

HERITAGE DOCUMENTATION PROGRAMS

Work Plan, FY 2007

HISTORIC AMERICAN BUILDINGS SURVEY (HABS)

Antietam National Battlefield, Sharpsburg, Maryland, Outbuildings

In support of previous projects in which the principal buildings were measured and drawn, HABS will produce drawings of various outbuildings located on the Mumma and Poffenberger farmsteads that are now part of Antietam Battlefield. At the Mumma Farm, the board-and-batten store house is being recorded, and at the Poffenberger Farm, the shop building and the farm site plan.

Partner: Antietam National Battlefield

Blandair, Columbia, Maryland

HABS previously recorded through measured drawings and photographs the ca. 1850 brick manor house and the log-constructed, board-and-batten slave quarter at Blandair. The current project calls for large-format photographs of the other outbuildings which include a tenant house, granary, barn, spring house and other assorted buildings.

Partner: Howard County Department of Parks & Recreation

Buildings of the United States Series, Maryland

As part of a five year plan, HABS will produce large-format photographs of historic sites and structures in Maryland. Ultimately, the photographs are to be used to illustrate the upcoming Society of Architectural Historians (SAH), Buildings of the United States series, Maryland volume, but they will also assist State and local groups with their preservation efforts. HABS historians are working with MHT and local preservation groups to help formulate lists of the sites to be recorded and to produce short-form histories to accompany the photographs in the HABS collection. The first phase of this project focused on Baltimore City and County, as well as Harford, Prince Georges, and Anne Arundel counties. Currently underway is recording in Carroll County, to be followed by Howard County. The sites will range in period and style to include both architect designed and vernacular buildings forms. Plans are also underway for a similar study of Queen Anne County, on Maryland's Eastern Shore.

Partner: Maryland Historical Trust; Society for the Preservation of Maryland Antiquities

Carnegie Libraries of Philadelphia, Phase I

The Historic American Buildings Survey (HABS) will undertake a two-phase project to document Carnegie Libraries in Philadelphia through history, photography, and measured drawings. During Phase I, HABS staff will first survey all of the city's Carnegie libraries and to record them with short-form historical reports, digital field photos, and large-format black-and-white photography, undertaken to HABS standards. Based on the information gathered during the initial survey and research process, a selection of

representative library forms will be recorded with measured drawings, lengthier historical reports, and the addition of interior photographs. The city of Philadelphia had already established a public library system when funding was provided by Pittsburgh industrialist Andrew Carnegie for library construction. In fact, Philadelphia figures quite prominently on the timeline of American Library history, establishing the nation's first private, subscription library—known as the Library Company—in 1731. Philadelphia was among the first American cities to establish a non-subscription public library system in 1891 that aptly became known as the Free Library of Philadelphia. And it was in Philadelphia that the American Library Association was formed in 1876. In 1905, a \$1.5 million grant from Carnegie enabled the construction of twenty-four branch libraries throughout the city, built between 1905 and 1930 (most between 1905 and 1917) by a number of Philadelphia architects.

Partner: Preservation Alliance for Greater Philadelphia

Melrose Carriage House, Natchez National Historical Park, MS

In 1992, HABS recorded Melrose Plantation house and its kitchen and dairy house dependencies. Begun in 1841, Melrose is among the finest Greek Revival style homes in the south, and is currently owned and interpreted by NPS. This year, HABS will return to Melrose to create documentation of the carriage house. Although constructed in wood frame rather than brick, as are the main house and dependencies, the carriage house also reflects the influence of the Greek Revival style in elements such as the corner pilasters.

Partner: Natchez National Historical Park

Monocacy National Battlefield sites, Thomas Farm, and the Barn at the Best Farm

The Thomas Farm is the most recent of the Civil-war era farmsteads involved in the Battle of Monocacy to come under NPS stewardship. HABS drawings will be used in the rehabilitation of the house and its use by the park for administrative offices. At the core of the house is a late eighteenth century I-house that was later expanded to create a two-room deep structure. The house also underwent stylistic changes at that time, upgraded with Italianate details such as first-floor jib-doors, and ornamental porches.

HABS will also photograph the barn at the neighboring Best Farm. This is a rather unique stone structure with a hipped roof. The owner of the farm was of French descent, and thus the form of the barn may have been inspired by vernacular French architecture.

Partner: Monocacy National Battlefield

Monroe Station, Big Cypress National Preserve, Florida

The Big Cypress Swamp is a freshwater swamp that feeds into and is essential to the life of the adjacent Everglades. Although a nature preserve, the area also has cultural significance. Frequent today mostly by nature-lovers and hunters, the swamp has been both home and refuge to Native Americans and early white settlers to this region. In the early part of the twentieth century, the region was bisected by the Tamiami Trail, connecting Tampa and Miami and constructed between 1915 and 1928. Despite the

prospect of serious engineering hurdles, the idea was vigorously embraced and executed in a piecemeal manner through the aspirations and financial support of south Florida's county governments and some of their major landholders. Both public and private interests hoped to open the vast, inaccessible, and almost entirely undeveloped acreage to housing, tourism, and expanded agriculture. Although the State of Florida became officially involved during the last two years of construction, Barron Collier, who owned nearly all the land in newly-formed Collier County (1923), provided much of the backing for the completion of the last stretch of the trail. This section of the roadway extended across a sparsely inhabited area, leading to Collier's construction of six rest stops located at ten-mile intervals. These offered gas and refreshments to travelers in addition to quarters for a patrolman of the newly formed Southwest Florida Mounted Police. Monroe Station is one of the two surviving rest stops, now a rare icon of first-generation automobile travel in the United States. The park intends to restore and interpret the site utilizing the HABS drawings and history in that process.

Partner: Big Cypress National Preserve, and the Preservation Training Center of NPS

The Urban Landscape of Cattle Ranching in Elko County, Nevada Cooperative Ecosystem Studies Unit (CESU) Task Agreement

Home to some of the oldest and most architecturally significant ranches in the Great Basin, Elko County, Nevada, is generally viewed as one of the centers for Western American cowboy culture. The cowboy affiliation, however, has had the effect of favoring the rural and pastoral aspects of the landscape over its more urban and industrial side, which recent historical scholarship suggests played a seminal role in shaping the local economy and culture. A study conducted by Thomas Carter at the University of Utah (UU) uses the built environment found on the ranches in four Elko County river drainages (the Oywhoe, North Fork of the Humboldt, Mary's and Thousand Springs), five towns (Elko, Halleck, Deeth, Wells, and Montello), and several regional market cities (San Francisco, Ogden, and Denver) as primary evidence that places this western landscape fully within the context of American industrial expansion during the second half of the nineteenth century. Prof. Carter conducts a field school for UU students to record buildings through measured drawings and on-site analysis. HABS is contributing funds so that their field drawings can be translated into drawings to our standards for inclusion in the collection. This project was begun in 2006 and is ongoing.

Partners: NPS and University of Utah, School of Architecture & Urban Planning

Washington County, Maryland Barn Study, Sally Kress Tompkins Fellowship

Each year SAH and HABS sponsor a fellowship for an architectural historian working with the HABS summer program. Matching our program needs with the particular research interests of the historian, the fellow is either placed as the historian on an existing summer team, or given a project that creates documentation of an under-recognized or endangered historic resource. The HABS/SAH Fellow for this year will undertake a study of barns in the mid-Maryland counties of Carroll, Frederick, and Washington. This study is intended to provide an overview and assessment of barns, including the development of a barn typology for this region. Barns are a historic

resource identified by Maryland Historical Trust has endangered due to the rapid suburban development of former farm communities. Historically the area is well-known for its Civil War past. That past is recognized and commemorated by various monuments, memorials, and several nearby national parks (Monocacy, Antietam, Harper's Ferry, and Gettysburg). These seminal events obviously occurred when this area was predominantly rural in character, and the barns dotting the hills of middle Maryland (included some on NPS sites) can be said to be emblematic of that disappearing landscape. Moreover, social, economic, and cultural factors informed the choice of materials and determined the form these barns took. This makes it possible for us, today, to read the remaining buildings and extrapolate material evidence from them, evidence that is suggestive of how the agricultural landscape developed in the region over time. A historical report, including narrative, description, and bibliography, will be accompanied by digital photographs and a catalogue of barns visited and studied.

Partners: Society of Architectural Historians (SAH), and the Catocin Center for Regional Studies

Washington Place, (former) Governor's Mansion, Honolulu, Hawaii

Recently designated as a National Historic Landmark, Washington Place is important to the cultural development of Mainland Hawaii as the home of a wealthy colonial settler, Queen Liliuokalani, and the governors from 1918 to 2002. The house was built in the 1840s in the Greek Revival style adapted to a tropical climate to include a two-story, wrap-around veranda and adjoining lanai. Parallels have been drawn between the design of Washington Place and that of French Creole architecture in the American South. The house is one of a few left from the colonial or territorial periods in Hawaii's history. As the home of merchant and sea captain John Dominis and later his widow Mary, it was opened to influential visitors from far and wide. The name Washington Place was designated on the anniversary of the birth of George Washington, in 1848, and was at the same time a tribute to the much-admired mansion and the hospitality of its hostess. The house is considered a Hawaiian treasure and the comprehensive HABS recording will be used for its restoration and respectful reuse.

Partners: Washington Place Foundation

White House, First Floor of the West Terrace and the West Wing

The history of the West Wing dates to the early years of the White House. Thomas Jefferson proposed one-story terrace extensions to the east and west, intended to house domestic work functions below, with an open promenade above on the roof. It was not until the early twentieth century, during the Theodore Roosevelt administration, that the presidential offices were moved into what became known as the West Wing, at which time some of what is now known as the West Terrace was also turned over to staff office use. The section nearer the residence still contained service areas such as the laundry and flower room. HABS will continue with drawing and photographic documentation.

White House, Press Room (and FDR's swimming pool)

In 1933, a successful private financial campaign raised money for the construction of an indoor pool to provide relief for Franklin D. Roosevelt, who suffered from poliomyelitis. The pool was located inside the west terrace between the White House and the West Wing. The pool featured modern technology, such as underwater lighting, mechanical sterilizers, and custom-made glazed structural tiles. The terrace area in which it was located, however, dates back to the time of Thomas Jefferson's occupation at the White house, and remnants of that era made visible as a result of the current renovations are also being recorded, included an arched ceiling and lintels, and French doors opening onto the Rose Garden. In 1969-70, nearly forty years after the installation of the pool, Richard Nixon decked over it to create a spacious and well-appointed press briefing room intended to accommodate the growing press corps of the television age.

The documentation of the Jeffersonian-era terrace, the former pool area (now the press room) and the executive offices of the West Wing is the latest phase in a series of projects to record the White House. During 2007, HABS will produce existing-condition measured drawings in CAD of the Ground Floor Plan of the West Terrace and the West Wing. In addition, a historical report that traces the uses over time of this section of the West Wing, and large-format photographs of the pool area will be undertaken.

Partner(s): The White House, National Park Service Liaison to the White House

HISTORIC AMERICAN ENGINEERING RECORD (HAER)

Statue of Liberty

HAER will continue its documentation of the Statue of Liberty begun several years ago. The current project will set up a survey control grid, anchor the grid to the real world, and produce high-resolution photographs of the exterior and interior of the Fort and Pedestal. Low and high resolution scans will be used to create Visitor Center and Pedestal floor plans, exterior elevations, building sections, a site plan, and interior details. Additional scans will be taken to fill in missing information from the 2001 project.

Partners: Statue of Liberty National Monument; Texas Tech University

Marshall Space Flight Center, NASA

Neutral Buoyancy Simulator: The Army constructed the Neutral Buoyancy Simulator in 1955 at the Redstone Arsenal. Engineers and designers, as well as astronauts, used it for the various phases of research needed to gain first hand knowledge of design and operation problems connected with working in a zero-gravity environment. Because of this unique capability, the NBS contributed significantly to the American manned space program especially Projects Gemini, Apollo, Skylab, and the Space Shuttle. Until the mid-1970s, when an additional facility was constructed at the Johnson Space Flight Center to support the Space Shuttle Program, the NBS was the only test facility that allowed astronauts to become familiar with the dynamics of body motion under weightless conditions. HAER is preparing the historical report in FY07 to complement drawings and photographs from FY06.

NASA Saturn V Test Stand: The Saturn V Dynamic Test Stand was constructed in 1964 to conduct mechanical and vibration tests on a fully assembled Saturn V rocket. The facility is approximately 122 feet by 98 feet and 360 feet high. The test vehicle rested on hydrodynamic supports which were used to induce vibrations and loads in the pitch, roll and yaw directions along its longitudinal axis to simulate in-flight stresses. After completion of the Saturn V testing program the facility was modified for the testing the Space Transport System (i.e. the Space Shuttle, External Tank and Solid Rocket Boosters assembly). The facility is now a National Historic Landmark.

Partner: National Aeronautics and Space Agency, Marshall Space Flight Center

New York Canal System: Lockport Locks

HAER will provide comprehensive documentation on the design, construction, operation and maintenance of the flight of five locks (Nos. 67, 68, 69, 70 and 71) on the Erie Canal system and the adjacent flight of two locks (Nos. 34 and 35) on the NY Barge Canal. The report will provide an overview of the historical geology of the region, survey the engineering literature, and include a summary of contemporary engineering practices for large-scale civil works such as the canal system for both generations of locks. Measured and interpretive drawings of both the flight of five locks from the Erie Canal and the two Barge Canal locks were facilitated by the use of laser scanning technology in partnership

with Texas Tech University. Large-format photographs complete the documentation package. Year 2 of a 2-year project.

Partners: City of Lockport, NY; Texas Tech University

Mad River Glen:

HAER will provide comprehensive documentation of Chair # 1, the longest and oldest operating ski lift still in its original location in North America. In 1947 Mad River contracted with the American Steel & Wire Company to engineer, design, fabricate and partially install a state-of-the-art single chairlift. Mad River Glen's Chair # 1 is a single chair monocable chairlift with an initial lifting capacity of 200 pph (people/per/hour) and an ultimate capacity of just over 400 pph. The original 69 chairs were spaced at 165' on the wire rope and with the addition of 71 chairs in 1955; a capacity of 400 pph was realized. Later, 18 more chairs were added to bring the capacity up to 450 pph for a current total of 158 chairs. Since 1947, the lift called Chair # 1 has had some modifications and in general has had a remarkable operational and safety record for its age of 58 years.

Partner: Mad River Glen Cooperative

Maritime Documentation

Maritime Administration:

The U.S. Maritime Administration maintains a fleet of ships in three anchorages around the United States - James River, Virginia (JRRF); Beaumont, Texas (BRF); and Suisun Bay, California (SBRF). The motley collection of vessels, ranging from vintage World War II craft to modern cargo ships, is often referred to as the "mothball fleet" or "ghost fleet" because of its inactive status, but the true purpose is to store ships in a repository (long-term berthing) known as the National Defense Reserve Fleet (NDRF). Congress established the NDRF in 1946 to operate as an emergency supply of ships during times of crisis – they were activated in seven wars and several crises. Within the fleet, the Maritime Administration also maintains many ships that have outlived their military usefulness and await disposal. As part of a three-year project, the ships documented in 2006, 2007 and 2008 include the Arthur M. Huddell, the Empire State IV, Gage, General Edwin D. Patrick, General John Pope, Sphinx, Sperry, Vulcan, and Winthrop Victory.

Partner: Maritime Administration

Maine Lobster Boats Survey

A team of documentation specialists will survey a selection of Maine lobster boats using "total station" technology and develop lines drawings, construction details, and photographs for the HAER collection. This is the second year of the project.

Partners: Penobscot Marine Museum, Maine and Mystic Seaport Museum, Connecticut

Lore Oyster House:

HAER will record the site with Level I documentation. Significant architectural and technological features will be recorded by measured and interpretive drawings, large-format photographs and written data. In addition to contemporary photographs and drawings, a selection of historic photographs, drawings and illustrations may be copied and included as part of the record subject to copyright release. A narrative history will be prepared describing the origins, design, execution, modifications, and operation of the Lore Oyster House. The HAER documentation will provide historical background and technical graphics that will aid historic preservation and management efforts and enable The Calvert Marine Museum to augment its interpretive program and enhance the site's stature as a nationally significant maritime resource.

Partner: Calvert Marine Museum

Gil Smith's Yachts:

From the 1870s until suffering a stroke at the age of 93 in 1936, Gilbert Smith built some of the fastest sail boats in the world. Based in Patchogue, Long Island, he and a crew of one or two employees used hand tools to construct everything but rigging and hardware, and his wife sewed the sails. The boats combined graceful lines, long overhanging sterns, flat bottoms, small keels, large centerboards and a lot of sail to provide smooth, good sailing in deep channels, but permitting the boat to traverse the shallows of the bay. HAER is working with volunteers to document the lines of these historic vessels.

Partner: Long Island Maritime Museum

Purse Seiner Shenandoah:

The *Shenandoah* was built in 1925 at the Skansie Ship Building Company in Gig Harbor, Washington. Originally powered by a 65 hp Atlas Imperial diesel engine, the *Shenandoah* was operated almost exclusively at the Salmon Banks in the San Juan Islands, and made several trips to Alaska. She operated until 1999, and is one of only two Skansie-built purse seiners remaining in Gig Harbor. The ship is undergoing stabilization and restoration as a tribute to the boat builders and fishermen of the region, and HAER is working closely with the Coastal Heritage Alliance to document it.

Partner: Coastal Heritage Alliance

Illinois & Michigan Waterway:

HAER has begun a multi-year project documenting navigation facilities on the Illinois Waterway. A combination of HAER drawings, photographs, and reports of seven lock and dam sites, the project office site, and thirty-nine contributing structures will provide baseline data to assist in planning efforts for rehabilitation and restoration, and facilitate in the interpretation of the buildings and grounds. The historic resources of the Illinois Waterway Navigation Facilities underscore the U.S. Army Corps of Engineers' contributions to broad historical themes in transportation, maritime history, engineering, commerce, conservation, military, politics, economics, labor, and social history between 1905 and 1952.

Partner: U.S. Army Corps of Engineers

Historic Highways and Bridges

Arkansas Bridges:

Covered Bridges Exhibition

Few structures in America combine architectural ingenuity, economic necessity and romantic idealism better than the covered bridge. The Smithsonian exhibition, *Covered Bridges: Spanning the American Landscape*, celebrates these iconic structures and the individuals behind their development through photographs, architectural schematics and models. The exhibition debuted at The State Museum of Pennsylvania in Harrisburg on March 4, 2006 and continues on a four-year, multi-city national tour.

Partners: Federal Highways Administration; Smithsonian Institution

C&O Lift Bridge

Designed to carry Norfolk and Western trains over the canal at Williamsport, MD to the power plant, the 1923 lift bridge operated once before the 1924 flood destroyed major parts of the canal and ultimately forced it to cease operations. HAER will develop comprehensive documentation of this historic resource.

Partner: C&O Canal National Historic Site

Grand Canyon Infrastructure, Phase II

This project documents the history and evolution of utility systems (above and underground) within the historic Accommodation Zone of Grand Canyon Village at Grand Canyon National Park with historical narratives and large format photographs. A century of human activity on the South Rim has left a labyrinth of pipes, tunnels and other infrastructure elements that remain, to a greater or lesser degree, obscure to NPS personnel. In addition to documenting these remains at one of the great NPS landscapes, this project will also assist the park as it plans future maintenance and alterations. This material will be available for conversion into a GIS map layer so that future development projects can be overlaid onto the utility layer to determine where to avoid damage.

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Partner: Grand Canyon National Park

FY 2006 HISTORIC AMERICAN LANDSCAPES SURVEY (HALS)

Theodore Roosevelt Memorial

After Roosevelt's death on January 6, 1919, citizens wanted to establish a memorial in his honor. The Theodore Roosevelt Memorial Association purchased a 91 acre wooded island in the Potomac River in 1932, Congress approved funds in 1960, and the memorial was dedicated on October 27, 1967. Eric Gugler designed the memorial and Paul Manship designed the statue. The National Capital Region of the National Park Service will be undertaking a restoration of the Memorial, which HALS will comprehensively document with measured drawings, written history, and large-format photography.

Partner: National Capitol Region, NPS; George Washington Memorial Parkway, NPS

White House Grounds , Washington, D.C.

Reservation Number One of the L'Enfant Plan of Washington, DC is more commonly known as the White House and its grounds. The White House Historical Association has been working closely with the National Capitol Region of the National Park Service and HABS to produce existing condition baseline documentation of the mansion and will now produce similar comprehensive HALS documentation of the approximately 18 acres that comprise the Reservation. The documentation will serve as the basis for maintaining and interpreting the grounds.

Partner: National Capitol Region, NPS; White House Liaison

San Antonio Riverwalk, San Antonio Texas

The San Antonio Riverwalk, or Paseo Del Rio, is a 2 1/2 mile stretch of landscaped waterfront that features many of San Antonio's hotels, restaurants, night clubs, bars, shopping centers and businesses. In the Sixteenth Century Spanish Explorers used the waterway to supply water to their missions. Mission San Antonio de Valero, also known as The Alamo, was the first to benefit from it. The river flooded its banks many times and in September 1921 the worst flood in its history killed over fifty people and spurred action to correct the problem. City planners struggled over what to do but architect Robert H. H. Hugman's plan to convert the area into an urban park with apartments, dining, shopping, boat rides and walk ways lit with old-fashioned street lamps was selected. This documentation project is an experiment to apply digital laser measuring technology to measure a landscape and will focus on one component of the Riverwalk, the Arneson Theatre.

Partner: Texas Tech University School of Architecture

Spruce House, Mesa Verde, Colorado

Spruce House is the third largest dwelling at Mesa Verde with 114 rooms and 8 kivas, which may have housed as many as 150 people. The name is derived from the trees that were mistakenly identified as Spruce by the Anglos who first came upon this place in the 1880s. They actually are Douglas firs. Two kivas have been restored with the type of cribbed roof fashioned after an intact kiva discovered at Square house. In the winter,

Spruce House gets maximum sunshine when the sun is low in the sky, and shade in the summer. Much of the House is under the overhang, so this is one of the best-preserved cliff dwellings. Occupied between 1200 and 1300, there were three-story walls reaching all the way to the cave roof, with much painted plaster still visible.

HALS elevation and plan drawings will be produced. Through this project we will experiment with digital laser technology and the measuring of complex and irregular structures built within the landscape.

Partner: Texas Tech University School of Architecture

Allstadt Farm, Harpers Ferry National Historical Park

The Allstadt house and associated outbuildings are the centerpiece of an approximately 672 acres farm that existed at the time of John Brown's Raid (10/1859) and the Battle of Harpers Ferry (9/1862). The farmhouse and outbuildings are in a ruinous state, but it is the desire of NPS to stabilize the structures for interpretation. The recording team will produce landscape architectural documentation as time permits, consisting of large-format photography.

Partner: Harpers Ferry National Historical Park

CULTURAL RESOURCES GEOGRAPHICAL INFORMATION SYSTEMS (CRGIS)

(Note: CRGIS staff assist in numerous projects within Heritage Documentation Programs and throughout the NPS. Please review projects for the HABS, HAER, and HALS branches for additional CRGIS contributions.)

Bleeding Kansas

CRGIS will create and populate a GIS database with pre-Civil War events in Kansas and Missouri. Once created, CRGIS along with the NPS GIS Division will develop a prototype web site featuring an interactive GIS map using the GIS database. Eventually this web site will go public.

Partners: NPS National Information Systems Center, NPS GIS Division

Bodie NHL Revision

CRGIS is participating in this revision by developing the existing map layers e.g. historic buildings, mining sites, tailings ponds, etc. into a GIS database in order to better document this important type of historic landscape. Through the use of viewshed analyses, CRGIS will provide data that will assist in defining the revised boundary of the site. CRGIS will conduct a field test of the computer generated viewshed to determine its validity.

Partner: NPS Western Region, University of Nevada- Reno

Cane River GIS

CRGIS will upgrade and reorganize the CRNHA existing GIS to take full advantage of the GIS tools now available in newer versions of the software. As part of this effort CRGIS will provide technical support to interns hired by the CRNHA in cooperation with the National Center for Preservation Technology and Training (NCPTT) and Northwestern State University (NSU). To facilitate the upgrade CRGIS will provide training in Geodatabase management to selected CRNHA, NCPTT and NSU staff.

Partners: Cane River National Heritage Area, NCPTT, Northwest State University

Civil War Resurvey

In response to a Congressional call for the update of the 1993 Civil War Sites Advisory Commission Report, a resurvey of 190 battlefields in Virginia, Tennessee, Maryland, West Virginia, and Pennsylvania was initiated. CRGIS continues to participate in the resurvey by upgrading the Civil War Battlefield GIS database, conducting field surveys of thirty-two battlefields in and around the Richmond area, and conducting a GPS field school for the surveyors. Once the survey data is completed CRGIS will undertake a series of analyses designed to evaluate the changes that have take place to these battlefields in the intervening fourteen years since the original study was undertaken.

Partner: ABPP

Congressional Cemetery

In Phase 1 of a planned two phased project, CRGIS will create a GIS database for the cemetery, integrate recent survey data into that database, geo-reference and rectify the most recent aerial photographs of the cemetery, create an underground utility map layer and incorporate it into the GIS database. CRGIS will also link digital photographs of cemetery stonework to burial plots. Phase 1 ends with a two day introduction to GIS course taught by CRGIS for the staff.

Partner: Association for the Preservation of Historic Congressional Cemetery

Cumberland Gap Historic Road Mapping

CRGIS will map three historic roadways: Wilderness Road, Harlan Road, and Civil War era Battery #7 Road to GPS mapping accuracy i.e. +/- 3 meters. The resulting map layers will be overlaid to document the establishment and evolution of the region's transportation system through the park. These roadways include early corridors opening the American west, Civil War roads, and tourism and commercial development routes.

Partners: Cumberland Gap NHP and Southeast Region GIS Technical Support Center

Fallen Timbers Battlefield Survey

CRGIS has worked with Prof. G. Michael Pratt, an anthropologist and faculty member at Heidelberg College in assembling historical and archeological data on the Battle of Fallen Timbers, one of key battles associated with the "Indian Wars" period of 1790-1795. These data were used by CRGIS to draw the boundary of the battlefield.

Partners: ABPP, Heidelberg College

FEMA IAA

Under the terms of the interagency agreement, CRGIS will continue its GIS technical support to both the New Orleans field office and FEMA HQ. In addition CRGIS will create an emergency response manual based on the Katrina experience. GIS and GPS training of FEMA and its partners are also included in the agreement.

Partner: FEMA

Mt. Vernon Memorial Parkway Landscape Study

CRGIS will scan, geo-reference, and digitize the Mount Vernon Memorial Highway Planting Plan from north Alexandria ending at the north end of Columbia Island. CRGIS will then conduct an analysis to identify existing plantings associated with the scanned plan as well as those planting that have no association. The end product will be GIS data layers and paper maps available for use by GWMP landscape historians in developing a management plan for that segment of the GWMP.

Partner: National Capital Region, GWMP

NCPTT Training

Each year NCPTT holds a unique multi-disciplinary field school on a historic archeological site near Natchitoches, LA. The field school brings a suite of technologies e.g. ground penetrating radar, resistivity, high resolution aerial photography, GPS, and GIS, to conduct a non-invasive archeological excavation. CRGIS participates as the expert on GPS and GIS, offering instruction to the student within the context of how to integrate these technologies to produce data and information about the site.

Partner: NCPTT

Palo Alto GPS Survey

For the past 3 years CRGIS has participated with staff of the Palo Alto Battlefield NHS and the Southeast Archeological Center in conducting survey of this important Mexican-American battlefield. With the completion of this year's effort the battlefield has been completely surveyed. The results will have a substantial impact on the way the park interprets the site.

Partner: PAAL

Unison Battlefield Survey

Using the battlefield survey methodology developed under a previous project (Aldie, Middleburg, and Upperville battles), CRGIS will conduct original research of primary and secondary source materials, map the battlefield, draw its boundaries, write a narrative of the battle and create a report for the public, ABPP, and the Unison Preservation Society.

Partners: ABPP, Unison Preservation Society