

Headquartered in Dallas, Texas, Jacobs leads the global professional services sector delivering solutions for a more connected, sustainable world. With \$15 billion in fiscal 2019 revenue and a talent force of more than 52,000, Jacobs provides a full spectrum of services including scientific, technical, professional, and construction — and program — management for business, industrial, commercial, government, and infrastructure sectors. For more information, visit www.jacobs.com, and connect with Jacobs on LinkedIn, Twitter, Facebook, and Instagram.

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### Challenging today. Reinventing tomorrow.



## **Cultural Resources**

Jacobs employs a highly experienced team of cultural resources professionals stationed across the U.S. to serve the needs of our clients nationwide.

We also have cultural resources staff internationally, including Canada and the United Kingdom. All U.S. members of our team have achieved the Secretary of Interior's Professional Qualification Standards for History, Archaeology, Architectural History, or Historic Architecture (36CFR61).

The Jacobs team is well-versed in federal, state, and local regulations governing cultural resources, and we help clients navigate the process and requirements of those regulations. To achieve compliance with these regulations, Jacobs offers a breadth of cultural resources services covering historic and prehistoric archaeology, architectural history, and Native American /First Nations consultation and ethnography. Jacobs represents our clients' interests first and foremost, ensuring that they achieve the required compliance while recognizing schedule and budget. Communication is key, and we convey recommendations

and risks so our clients make the best decisions to advance their projects while respecting cultural resources. In the U.S., federal regulations govern the treatment of historic properties that may be affected by projects undertaken by a federal agency, using federal funding or lands, or requiring federal permits. This legislation includes the National Historic Preservation Act of 1966 (NHPA), Archaeological Resources Protection Act of 1979 (ARPA), Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), American Indian Religious Freedom Act of 1978 (AIRFA), National Environmental Policy Act (NEPA), and Section 4(f) of the National Transportation Act. Our team of experts includes staff with advanced degrees in Archaeology, Anthropology, History, Geology, and Historic Preservation, as well as Licensed Architects and Registered Professional Archaeologists. Our staff has well-established relationships with key agencies built on our extensive experience and the excellence of our technical deliverables. Senior technical staff provide peer oversight and quality control for every project.

### Jacobs' cultural resources team routinely manages the following service areas for small and large projects throughout the nation:

- Regulatory Analysis and Strategic Planning
- Archival Research and Literature Review
- Native American Consultation and Ethnographic Research
- Identification of Traditional Cultural Places and Heritage Resources
- Survey for Archaeology and Built Environment
- National Register of Historic Places (NRHP) Eligibility Determinations
- NHPA Effect Findings

- Development and Implementation of Memoranda of Agreement and Programmatic Agreements
- Test Excavation and Data Recovery
- Construction Monitoring and Mitigation
- Preparation of Historic American Buildings Survey (HABS). Historic American Landscapes Survey (HALS), and Historic American Engineering Record (HAER) Evaluations
- Historic Property / Cultural Resources Management Plans
- Section 106 Compliance Programs







### Historic Archaeology and Architectural History

Our team of historians, architectural historians, and archaeologists have specialized expertise in historic preservation and architectural history. We regularly conduct archival research and surveys of historic built environment; prepare historical contexts, preservation plans, interpretive plans, and National Register of Historic Places determinations and nominations; prepare and execute memoranda of agreement and programmatic agreements; and evaluate and excavate historic archaeological sites.

### **Prehistoric Archaeology**

Jacobs' archaeological services include literature review; reconnaissance studies; avoidance, minimization, and mitigation development; intensive archaeological surveys; preservation and treatment plans; memoranda of agreement; site testing/evaluations; full-scale excavation for data recovery; construction monitoring; impact mitigation management; and ruins stabilization. Our professional archaeologists are thoroughly familiar with applicable regulations governing the treatment of cultural resources, and the firm maintains the laboratories and equipment required for all cultural resources undertakings.

### Native American/First Nations Consultation and Ethnography

The cultural resources management field is changing rapidly - for example, involving greater levels of coordination with Native Americans and Native Hawaiian and Alaskan organizations in the U.S. Cultural resources undertakings require qualified professionals who have a comprehensive understanding of the resources, regulatory process, participants, and changing political climate. Jacobs has helped agencies consult with First Nations and Native American groups regarding cultural resources issues, including but not limited to identification of traditional cultural properties (TCPs), Native American burials and burial sites, sacred sites, and religious practices. We also coordinate the employment of Native American and First Nation representatives to monitor earth-disturbing activities pursuant to federal, state, county, or city regulations, as appropriate. Consultation services include facilitating consultation with tribal groups, bibliographic and archival research, personal interviews, evaluation of TCPs for NRHP eligibility, treatment recommendations, and assistance with NAGPRA agreements.

## Selected Project Experience

# NextEra Wind Energy Resources, LLC. Wind Energy Facilities Projects, Washington and Republic Counties, Kansas

Jacobs supported NHPA Section 106 compliance actions for the Washington Republic North (WRN) and Washington Republic South (WRS) Wind Energy Facilities Projects, including the construction of a 565 megawatt (MW) facility and associated transmission interconnect and a 422 MW facility and associated transmission line. Jacobs completed cultural resources records research and predictive modeling for the nearly 100,000-acre combined project area. The records research identified numerous cultural resources, including prehistoric and historic trails and habitation sites. The predictive model identified areas of high, moderate, and low probability for archaeological site potential within the project areas. Jacobs provided this information to the client prior to micrositing activities to locate project components while avoiding adverse effects to cultural resources.

### Federal Emergency Management Agency Support, Hurricane Katrina, New Orleans, Louisiana.

Jacobs staff served as the onsite Special Considerations Liaison for Public Assistance/Historic Preservation at the FEMA office in New Orleans. The Liaison position worked closely with ACHP staff and the FEMA Federal Historic Preservation Officer to develop a Programmatic Agreement and Memoranda of Agreement to help meet FEMA's obligations under Section 106 of the NHPA. The position also supported FEMA and the National Guard Bureau in their government-to-government consultation with as many as 11 Native American tribes and worked closely with state and other federal agencies, including the NPS. Jacobs staff also filled the position of Louisiana SHPO Liaison to FEMA, representing SHPO in the FEMA office to facilitate and expedite the Section 106 process. These positions were created by FEMA to accommodate the enormous scale of FEMA-funded efforts after Hurricanes Katrina and Rita.



### NASA, Santa Susana Field Laboratory, Ventura County, California

This project included a cultural resources study for the NASA's Santa Susana Field Laboratory in support of a NEPA Environmental Impact Statement. The project area is highly sensitive and contains the Burro Flats archaeological site, an archaeological district, a Traditional Cultural Property, a designated Indian Sacred Site, and three mid-century historic districts associated with early rocket engine testing, the development of weapons and space vehicle booster systems (including Lunar Module Rocket Engine assemblies), and the Space Shuttle Program. The cultural resources team has been implementing the stipulations of the Programmatic Agreement since 2014 and continues to support NASA with cultural resources tasks, including a cultural resources assessment following the 2018 Woolsey Canyon fire.

### Reno Spaghetti Bowl Project, Washoe County, Nevada

Jacobs led NHPA Section 106 compliance activities for one of Nevada's largest public infrastructure projects: reconstruction of the I-80/I-580/US 395 freeway system interchange, including identifying and evaluating 633 properties on over 2,000 parcels; an Effects Assessment for 33 historic properties (including six districts); preparing a Traditional Cultural Property report for the Truckee River; drafting and implementing a Memorandum of Agreement; and coordinating Native American, consulting party, and agency consultation. Jacobs oversaw a highly specialized subcontractor team and collaborated with NDOT cultural and environmental staff, project designers, and stakeholders to maintain the project's aggressive schedule. In addition, Jacobs developed visual simulations to provide depictions of visual impacts to historic properties.

### Union Pacific Railroad Program, Western Region of United States

The Jacobs team assists UPRR program management with cultural resources compliance, covering projects from small trestle bridge replacements, to large capacity projects, and sensitive, high profile replacements of historic truss bridges. We assist UPRR with permitting and Section 106 consultation strategies across their entire network. Projects have included the Great Salt Lake Causeway railroad bridge, removing a historic railroad bridge across the Willamette River in Oregon, and numerous historic bridges in Texas. Currently, Jacobs is leading Section 106 for the Clinton Railroad Bridge Replacement project across the Mississippi River between lowa and Illinois.

### National Science Foundation, National Observatories in New Mexico, Arizona, West Virginia, Puerto Rico

To continue to fulfill its mission within the bounds of available funding, the National Science Foundation (NSF) must change operations at some of the U.S. National Observatories. Jacobs assisted NSF with determinations of eligibility for these enormous, mid-century technical structures and their supporting infrastructure. Evaluations resulted in two newly eligible historic districts and one revised historic district. The cultural resources studies also supported NEPA Environmental Impact Statements. The studies analyzed proposed changes to operations at Arecibo Observatory in Puerto Rico, Green Bank Observatory in West Virginia, and Sacramento Peak Observatory in New Mexico. Jacobs assisted NSF with Section 106 consultation and crafted a Programmatic Agreement for each project. Jacobs is now implementing the documentation and mitigation stipulated for each site.

### St. Elizabeths Hospital East Campus Transportation Network. District Department of Transportation. Washington, DC.

Jacobs conducted cultural resource surveys at the St. Elizabeths Hospital National Historic Landmark (NHL) and coordinated the NHPA Section 106 consultation process with numerous active and engaged consulting parties, District of Columbia SHPO, NPS, and ACHP. As part of this process, Jacobs authored the effects analysis of the transportation network on the NHL as well as the cultural resources chapter and the Section 4(f) evaluation for the EIS. Jacobs also coordinated Section 106 consultation and developed the Memorandum of Agreement and brought it to



# State Route 520 Bridge Replacement and HOV Program, Seattle, Washington

This program involved the replacement of an historic floating bridge—the longest floating bridge in the world—and extensive highway improvements. Serving as cultural resources program lead, Jacobs identified hundreds of NRHP- and Washington State Register-eligible structures, including nontraditional properties such as historic landscapes, roadways, and bridges, and an adversely affected Traditional Cultural Property. Jacobs supported WSDOT and FHWA in government-to-government consultation and worked closely with SHPO, ACHP, the Seattle Historic Preservation Office, and NPS, as well as numerous agency and community stakeholders. The program culminated in a Programmatic Agreement and also included a complex Section 4(f) evaluation.

## U.S. Air Force March Air Reserve Base, Riverside County, California

Because of changing missions at the Base, Jacobs updated the Integrated Cultural Resources Management Plan (ICRMP). Jacobs worked closely with Base and mission staff to develop a 5-year ICRMP that focused on integrating cultural resources considerations into the construction and operation and maintenance projects planned for the Base and provided recommendations for the Base's large historic district, containing over 50 contributing resources. Jacobs conducted a Basewide survey of Cold War-era and earlier resources and developed a detailed historic context. The survey placed Cold Warera resources into a context consistent with California- and USAF-specific Cold War themes and registration requirements. The update included a refinement of the ICRMP's Standard Operating Procedures for cultural resources management and suggestions to modify the Base Maintenance Manual and Programmatic Agreement to better align with USAF's future needs and plans.