department of Environmental Protection and Energy
CN-404
501 East State Street

Trenton, NJ 08625
609-292-2023

NEW MEXICO

Historic Preservation Division
Office of Cultural Affairs
Villa Rivera Building, 3rd Floor
Santa Fe, NM 87503
505-827-6320

NEW YORK

Parks, Recreation and Historic Preservation Agency
Building #1, 20th Floor
Albany, NY 12238
518-474-0443

NORTH CAROLINA

Department of Cultural Resources
Division of Archives and History
109 East Jones Street
Raleigh, NC 27601-2807
919-733-7305

NORTH DAKOTA

State Historical Society of North Dakota
Heritage Center
Bismarck, ND 58505
701-224-2672

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

Historic Preservation Office
Department of Community and Cultural Affairs
Commonwealth of the Northern Mariana Islands
Saipan, MP 96950
011-670-664-2120

OHIO

Ohio Historical Society
Historic Preservation Office
567 East Hudson Street
Columbus, OH 43211-1030
614-297-2470

OKLAHOMA

Oklahoma Historical Society
State Historic Preservation Office
2100 North Lincoln Boulevard
Oklahoma City, OK 73105
405-521-6249

OREGON

State Historic Preservation Office
Parks and Recreation Department
1115 Commercial Street, NE
Salem, OR 97310-1001
503-378-5001

REPUBLIC OF PALAU

Ministry of Social Services
Division of Cultural Affairs PO Box 100
Koror, RP 96940
680-488-2489
E-mail <histpres@palaunet.com>

PENNSYLVANIA

Pennsylvania Historic and Museum Commission
PO Box 1026
Harrisburg, PA 17108-1026
717-787-2891

COMMONWEALTH OF PUERTO RICO

Office of Historic Preservation
PO Box 82
San Juan, PR 00901
809-721-2676

RHODE ISLAND

Rhode Island Historical Preservation Commission
150 Benefit Street
Providence, RI 02903
401-277-2678

SOUTH CAROLINA

South Carolina Department of Archives and History
PO Box 11669
Columbia, SC 29211
803-734-8592

SOUTH DAKOTA

South Dakota State Historical Society
900 Governors Drive
Pierre, SD 57501-2217
605-773-3458

TENNESSEE

Department of Environment and Conservation
State Historic Preservation Office
2941 Lebanon Road
Nashville, TN 37243-0435
615-532-0105

TEXAS

Texas Historical Commission
PO Box 12276
Austin, TX 78711-2276
512-463-6100
E-mail <thc@nueces.thc.state.tx.us>

UTAH

Utah State Historical Society
300 Rio Grande
Salt Lake City, UT 84101
801-533-3551
E-mail <cehistory@email.state.ut.us>

VERMONT

Vermont Division for Historic Preservation
Agency of Development and Community Affairs
135 State Street, 4th Floor
Montpelier, VT 05633-1201
802-828-3226

VIRGIN ISLANDS

Department of Planning and Natural Resources
Foster Plaza, 396-1 Anna's Retreat
St. Thomas, VI 00802
809-776-8605

VIRGINIA

Department of Historic Resources
221 Governor Street
Richmond, VA 23219
804-786-3143

WASHINGTON

Office of Archeology and Historic Preservation
PO Box 48343SW
Olympia, WA 98504
360-753-5010

WEST VIRGINIA

Division of Culture and History
1900 Kanawha Boulevard
East Charleston, WV
25305-0300
304-753-5010

WISCONSIN

State Historical Society of Wisconsin
Division of Historic Preservation
816 State Street

Madison, WI 53706
608-264-6500

WYOMING

Wyoming State Historic Preservation
Office Department of Commerce
6101 Yellowstone
Cheyenne, WY 82002
307-777-7697

APPENDIX K FEDERAL HIGHWAY ADMINISTRATION LOCAL TECHNICAL ASSISTANCE PROGRAM

LTAP provides for local highway agencies' improved access to highway technology to meet the growing demands placed on local roads, bridges and public transportation. Established in 1981 as the Rural Technical Assistance Program, the Local Technical Assistance Program is a program of the Federal Highway Administration.

LTAP has established a nationwide system of 55 technology transfer centers, some of which are located in universities and others in state highway agencies. Four centers serve American Indian Tribal Governments. Each center develops a mix of technology transfer tools and information to most effectively address the needs of the local highway community.

Funding for the centers is provided through the federal-aid process — which requires support and involvement from state highway agencies — and from federal LTAP funds, state departments of transportation, universities, local agencies, and finances designated by state legislation. The centers serving American Indian Tribal Governments are jointly funded by FHWA and the US Department of the Interior Bureau of Indian Affairs.

The Intermodal Surface Transportation Efficiency Act of 1991 provided authority to expand the program into urban areas as resources become available through 1997. This new authorization also included an emphasis on intergovernmental transportation planning for American Indian tribal governments, through training and technical assistance.

LTAP centers enable local agencies to improve their transportation network by —

- increasing transportation expertise at the state and local levels;
- providing a channel for materials prepared at the national level for local use;
- promoting the effective use of research findings and innovations for improving transportation;
- meeting the needs of transportation personnel in local areas with tailored resource materials.

In the technology transfer network, each center can serve as both a source and a recipient of information. The Technology Transfer Clearinghouse, operated under contract to the FHWA by the American Public Works Association, links the centers with information and technology sources.

Local Technical Assistance Program Centers

Local Technical Assistance Program T2 Centers also can be accessed on the Internet,
<<http://patriot.net/~ltap/ltap.html>>

T2 Clearinghouse
American Public Works Association
1301 Pennsylvania Avenue, NW, Suite 501
Washington, DC 20004
202-347-7267
Facsimile 202-737-9153
E-mail <lpogue@mail.pubworks.org>

ALABAMA

Alabama Technology Transfer Center
Department of Civil Engineering
Harbert Engineering Center
Auburn University
Auburn, AL 36849-5337
334-844-4320
Facsimile 334-844-6290
E-mail <tsqjrmc@eng.auburn.edu>

ALASKA

Alaska Transportation Technology Transfer Program
2301 Peger Road
Fairbanks, AK 99709-5399
907-451-5320
Facsimile 907-451-2313

ARIZONA

Arizona Technology Transfer Center
Arizona DOT
1130 North 22nd Avenue, 069R
Phoenix, AZ 85009
602-256-9431
Facsimile 602-256-7648

ARKANSAS

Arkansas LTAP
PO Box 2261
Little Rock, AR 72203
501-569-2249

Facsimile 501-569-2476
E-mail <tmhp032@ahd.state.ar.us>

CALIFORNIA

California LTAP
University of California
Institute of Transportation Studies
Richmond Field Station Building 452
Richmond, CA 94804-4603
510-231-9590
Facsimile 510-231-9591

COLORADO

Colorado Transportation Information Program,
Colorado State University
Engineering Research Center, Room 325
Ft. Collins, CO 80523
800-262-7623
E-mail <rszrot@enr.colostate.edu>
Web <<http://www.ColoState.EDU/Orgs/COPTIP>>

CONNECTICUT

Technology Transfer Center
University of Connecticut
179 Middle Turnpike U-202
Storrs, CT 06269-5202
860-486-5400
Facsimile 860-486-2399
E-mail <triadm05@uconnvm.uconn.edu>
Web <<http://www.eng2.uconn.edu/ti/cti/tt/tt.htm>>

DELAWARE

Delaware DOT T2 Center
PO Box 778
Dover, DE 19903
302-739-3167
Facsimile 302-739-2251

FLORIDA

Florida Technology Transfer Center
PO Box 116585
University of Florida
Gainesville, FL 32611-6585
352-392-0378
Facsimile 352-392-3224
E-mail <t2@ce.ufl.edu>

GEORGIA

Georgia DOT Technology Transfer Center
No. 2 Capitol Square, Room 301
Atlanta, GA 30334-1002
404-656-5364

Facsimile 404-656-3507
Web <<http://www.dot.state.ga.us/homeoffs/training/techtran/index.html>>

HAWAII

Hawaii Local Technical Assistance Program
2800 Woodlawn Drive, Suite 280
Honolulu, HI 96822
808-539-3837
800-220-5827
Facsimile 808-539-3842
Web <<http://hltap.mic.hawaii.edu>>

IDAHO

Idaho Technology Transfer Center
PO Box 7129
Boise, ID 83707-1129
208-885-4335
Facsimile 208-885-2877

ILLINOIS

Illinois Technology Transfer Center
Illinois Department of Transportation
2300 S. Dirksen Parkway, Room 205
Springfield, IL 62764
217-785-5048
Facsimile 217-785-7296

INDIANA

Highway Extension and Research Project for Indiana
Counties and Cities
Purdue University
1284 Civil Engineering Building
West Lafayette, IN 47907-1284
765-494-2164
Facsimile 765-496-1176
E-mail <Imccorma@ecn.purdue.edu>
Web <<http://ce.ecn.purdue.edu/CE/Outreach/HERPICC/herpicchome.html>>

IOWA

Center for Transportation Research and Education
Iowa State University
ISU Research Park, 2625 North Loop, Suite 2100
Ames, IA 50010-8615
515-294-8103
Facsimile 515-294-0467
Web <<http://www.ctre.iastate.edu>>

KANSAS

Kansas University Transportation Center
2011 Learned Hall

Lawrence, KS 66045
913-864-5658
Facsimile 913-864-3199

KENTUCKY

Kentucky Transportation Center
140 Civil Engineering
Kentucky Transportation Center Building
University of Kentucky
Lexington, KY 40506-0281
606-257-4513
Facsimile 606-257-1815
Web <<http://www.engr.uky.edu/KTC/ktctmb.html>>

LOUISIANA

Louisiana LTAP T2 Center
4101 Gourrier Avenue
Baton Rouge, LA 70808-4443
504-767-9117
Facsimile 504-767-9156
E-mail <laltap@ltrc.lsu.edu>
Web <<http://www.ltrc.lsu.edu>>

MAINE

Maine Local Roads Center
Community Services Division
Maine DOT
16 Station House Station
Augusta, ME 04333-0016
207-287-2152
Facsimile 207-287-3292
Web <http://www.state.me.us/mdot/planning/local_rd/local_rd.htm>

MARYLAND

Maryland Transportation Technology Transfer Center
Department of Civil Engineering
University of Maryland College Park, MD 20742
301-405-2009
Facsimile 301-405-2585
E-mail <ttc@eng.umd.edu>

MASSACHUSETTS

Baystate Roads Program
2140 Marston Hall
University of Massachusetts
Amherst, MA 01003
413-545-2604
Facsimile 413-545-6471
Web <<http://www.baystate.ecs.umass.edu>>

MICHIGAN

Local Technical Assistance Program
Michigan Technological University
1400 Townsend Drive
Houghton, MI 49931-1295
906-487-2102
Facsimile 906-487-3409

MINNESOTA

Minnesota Technology Transfer Program
Center for Transportation Studies
511 Washington Avenue, SE, Suite 200
Minneapolis, MN 55455
612-625-5829 or 612-625-8049
Facsimile 612-625-6381

MISSISSIPPI

Mississippi Center for Technology Transfer
Jackson State University
PO Box 18125
Jackson, MS 39217-0625
601-968-2339
Facsimile 601-973-3703
E-mail <tsquare@ccaix.jsums.edu>

MISSOURI

Transportation T2 Center – Missouri
Missouri Highway and Transportation Department
PO Box 270
Jefferson City, MO 65102
573-751-0852
Facsimile 573-526-4337

MONTANA

Local Technical Assistance Center
Montana State University
202 Cobleigh Hall
Bozeman, MT 59717-0390
800-541-6671
Facsimile 406-994-6105
E-mail <zce7002@msu.oscs.montana.edu>

NEBRASKA

Nebraska Technology Transfer Center
University of Nebraska-Lincoln
PO Box 880560
Lincoln, NE 68588-0560
402-472-5748
Facsimile 402-472-0685

NEVADA

Nevada Transportation T2 Center
College of Engineering/257
University of Nevada, Reno
Reno, NV 89557
702-784-1433
Facsimile 702-784-1429

NEW HAMPSHIRE

Technology Transfer Center
33 College Road-Kingsbury Hall
University of New Hampshire
Durham, NH 03824-3591
603-862-2826
Facsimile 603-862-2364

NEW JERSEY

Rutgers R2T2 Center
Center for Government Service
PO Box 5079
New Brunswick, NJ 08903-5079
908-932-3640 ext. 627
Facsimile 908-932-3586

NEW MEXICO

New Mexico LTAP Center
PO Box 1149
Santa Fe, NM 87504-1149
505-827-5150
Facsimile 505-827-5167

NEW YORK

Cornell Local Roads Program
416 Riley-Robb Hall
Ithaca, NY 14853-5701
607-255-8033
Facsimile 607-255-4080
E-mail <Center: clrp@cornell.edu>
Web <<http://www.cals.cornell.edu/dept/aben/localroads/home.htm>>

NORTH CAROLINA

Institute for Transportation Research and Education
North Carolina State University
Campus Box 8601
Raleigh, NC 27695
919-575-8033
Facsimile 919-575-8898
Web <<http://www.itre.ncsu.edu/itre/t2/t2.html>>

NORTH DAKOTA

North Dakota Transportation Technology Transfer Center
Civil/Industrial Engineering Building, Room 201H
North Dakota State University
Fargo, ND 58105
800-726-4143
Facsimile 701-231-7195
Web
<<http://www.hardhat.cme.ndsu.nodak.edu/t2center/t2.htm>>

OHIO

Ohio Transportation Technology Transfer Center
The Ohio State University
Department of Civil Engineering
470 Hitchcock Hall, 2070 Neil Avenue
Columbus, OH 43210-1275
614-292-2871
Facsimile 614-292-6185
Web <<http://www-ltap.eng.ohio-state.edu.ltap>>

OKLAHOMA

Center for Local Government Technology
308 CITD
Oklahoma State University
Stillwater, OK 74078
405-744-6049
Facsimile 405-744-7268

OREGON

Oregon Technology Transfer Center
2950 State Street, Room 103
Salem, OR 97310-0784
503-986-2854
Facsimile 503-986-2844

PENNSYLVANIA

LTAP-The Pennsylvania Local Road Program
Penn State Eastgate Center
1010 North 7th Street, Suite 304
Harrisburg, PA 17102-1410
717-772-1972
Facsimile 717-772-1998
E-mail <ltap@psu.edu>

PUERTO RICO

Puerto Rico Transportation Technology Transfer Center
Civil Engineering Department
University of Puerto Rico at Mayaguez
Mayaguez, PR 00681-5000

787-834-6385
Facsimile 787-265-5695
E-mail <t2prl@rmce02.upr.clu.edu>

RHODE ISLAND

Rhode Island Technology Transfer Center
Department of Administration
Division of Planning
One Capitol Hill
Providence, RI 02908-5872
401-277-1235
Facsimile 401-277-2083

SOUTH CAROLINA

Transportation Technology Transfer Service
Department of Civil Engineering
Clemson University
Clemson, SC 29634-0911
803-656-3000
Facsimile 864-656-2670
E-mail <t3s@eng.clemson.edu>

SOUTH DAKOTA

South Dakota Transportation Technology Transfer
Service
PO Box 2220, HH 302 – SDSU
Brookings, SD 57007
800-422-0129
Facsimile 605-688-5880
E-mail <grants@mmail.sdstate.edu>

TENNESSEE

Tennessee Transportation Assistance Program
600 Henley Street, Suite 309
Knoxville, TN 37996-4133
615-974-5255
Facsimile 615-974-3889
E-mail <tmap@utk.edu>
Web <<http://www.ra.utk.edu.tc>>

TEXAS

Texas Local Technical Assistance Program
Texas Engineering Extension Service
TAMU System
College Station, TX 77843-8000
409-845-4457
Facsimile 409-862-4768
Web <<http://www.tamu.edu/texasltap>>

UTAH

Utah Transportation Technology Transfer Center
Department of Civil and Environmental Engineering

Utah State University
Logan, UT 84322-4111
801-797-2289 or 800-822-8878
Facsimile 801-797-1185
E-mail <utaht2@lab.cee.usu.edu>

VERMONT

Vermont Local Roads
Saint Michael's College
Colchester, VT 05439
802-654-2652
Facsimile 802-654-2555

VIRGINIA

Virginia Transportation Technology Transfer Center
530 Edgemont Road
Charlottesville, VA 22903
804-293-1966
Facsimile 804-293-1429
E-mail <cdg3k@virginia.edu>
Web <<http://www.pratt.vrtc.virginia.edu>>

WASHINGTON

Northwest T2 Center
WSDOT-TransAid
PO Box 47390
Olympia, WA 98504-7390
360-705-7390
Facsimile 360-705-6822
Web <<http://www.wsdot.wa.gov/TA/T2/T2HP.htm>>

WEST VIRGINIA

West Virginia Transportation Technology Transfer
Center
Department of Civil Engineering
West Virginia University
PO Box 6103
Morgantown, WV 26506
304-293-3031, ext. 629
Facsimile 304-293-7109
Web <<http://www.cemr.wvu.edu/~wwwtrans/TTC.html>>

WISCONSIN

Transportation Information Center
University of Wisconsin-Madison
432 North Lake Street, RM 725A
Madison, WI 53706
608-262-0422
Facsimile 608-263-3160

WYOMING

Wyoming Technology Transfer Center
Department of Civil Engineering
PO Box 3295
Laramie, WY 82071-3295
800-231-2815
Facsimile 307-766-6784

Tribal LTAP Center
D-Q University
PO Box 409
Davis, CA 95617-0409
916-758-0470
Facsimile 916-758-4891

AMERICAN INDIAN TRIBAL GOVERNMENT T2 CENTERS

Technology Transfer and Training Program for Native Americans

Colorado State University
Engineering Research Center
Ft. Collins, CO 80523
800-262-7623
Facsimile 970-491-8334
Web <[http://www.colostate.edu/Orgs/CTP/T3/
index.html](http://www.colostate.edu/Orgs/CTP/T3/index.html)>

Native American Technology Transfer Center Montana State University

202 Cobleigh Hall
Bozeman, MT 59717-0390
800-541-6671
Facsimile 406-994-6105
E-mail <zce7002@msu.oscs.montana.edu>

Tribal Technical Assistance Center

402 Sharon Avenue
Michigan Technological University
Houghton, MI 49931-1295
888-230-0688
Facsimile 906-487-1824
Web <[http://www.civil.mtu.edu/organizations/ltap/
TTAPindex.html](http://www.civil.mtu.edu/organizations/ltap/TTAPindex.html)>

Northwest Tribal LTAP Center

Eastern Washington University
Department of Urban and Regional Planning
668 North Riverpoint Boulevard
Suite A, Room 234
Spokane, WA 99202-1660
800-583-3187
Facsimile 509-358-2267

Tribal Government LTAP Center

Center for Local Government Technology
308 CITD
Oklahoma State University
Stillwater, OK 74078
405-744-6049
Facsimile 405-744-7268

APPENDIX L

REBUILD AMERICA COALITION

The Rebuild America Coalition is a broad cooperative of public and private organizations committed to the infrastructure challenge. Housed in APWA's Washington, DC office, the Coalition includes mayors, county commissioners, city council members, and other public leaders responsible for maintaining, inspecting, and planning the building and rebuilding of our public facilities. They are supported by the engineers, builders, financiers, contractors, and architects whose careers are dedicated to the highest standards of quality, safety and cost effectiveness. The Coalition believes that our nation's economic competitiveness and well-being are directly linked to the condition and quality of our country's infrastructure facilities and services.

Members of the Coalition volunteer their time to help focus public attention on the serious problems associated with America's deteriorating infrastructure. For instance, leaking pipes cause some major cities to lose as much as 30 percent of their fresh water supply each day; many communities cannot expand or accept more industrial or residential development because their wastewater treatment facilities are operating at or near full capacity. Approximately a third of our nation's bridges are deficient. Millions of Americans are not served by modern sewage treatment facilities, and over one million miles of highway will need to be resurfaced by the year 2000.

According to a report released by the House Committee on Public Works and Transportation (renamed the House Committee on Transportation and Infrastructure), federal spending on infrastructure has been declining. In 1965, infrastructure spending was 6.3 percent of the federal budget; by 1992, however, only 3.0 percent of total federal outlays were devoted to infrastructure. This under-investment in the nation's infrastructure threatens our national economy and living standards.

The House report concludes that the nation's leaders must develop a strategy to focus on meeting our vast transportation and environmental infrastructure needs, establishing priorities with the greatest economic and environmental returns and developing sources of funding.

It further suggests that the infrastructure issue must be elevated to the high level of public visibility that it deserves. This would help develop a broad national

consensus on infrastructure issues, which could then become a springboard for the nation to move forward on a sweeping, comprehensive infrastructure investment program.

Rebuild America Coalition's steering committee includes —

- American Consulting Engineers Council
- American Institute of Architects
- American Public Works Association
- American Road and Transportation Builders Association
- American Society of Civil Engineers
- Associated General Contractors of America
- Council of Infrastructure Financing Authorities
- National Association of Counties
- National Association of Home Builders
- National Association of Securities Professionals
- National Association of State Treasurers/Council of State Governments
- National League of Cities
- Public Securities Association
- US Conference of Mayors

ACTION PLAN TO REBUILD AMERICA

The Coalition believes that infrastructure must be a top national priority. Convinced of the need to reinvest in America's infrastructure, the Coalition's mission is to —

- create public awareness of the need to increase infrastructure investment and infrastructure's role in building the nation's economy and improving the productivity of the nation;
- promote the economic benefits of job creation through public and private infrastructure investment;
- encourage government action at the federal, state and local levels to increase infrastructure funding;
- encourage innovations in technology, financing and public/private partnerships;
- encourage formation of similar state and/or local coalitions;
- and foster joint cooperation among the public and private sector organizations in support of resolving the nation's public works crisis.

GOALS FOR PUBLIC POLICY

To accomplish its mission, the Coalition has identified the following legislative goals —

- There should be no further funding reductions in existing federal programs that address infrastructure needs.
- The existing federal infrastructure trust funds must be continued, adequately funded, and fully expended for their intended purposes.
- Federal restrictions on the use of tax-exempt financing for infrastructure purposes should be eliminated.
- A federal capital infrastructure program should be created to provide assistance to states and localities in meeting infrastructure needs.
- A federal long-term, multi-year capital budget should be established.

HOW YOU CAN HELP

The Coalition's approach is a grassroots campaign involving those who are on the front line of the infrastructure challenge. Local and state-level leaders help policymakers and the public understand the extent of the problem and how it can be solved. A public information kit that includes a publicity handbook, a guide to lobbying and state-by-state statistics, encourages localities and states to develop grassroots coalitions similar to the one at the national level.

For more information, contact —

Rebuild America Coalition
1301 Pennsylvania Avenue, NW, Suite 501
Washington, DC 20004
202-347-7254
Web <<http://www.rebuildamerica.org/contact>>

APPENDIX M

ONE-CALL SYSTEM

INTERNATIONAL

The One-Call System International is a Special Interest Group of the American Public Works Association. This group is composed of hundreds of professional public works, construction and utility people working together to safeguard citizens and construction personnel who work around utilities as well as safeguard the underground infrastructure of pipes, mains and lines which bring utilities to your communities. This gives it a greater degree of self control to react quickly and decisively to meet the industry's needs and to function effectively.

The purpose of OCSI is to —

- promote damage prevention and safety;
- provide information to members and One-Call systems; and
- promote public safety through education.

One of One-Call's major projects each year is the Spring One-Call System Symposium where utility people, vendors and others critically interested in underground utilities gather to more effectively provide for safety and damage control. One-Call can also be consulted before excavations are started on historic rehabilitation projects to locate underground utilities.

In the future it is hoped that information distributed by One-Call operators in individual states can connect callers to the State Historic Preservation Office or other preservation organizations.

ONE CALL STATE PHONE NUMBERS

ALABAMA

Alabama Line Location Center
800-292-8525

ALASKA

Locate Call Center Of Alaska
800-478-3121

ARIZONA

Arizona Blue Stake, Inc.
800-782-5348

ARKANSAS

Arkansas One Call System, Inc.
800-482-8998

CALIFORNIA

USA North
800-227-2600
USA South
800-227-2600

COLORADO

Utility Notification Center Of CO
800-922-1987

CONNECTICUT

Call Before You Dig
800-922-4455

DELAWARE

Miss Utility Of Delmarva
800-282-8555

FLORIDA

Call Sunshine
800-432-4770

GEORGIA

Utilities Protection Center, Inc.
800-282-7411

IDAHO

Utilities Underground Location
800-424-5555

ILLINOIS

Julie, Inc.
800-892-0123

INDIANA

Underground Plant Protection Services
800-382-5544

IOWA

Underground Plant Location Service
800-292-8989

KANSAS

Kansas One Call Center
800-344-7233

KENTUCKY

Kentucky Underground Protection
800-752-6007

LOUISIANA

Louisiana One Call System, Inc.
800-272-3020

MAINE

Dig Safe
888-344-7233

MARYLAND

Miss Utility
800-257-7777

MASSACHUSETTS

Dig Safe
888-344-7233

MICHIGAN

Miss Dig System
800-482-7171

MINNESOTA

Gopher State One Call
800-252-1166

MISSISSIPPI

Mississippi Dig System, Inc.
800-482-7171

MISSOURI

Missouri One Call System, Inc.
800-344-7438

MONTANA

Utilities Underground Location Center
800-424-5555

NEBRASKA

Diggers Hotline
800-331-5666

NEVADA

Underground Service Alert North
800-227-2600

NEW HAMPSHIRE

Dig Safe — New Hampshire
800-225-4977

NEW JERSEY

Garden State Underground Plant
800-272-1000

NEW MEXICO

New Mexico One Call System
800-321-2737

NEW YORK

New York City — Long Island One Call
800-272-4480

NORTH CAROLINA

North Carolina One Call Center
800-632-4949

NORTH DAKOTA

Utilities Underground Location Center
800-795-0555

OHIO

Ohio Utilities Protection Service
800-362-2764

OKLAHOMA

Call Okie
800-522-6543

OREGON

Utilities Underground Notification Center
800-332-2344

PENNSYLVANIA

Pennsylvania One Call System
800-242-1776

RHODE ISLAND

Dig Safe — Rhode Island
800-344-7233

SOUTH CAROLINA

Palmetto Utility Protection Service
888-721-7877

TENNESSEE

Tennessee One Call System
800-351-1111

TEXAS

Texas One Call System
800-245-4545

UTAH

Blue Stakes Location Center
800-662-4111

VERMONT

Dig Safe — Vermont
888-344-7233

VIRGINIA

Miss Utility Of Virginia
800-557-7001

WASHINGTON

Utilities Underground Notification
800-424-5555

WEST VIRGINIA

Miss Utility Of West Virginia
800-245-4848

WISCONSIN

Diggers Hotline
800-242-8511

WYOMING

Wyoming One Call
800-348-1030

WASHINGTON, DC

Miss Utility
800-257-7777

APPENDIX N

SEARCHING THE INTERNET — DIRECTORIES AND INDEXES

The following are a few of the better-known Internet search tools, listed by category.

DIRECTORIES

Directories are extensive lists of internet resources arranged by human editors into subject categories. All are selective, some include reviews, and attempt to point the user to what the editors view as the best resources on the internet. For materials on specific topics, choose from —

A2Z

<<http://a2z.lycos.com/>>

This directory includes the most popular sites on the web.

LookSmart

<<http://www.looksmart.com/>>

This is a selective directory of over 146,000 useful sites with an attractive graphical interface.

Magellan

<<http://www.mckinley.com/>>

This database consists of over 1.5 million Internet sites. Many are reviewed and rated for depth and ease of use.

The World Wide Web Virtual Library

This is the "official" directory of Web resources. It includes directories for many subject areas, which are maintained by interested volunteers.

By subject —

<<http://www.vlib.stanford.edu/overview.html>>

By geographical arrangement —

<<http://www.vlib.stanford.edu/servers.html>>

Yahoo

<<http://www.yahoo.com/>>

This is the most comprehensive hierarchically arranged directory to Web resources. It is an excellent starting point when looking for information on broad topics, and the categories help to narrow down your search.

INDEXES

The following indexes are generated automatically by computer programs called "robots" or "webcrawlers." Each claims to be the largest and best index of Internet resources but this is difficult to determine. Full-text searching gives the user the ability to find almost anything on any topic, but false hits are possible and must be verified by the user.

Alta Vista

<<http://altavista.digital.com/>>

This is probably the largest and fastest Internet index. This should be the first choice of index searches. It offers full Boolean (and, or, but not, near, etc.) searching and user control over search terms.

Excite

<<http://excite.com/>>

Excite is a comprehensive index of over 50 million Web pages, with reviews of over 61,000 sites. Excite uses a sophisticated searching technique known as intelligent concept extraction, which is a very sophisticated thesaurus of words.

HotBot

<<http://www.hotbot.com/>>

HotBot is a fast and powerful index based on the Inktomi search engine. It has a variety of enhanced search features in "Expert" mode and offers the ability to customize and save search options.

InfoSeek

<<http://www.infoseek.com/>>

InfoSeek has simple keyword searching and is comprehensive and fast. It offers the option to broaden a search through additional links in the form of "Related Topics" and "Company Profiles."

Lycos

<<http://www.lycos.com/>>

Lycos is different from other indexes by its range of added directory features, such as: a2z Directory of Sites by Subject <<http://a2z.lycos.com/>>, a listing of "one-tenth of web sites most linked to by users."

City Guide

<<http://cityguide.lycos.com/>>

People Find

<<http://www.lycos.com/pplfindr.html>>, a separate index of pictures and sounds.

Pointerview

<<http://www.pointcom.com/>> features daily and weekly Website reviews.

WebCrawler

<<http://webcrawler.com/>>

WebCrawler is a small and selective database. It supports both full Boolean searching, including proximity connectors, and natural language searching. When using the "Show summaries" feature, it offers a "similar pages" option.

MULTIPLE-INDEX SEARCHES

Cyber411

<<http://www.cyber411.com>>

Cyber411 currently searches 15 different Internet search engines.

Inference Find

<<http://www.inference.com/ifind/>>

Inference Find searches AltaVista, Excite, InfoSeek, Lycos, WebCrawler and Yahoo. It then clusters the results into groupings based on key words and Web sites. This is the favorite search engine of many Internet researchers.

Internet Sleuth

<<http://www.isleuth.com>>

The Internet Sleuth is an index of indexes. It has descriptions of, and links to, over 1,500 separate databases on the Internet, which range from comprehensive ones like Yahoo to texts of individual literary works.

MetaCrawler

<<http://metacrawler.cs.washington.edu>>

MetaCrawler searches seven major indexes. It also performs site verification by checking each link to confirm that it is accessible.

ProFusion

<<http://www.designlab.ukans.edu/profusion/>>

ProFusion offers six of the major Web indexes. It allows the user to select which of the six indexes

he/she wants to search. It has an option to check for broken links.

SavvySearch

<<http://savvy.cs.colostate.edu:2000/>>

SavvySearch currently searches over 19 different Internet indexes, including specialized databases such as — The Internet Movie Database

<<http://www.us.imdb.com/>> and Virtual Software Library <<http://www.shareware.com/>> as well as the general indexes from AltaVista to Yahoo. It also give the researcher the option of displaying the results of each database individually or integrating them into a single display.

Search.Com

<<http://www.search.com/>>

Search.Com is an "index of indexes." It provides links to over 250 separate Internet databases, from general indexes such as AltaVista and Yahoo to specialized databases like the DealerNet New Car Directory <<http://www.dealernet.com/>>.

SEARCH FOR PEOPLE

The following tools are means for searching for addresses, telephone numbers and e-mail addresses. These tools are not complete as many institutions do not make their directories public, and many people have unlisted phone numbers.

E-Mail Directories

Four11

<<http://www.four11.com/>>

Internet Address Finder

<<http://www.iaf.net/>>

This also includes an e-mail "reverse look-up option" which is useful when you have an e-mail address and want to know who owns it.

InterNIC Directory Services

<<http://www.internic.net/ds/dspgwp.html>>

NetPages

<<http://www.aldea.com/wwwindex.html>>

OKRAnet.citizen Directory Service

<<http://okra.ucr.edu/okra/>>

PeopleFind

<<http://www.lycos.com/pplfind.html>> from Lycos <<http://www.lycos.com/>>, and includes road maps and directories of nearby businesses.

Telephone and Postal Directories

Database America People Finder
<<http://www.databaseamerica.com/html/gpfind.htm>> includes a telephone "reverse lookup" feature where you can enter a phone number and find out who it belongs to.

The Global Yellow Pages

<<http://www.globalyp.com/world.htm>>

Kapitol - International Directories

<<http://www.infobel.be/infobel/infobelworld.html>>

Switchboard

<<http://www.switchboard.com/>>

Telephone Directories on the Web

<<http://www.contractjobs.com/tel/>>

WhoWhere?

<<http://www.whowhere.com/>>

World Phonebooks

<<http://www.geocities.com/CapeCanaveral/2673/phone.html>>

SEARCH AND DISCUSSION LISTS

Discussion lists offer groups of people the ability to exchange information on topics of shared interest. See "Discussion Lists: Mail List Manager Commands" <<http://lawlib.slu.edu/training/mailser.htm>> for information on using discussion lists.

Liszt

<<http://www.liszt.com/>>

A directory of over 24,000 discussion lists.

Vivian Neou's selective List of Lists

<<http://catalog.com/vivian/interest-group-search.html>>

This is the descendant of the original "List of Lists"

maintained by the InterNIC (Internet Network Information Center).

Law Lists

<<http://www.lib.uchicago.edu/~llou/lawlists/info.html>>

This is Lyonette Louis-Jacques's compilation of law-related discussion lists.

Publicly Accessible Mailing Lists

<<http://www.NeoSoft.com/internet/paml/>>

This is another selective list.

Tile.Net

<<http://www.tile.net/>>

This is a smaller index of discussion lists.

SEARCH FOR IMAGES

A number of search engines for locating images on the Internet have been introduced recently. Most of these images are copyrighted, so in most cases permission must be obtained before downloading and using any images.

LycosMedia

<<http://www.lycos.com/lycosmedia.html>>

WebSeer

<<http://webseer.cs.uchicago.edu/>>

Yahoo! Image Surfer

<<http://isurf.yahoo.com/>>

Used with permission from James Milles, Head of Computer Services and Associate Professor of Legal Research, Saint Louis University Law Library.

E mail <millesjg@slu.edu>

Web <<http://lawlib.slu.edu/misc/directory>>

APPENDIX O

NPS Form 10-900
(Oct. 1990)

OMB No. 10024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name _____

other names/site number _____

2. Location

street & number _____ not for publication

city or town _____ vicinity

state _____ code _____ county _____ code _____ zip code _____

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

Signature of certifying official/Title _____ Date _____

State of Federal agency and bureau _____

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of certifying official/Title _____ Date _____

State or Federal agency and bureau _____

4. National Park Service Certification

I hereby certify that the property is:

- entered in the National Register.
 See continuation sheet.
- determined eligible for the National Register
 See continuation sheet.
- determined not eligible for the National Register.
- removed from the National Register.
- other, (explain:) _____

Signature of the Keeper

Date of Action

_____	_____
_____	_____
_____	_____
_____	_____

Name of Property _____

County and State _____

5. Classification

Ownership of Property
(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property
(Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
_____	_____	buildings
_____	_____	sites
_____	_____	structures
_____	_____	objects
_____	_____	Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

Number of contributing resources previously listed in the National Register

6. Function or Use

Historic Functions
(Enter categories from instructions)

Current Functions
(Enter categories from instructions)

7. Description

Architectural Classification
(Enter categories from instructions)

Materials
(Enter categories from instructions)

foundation _____

walls _____

roof _____

other _____

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets.)

Name of Property _____

County and State _____

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance

(Enter categories from instructions)

Period of Significance

Significant Dates

Significant Person

(Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository:

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section number _____ Page _____

APPENDIX P

NPS Form 10-900-b
(June 1991)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Multiple Property Documentation Form

This form is used for documenting multiple property groups relating to one or several historic contexts. See instructions in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or computer to complete all items.

___ New Submission ___ Amended Submission

A. Name of Multiple Property Listing

B. Associated Historic Contexts

(Name each associated historic context, identifying theme, geographical area, and chronological period for each.)

C. Form Prepared by

name/title _____
organization _____ date _____
street & number _____ telephone _____
city or town _____ state _____ zip code _____

D. Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. (See continuation sheet for additional comments.)

Signature and title of certifying official _____ Date _____

State or Federal agency and bureau _____

I hereby certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

Signature of the Keeper _____ Date of Action _____

Table of Contents for Written Narrative

Provide the following information on continuation sheets. Cite the letter and the title before each section of the narrative. Assign page numbers according to the instructions for continuation sheets in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Fill in page numbers for each section in the space below.

	Page Numbers
E. Statement of Historic Contexts (If more than one historic context is documented, present them in sequential order.)	
F. Associated Property Types (Provide description, significance, and registration requirements.)	
G. Geographical Data	
H. Summary of Identification and Evaluation Methods (Discuss the methods used in developing the multiple property listing.)	
I. Major Bibliographical References (List major written works and primary location of additional documentation: State Historic Preservation Office, other State agency, Federal agency, local government, university, or other, specifying repository.)	

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

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SELECTED BIBLIOGRAPHY

- Alderson, William T., and Shirley Payne Low. *Interpretation of Historic Sites*. Nashville, TN: American Association for State and Local History, 1985.
- American Public Works Association. *History of Public Works in the United States 1776-1976*. Chicago: American Public Works Association, 1976.
- American Society of Civil Engineers. *Repair and Strengthening of Old Steel Truss Bridges*. New York: ASCE, 1979.
- Andrus, Patrick W., et al. *Manual For State Historic Preservation Review Boards*. Washington, DC: National Park Service, 1992.
- Ball, Norman R., ed. *Building Canada: A History of Public Works*. Toronto: University of Toronto Press, 1988.
- Browne, Henry J., AIA, ed. *Preservation Guidelines for Bethany and Wellsburg, West Virginia*. Charlottesville, VA: Browne, Eichman, Dalgliesh, and Gilpin, P.C., 1984.
- Building Officials and Code Administrators International, Inc. *The BOCA Basic Building Code/1978*. Chicago: Building Officials and Code Administrators International, Inc., 1978.
- Burns, John A., ed. *Recording Historic Structures*. Washington, DC: American Institute of Architects Press, 1989.
- Cossons, Neil, and Kenneth Hudson, ed. *Industrial Archaeologists Guide*. New York: Fernhill House, Ltd., 1972.
- Creigh, Dorothy Weyer. *A Primer for Local Historical Societies*. Nashville, TN: American Association for State and Local History, 1976.
- Escherich, Susan M., Stephen J. Farneth, and Bruce Judd. *Affordable Housing Through Historic Preservation: Tax Credits and the Secretary of the Interior's Standards for Historic Rehabilitation*. Washington: National Park Service, 1995.
- Ferguson, Eugene S. *Bibliography of the History of Technology*. Cambridge, MA, 1968.
- Harmon, Sharon Koomen. *The Codes Guidebook for Interiors*. New York: John Wiley and Sons, 1994.
- Hosmer, Charles B., Jr. *Preservation Comes of Age*. Charlottesville, VA: University Press of Virginia, 1981.
- Hoy, Suellen M. and Michael C. Robinson. *Public Works History in the United States: A Guide to the Literature*. Nashville, TN: American Association for State and Local History, 1982.
- Huntington, Whitney Clark and Robert E. Mickadeit. *Building Construction*. New York: John Wiley and Sons, 1974.
- Jandl, H. Ward (Ed.). *The Technology of Historic American Buildings: Studies of Materials, Craft Processes, and the Mechanization of Building Construction*. Washington: Foundation for Preservation Technology, 1983.
- Johnson, Ronald W. and Michael G. Schene, eds. *Cultural Resources Management*. Malabar, FL: Robert E. Krieger Publishing Company, 1987
- Kass, Stephen, Judith LaBelle, and David A. Hansell. *Rehabilitating Older and Historic Buildings: Law, Taxation, Strategies*. New York: John Wiley and Sons, 1985.
- Kemp, Emory L. *Industrial Archaeology: Techniques*. Malabar, FL: Krieger Publishing Company, 1996.
- Kyvig, David E. and Myron A. Marty. *Nearby History*. Nashville, TN: American Association for State and Local History, 1982.
- Maddex, Diane, ed. *All About Old Buildings*. Washington, DC: The Preservation Press, 1985.
- _____. *The Brown Book: A Directory of Preservation Information*. Washington, DC: The Preservation Press, 1983.
- _____. *Landmark Yellow Pages: Where to Find All the Names, Addresses, Facts and Figures You Need*. Washington, DC: National Trust for Historic Preservation, 1990.
- Markowitz, Arnold L. *Historic Preservation*. Art and Architecture Information Guide Series, v. 13. Detroit, MI: Gale Research Company, 1980.

- Massachusetts Historical Commission. *Preservation Planning Manual: Local Historical Commissions. Their Role in Local Governments*. Massachusetts Historical Commission, 1987.
- Massey, James C., Nancy B. Schwartz, and Shirley Maxwell, comp. *Historic American Building Survey/Historic American Engineering Record: An Annotated Bibliography*. Washington, DC: National Park Service, 1992.
- McAlester, Virginia and Lee McAlester. *A Field Guide to American Houses*. New York: Alfred A. Knopf, 1990.
- Nakata, Yuri, Susan J. Smith, and William B. Ernst Jr., comp. *Organizing A Local Government Documents Collection*. Chicago: American Library Association, 1979.
- National Trust for Historic Preservation. *A Guide to State Programs*. Washington: The National Trust for Historic Preservation, 1972.
- _____. *Index to Historic Preservation Periodicals*. Boston, MA: G.K. Hall and Co., 1988.
- _____. *A Survey of State Statutes Protecting Archeological Resources*. Washington, DC: The National Trust for Historic Preservation, 1996.
- Parrott, Charles. *Access to Historic Buildings for the Disabled: Suggestions for Planning and Implementation*. Washington, DC: US Department of the Interior, Heritage Conservation and Recreation Service, 1980.
- Rath, Frederick L., Jr. and Merrilyn Rogers O'Connell, eds. *A Bibliography on Historical Organization Practices: Historic Preservation*. Nashville, TN: American Association for State and Local History, 1980.
- Rothenberg, Marc. *The History of Science and Technology in the United States: A Critical and Selective Bibliography*. New York: Garland Publishing Company, 1982.
- Sabnis, Gajanan, ed. *Proceedings of an International Conference on Rehabilitation of Buildings and Bridges including Investigations*. Washington, DC: Howard University, 1982.
- _____. *Rehabilitation, Renovation, and Preservation of Concrete and Masonry Structures*. Detroit, MI: American Concrete Institute, 1985.
- Schlereth, Thomas J., comp. *Material Culture Studies in America*. Nashville, TN: American Association for State and Local History, 1982.
- Simonson, Kaye Ellen, comp. *Maintaining Historic Buildings: An Annotated Bibliography*. Washington, DC: National Park Service, Preservation Assistance Division, 1990.
- Smith, Carol C. *Fifty Years of the Historic American Building Survey, 1933-1983*. Alexandria, VA: The HABS Foundations, 1983.
- Stahl, Frederick A. *A Guide to the Maintenance, Repair, and Alteration of Historic Buildings*. New York: Van Nostrand Reinhold Company, 1984.
- Starbuck, David, ed. *An Introductory Bibliography in Industrial Archaeology*. Society for Industrial Archaeology, 1982.
- Sutcliffe, Anthony. *The History of Urban Planning: An Annotated Bibliography*. New York: Facts On File, 1981.
- Thompson, Enid T. *Local History Collections*. Nashville, TN: American Association for State and Local History, 1978.
- Advisory Council on Historic Preservation. *Guidelines For State Historic Preservation Legislation*. Washington, DC: The Council, 1972.
- _____. "Procedures for the Protection of Historic and Cultural Properties," Federal Register 39:18 (January 25, 1974), Part II.
- US Congress, Office of Technology Assessment. *Technologies for Prehistoric and Historic Preservation*. OTA-E-319. Washington, DC: GPO, 1986.
- US Department of Housing and Urban Development. *Guidelines for Rehabilitating Old Buildings*. Washington, DC: GPO, 1977.
- US Department of the Interior, Bureau of Land Management, *A View to the Past-A Window to the Future: A Guide to Photodocumenting*

- Historic Places*. Denver, CO: Bureau of Land Management, Cultural Resources Series No. 30, 1990.
- US Department of the Interior, National Park Service. *Affordable Housing Through Historic Preservation: Tax Credits and the Secretary of the Interior's Standards for Historic Rehabilitation*. Washington, DC: National Park Service, Preservation Alliance Division, 1995.
- _____. *Catalog of Historic Preservation Publications*. Washington, DC: National Park Service.
- _____. *Earthworks Landscape Management Manual*. Washington, DC: Park Historic Architecture Division, National Park Service, 1989.
- _____. *Economics of Revitalization: A Decision Making Guide for Local Officials*. Washington, DC: National Park Service, Heritage Conservation and Recreation Service, 1981.
- _____. *Federal Historic Preservation Laws*. Washington, DC: National Park Service, Cultural Resources Program, 1990.
- _____. *Guidelines for Rehabilitating Old Buildings: Principles to Consider When Planning Rehabilitation and New Construction Projects in Older Neighborhoods*. Washington, DC: Department of Housing and Urban Development and National Park Service, 1977.
- _____. *Historic American Building Survey/Historic American Engineering Record*. Washington, DC: National Park Service, Cultural Resources, 1992.
- _____. *Historic Preservation Handbook: Part II, Section 106, A Guide to the History, Meaning, Procedures and Implications of Section 106 of the Preservation Act of 1966*. Washington, DC: National Park Service, 1971.
- _____. *Local Government and Historic Preservation*. Washington, DC: National Park Service and National Trust for Historic Preservation, 1991.
- _____. *Local Preservation-A Compendium of Technical Assistance Material for Local Preservation*. Washington, DC: Department of the Interior, 1990.
- _____. *Maintaining Historic Buildings: An Annotated Bibliography*. Washington, DC: National Park Service, Preservation Assistance Division, 1990.
- _____. *Manual for State Historic Preservation Review Boards*. Washington, DC: National Park Service, Interagency Resources Division, 1992.
- _____. *Pioneers of American Landscape Design: An Annotated Bibliography*. Washington, DC: National Park Service, Preservation Assistance Division, 1993.
- _____. *Pioneers of American Landscape Design II: An Annotated Bibliography*. Washington, DC: National Park Service, Heritage Preservation Services, Historic Landscapes Initiative, 1995.
- _____. *Preserving Historic Landscapes: An Annotated Bibliography*. Washington, DC: National Park Service, Preservation Assistance Division, 1990.
- Wagner, Richard. *Local Government and Historic Preservation*. Washington, DC: National Trust for Historic Preservation.
- Weeks, Kay D. and Anne E. Grimmer. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. Washington, DC: National Park Service, 1995.
- Weinberg, Nathan. *Preservation in American Towns and Cities*. Boulder, CO: Westview Press, 1979.
- White, Bradford J. and Richard J. Roddewig. *Preparing A Historic Preservation Plan*.
- Wrenn, Tony P. and Elizabeth D. Mulloy. *America's Forgotten Architecture*. Washington, DC: National Trust for Historic Preservation, 1976.
- Ziegler, Arthur P. and Walter C. Kidney. *Historic Preservation in Small Towns*. Nashville, TN: American Association for State and Local History, 1980.

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*United States Department of the Interior
National Park Service*

NCPTT

The National Center for
Preservation Technology and Training