1. Building upon previous Section 3 reports, how many historic properties have been identified and evaluated by your agency in the past three years? Have your identification methods improved? Approximately what percentage or portion of inventory has been surveyed and evaluated for the National Register?

NIST manages an inventory of eligible National Register resources nationwide on its campus locations in Gaithersburg, Maryland; Boulder, Colorado; Fort Collins, Colorado; and near Kehaka of the island of Kauai, Hawaii.

Previously, no Gaithersburg, MD resources had been evaluated for eligibility for listing in the NRHP. Since then NIST contracted with professional architectural historians for a full survey and an historic assessment of the entire 579-acre campus. As a result of this survey and evaluation, NIST originally proposed to the Maryland Historical Trust (SHPO) a limited historic district confined to the center of the campus. Upon review, the SHPO recommended a much larger district that covers the entire campus from gate to gate. NIST brought the two recommendations to the Keeper of the NRHP for his final determination. In June of 2016, the Keeper sided with the SHPO, determining that the entire NIST Gaithersburg Campus is eligible for listing due to its significance under criteria A & C. Of the 64 campus structures, 26 were determined to be contributory and 38 were determined as non-contributory at this point. Thus, the entire campus inventory (100%) has been surveyed and evaluated in accord with NRHP criteria. For a listing of the contributory and non-contributory resources within the NIST Gaithersburg eligible district, please see Attachment A.
Similarly, in Boulder, CO since the last report was filed, the entire campus has been surveyed (100%) and evaluated as part of an historic assessment based upon the NRHP criteria. As a result of this assessment, and in consultation with Colorado History Office of Archeology and Historic Preservation (SHPO), the only one of the approximately 26 structures to be determined eligible for listing is the 1954 Radio Propagation Building (Bldg. 1).

NIST’s other major campus is located in Fort Collins, CO with six structures. The survey and evaluation of those resources according to Section 110 requirements and has resulted in a February 2020 Determination of Eligibility along with the Hawaii campus as a multiple resource district.

The NIST Kekaha, Hawaii campus consists of two structures built in 1972 which are located on a 30 acre site surrounded by the Barking Sands Missile Range (USN Base) and the Pacific Ocean on the west by the Department of Defense.

Evaluation in September, 2019 of the two satellite facilities in accordance with National Register standards and guidelines found that the facilities possess the qualities of significance and integrity necessary for listing on the National Register of Historic Places for their national level of importance under Criterion A in the area of science (National Park Service [NPS] 1983). The radio transmitter facilities in Fort Collins, Colorado, and Kekaha, Hawaii, are integral to transmitting the national standard for time calibrated through the atomic clock located in the previously determined eligible Building 1 at the NIST Boulder campus. The transmitter stations also are historically responsible for the transmitting frequencies that maintain the integrity of the nation’s radio airwaves.

2. Does your agency have policies that promote awareness and identification and of historic properties?

This information is collected through studies that are performed in accordance with processes outlined by the Department of the Interior for historic property evaluation and identification and as specified in Section 110 of the NHPA. The record copies of the studies are filed and maintained in both electronic and hard-copy format with Historic Preservation Officer. Our Real Property Inventory database also contains information that identifies a property’s historic status.

Our Federal Preservation Officer, with the concurrence of the appropriate State Historic Preservation Officer, determines if a property is eligible for listing in the National Register of Historic Places based on National Registration Criteria and in accordance with the Secretary of the Interior’s Standards for Evaluation. As noted above, resources on our two of least populated campuses were surveyed and evaluated over FY 2020 resulting in a net increase to our inventory of historic resources.
3. Describe reporting mechanisms or programs your agency uses to manage information about historic properties. What information do they contain about your historic properties?

Like many federal agencies NIST uses the standard FRPP definitions to classify its heritage assets. The categories NIST uses to classify heritage assets are:

- National Historic Landmark (NHL) (1) [not used as NIST has no NHLs]
- National Register Listed (NRL) (2) [not used as NIST currently has no NRLs]
- National Register Eligible (NRE) (3)
- Non-contributing element of NHL/NRL district (4)
- Not Evaluated (5)
- Evaluated, Not Historic (6)

Estimates of future capital expenditure are included in the FRPP. The Federal Preservation Officer checks the FRPP and the regular updates to verify it for accuracy in so far as the above determinations.

Since June of 2020, NIST has created web pages on both its intranet and its public website that provides a wealth of information about the historic resources within its portfolio, helpful research data as well as compliance requirements. See: Historic Preservation at NIST | NIST

4. Has your agency employed partnerships to assist in the identification and evaluation of historic properties?

NIST does not employ any partnerships to assist in the identification and/or evaluation of historic properties. Given that surveys and historic assessment of 100% of our resources on our four major campuses have been completed, partnerships would serve no purpose for NIST.

5. Provide specific examples of major challenges, successes, and/or opportunities your agency has experienced in identifying historic properties over the past three years.

NIST has been very successful in the identification of historic resources on its various campuses as noted above

Protection
6. **Have your agency’s programs and procedures to protect historic properties, including compliance with Sections 106, 110 and 111 of NHPA, changed over the past three years in ways that benefit historic properties?**

All Section 106 consultations for all campus locations are managed by the Federal Preservation Officer in close coordination with NIST project management staff and leadership. This assures that best practices and character defining features of the NRHP eligible properties are carefully considered and prioritized in proposed Undertakings. Furthermore, NIST established an Architectural Design Review Board in 2018 to review proposed changes to facilities and landscapes on primary Gaithersburg and Boulder campuses. This 5 member board is composed of seasoned architects and landscape design professionals whose responsibility is to make sure that proposed projects are compliant with the campus design guidelines found in the two master plans (Boulder Laboratories Master Plan | NIST and NIST Gaithersburg Master Plan | NIST) as well as the Secretary of the Interior’s Standards for the Treatment of Historic Structures.

The FPO, NIST Office of the General Counsel and the Maryland SHPO in 2019 signed a Programmatic Agreement for the Gaithersburg Campus that governs day to day maintenance and operational activities. Similarly, NIST and the CO SHPO along with the City of Boulder are in the process of drafting a Programmatic Agreement for the day to day management of O & M activities for NRHP-eligible Building 1 on the Boulder Campus.

In order to increase awareness among facilities staff, the FPO has conducted training workshops on both major campus locations.

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7. **Has your agency employed partnerships to assist in the protection of historic properties?**

As noted earlier, NIST has not used partnerships in the surveying and identification of historic resources.

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8. **Does your agency use program alternatives such as Programmatic Agreements, Program Comments, and other tools to better manage and protect your agency’s historic properties?**

Yes, over the last several years NIST has, with the essential help of the ACHP federal programs staff has developed and is in the process of developing Programmatic Agreements, to better manage the day to day maintenance as well as the long-term
renovations affecting Building One at the Department of Commerce Boulder Laboratories.

9. **Provide specific examples of major challenges, successes and/or opportunities your agency has encountered in protecting historic properties over the past three years.**

We have recently commenced with the initial construction phase of a major, multi-year renovation and extension to the Radiation Physics Laboratory, one of the original special purpose laboratories built on the Gaithersburg campus from 1962-1964. Working closely with the Maryland Historical Trust (MHT) NIST staff and its consultants devised a façade treatment that, in response to suggestions made by the MHT, references the “A-B-A-B” vertical rhythm of the existing building’s North elevation and is referenced, both vertically and horizontally by articulated scoring and strategic placement of the joints in the new precast panels.

![Rendering courtesy of ZGF Architects and Hensel Phelps](image)

Similarly, NIST is presently engaged with the CO SHPO on the design for rehabilitation of two wings (4 and 5) of the NRHP-eligible Building 1 on the Boulder campus.

10. **Do your agency’s historic federal properties contribute to local communities and their economies? Is the use of historic properties encouraged and promoted within your agency?**

The entire Gaithersburg campus is an NRHP eligible Historic District, so yes, the use of 64 historic structures (inclusive of the 24 contributory structures) is promoted and encouraged. Because NIST is a major employer surrounded by the City of Gaithersburg, its presence has a positive effect on the local economy. Similarly, in Boulder the continued use of historic building 1 is anticipated with a phased renovation project that will affect all six wings of this NRHP eligible structure. A familiar landmark along Broadway, a major north-south artery of Boulder, building 1 presents to the local community the primary entrance to the campus. The campus in turn serves a gateway to hikers, bikers, and residents who make maximum use of
outdoor recreation areas bordering and part of the campus located at the foot of the Flatirons mountain range.

11. Explain how your agency uses historic properties to foster heritage tourism, when consistent with agency missions.

NIST has not had to date opportunities for the use of its assets in economic development and heritage tourism. However, we involve stakeholders through compliance with the National Environmental Policy Act and the consultation process prescribed under 36 CFR §800 and Section 106 of the NHPA. In the future, we are looking to add to our public museum functions by adding exhibits at our new visitor processing centers that are being planned for both the Boulder and Gaithersburg campus locations.

There are no special statutory or legal restrictions that prohibit us from exploring partnerships for local economic development; however, all historic buildings are being used to fulfill our primary mission. Specific proposals would require review by legal counsel.

In 2018 we hosted an exhibition, in cooperation with Montgomery Modern (a program of the Maryland National Capital Park & Planning Commission), on 20th Century Modern Architecture in Montgomery County (where the HQ campus is located.) The exhibition prominently featured NIST and local structures that are acclaimed for their architectural significance.

In Boulder, in the Spring of 2019 we hosted a campus tour, in cooperation with the local preservation group, Historic Boulder that was very positively received.

12. If your agency is subject to the requirement of the Federal Assets Sale and Transfer Act (Property) and the Federal Property Management Reform Act (described above) how will their requirements affect your agency’s ability to protect and use its historic properties?

NIST evaluates the condition of its all of its properties, including historic properties, through the Facilities Assessment Program/ Facility Condition surveys of all facilities that are conducted on a recurring, periodic schedule.
13. How is your agency meeting the requirements of EO 13693, Planning Sustainability in the Next Decade?

The ongoing 20-year Gaithersburg Comprehensive Master Plan shall stipulate what has become common practice at the NIST campuses nationwide, that historic assets be repurposed. To this end historic buildings on the campuses have typically been used for same purpose(s) since their dates of original construction. Underpinning this Goal, the text shall include a provision similar to: “Preserve and enhance structures with established historic and cultural value, and protect and document important archeological finds.”

NIST has aggressively pursued various HVAC upgrades incorporating more efficient motors;
NIST reroofs its campus structures with white roofs;
NIST recently completed an Energy Savings Performance Contract for a 15-acre solar array that is estimated to provide the 579-acre Gaithersburg campus with 5% electrical savings:
NIST is nearing completion on a Co-Gen renewable energy facility that shall provide 70% steam and 40% electrical;
NIST is also installing geo-thermal wells for make-up water to the Plant Cooling Tower

All building modernizations and new facility construction will be designed to meet EO 13693.

14. Does your agency use, or has it considered using, Section 111 (now 54 U.S.C. § 306121) of the NHPA to lease or exchange its historic properties?

NIST does not have unilateral authority to transfer, out-lease, or sell their historic properties. If an opportunity arises where use of this authority would be considered advantageous, NIST would work with Office of the General Counsel for review, legal counsel, and direction.

Thus, our agency does not utilize this provision of the NHPA since all of its owned properties are within secured perimeters that provide for limited public access. Furthermore, new master plans for both Gaithersburg and Boulder project additions, rather than reductions in foot print.

15. Explain how your agency has employed the use of partnerships to assist in the use of historic properties.

NIST does not have partnerships for the preservation of historic properties because all historic buildings are preserved and utilized in fulfilling its mission. Due to the highly
specialized nature of most of our mission-critical space, NIST has not actively sought out partnerships to locate other agency functions in historic properties. However, in historic Building 1 in Boulder we do provide laboratory space for the Institute for Telecommunication Sciences (ITS), a division of the National Telecommunication and Information Administration. Similarly, at the Gaithersburg campus, we provide office space for the Office of Security of the U.S. Department of Commerce in Buildings 303 and 101, both contributory structures to the NIST Gaithersburg historic district.

16. Provide specific examples of major challenges, successes, and/or opportunities your agency has encountered in using historic properties over the past three years.

During last three years, we have improved our management of historic properties. Significant changes, accomplishments, and program progress since the last report include:

- Evaluation and updating the Real Property inventory database to reflect the building’s historic status as described above.
- Close and careful review of all Office of Facilities & Property Management design and construction projects to assure absolute compliance with the SOI Standards.
- Special historic preservation principles and practices training to Office of Facilities and Management personnel to inform and instruct staff about their stewardship responsibilities.
- NIST now requires that all design and construction projects affecting exteriors and certain interiors of its eligible resources have as part of its project team a historic preservation trained professional who meets the SOI qualification standards.
- Thorough documentation, analysis and coordination with the SHPO in order to determine effects for all Section 106 projects.
- Creation of an electronic log of all Section 106 cases showing project status at any given time.
- Coordination of work with the NIST Office of Safety, Health and Environment in the NEPA evaluation of projects and work sites.

Submitted October 26, 2020
by NIST FPO, Phillip W. Neuberg, FAIA

END OF REPORT