



# Cultural Resource Investigations

## NMDOT Guidelines - 2024



1930 and 2019 Bridges Along US 60 Near Bernardo, NM (NMDOT 2019)

**NMDOT Cultural Resources Section**  
**1120 Cerrillos Rd, Room 205/206**  
**Santa Fe, New Mexico 87504-1149**

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## Contents

Introduction .....	1
NMDOT Project Considerations .....	2
Safety.....	2
Tribal Consultation .....	3
Land Ownership .....	3
Area of Potential Effect (APE) .....	3
Types of Projects and Respective APEs .....	4
FHWA and NMDOT Lead Projects .....	5
T/LPA projects .....	6
Contractor Located Activities (CLA).....	7
NMDOT Permitted Projects .....	7
Identifying and Recording Historic (Cultural) Resources Within the APE.....	8
Records Search.....	8
Photography .....	9
Archaeological Sites.....	9
Historic Architecture .....	11
Historic Roads and Other Linear Features .....	11
Bridges and Culverts .....	12
Sidewalks and Other Street Infrastructure .....	13
Roadside Markers and Objects.....	13
Roadside Memorials .....	14
Eligibility and Effect Recommendations .....	14
Report Standards.....	14
NMCRIS Investigation Abstract Form (NIAF) .....	15
Project Map .....	16
Plan Sets.....	16
Report Review and Final Submittal .....	16
Glossary .....	17
Useful Links .....	23
Appendix A.....	24

## Introduction

The New Mexico Department of Transportation (NMDOT) provides a safe and efficient transportation system for the traveling public while promoting economic development and preserving the environment of New Mexico. Transportation projects can be paid for with federal funds, state funds, or private funds, but usually with a combination of federal and state funds. Knowledge of the funding source(s) is the first step in understanding how cultural resource management will be conducted for transportation projects.

The federal-aid Highway Program assists state Departments of Transportation and local governments with their transportation projects. The Federal Highway Administration, New Mexico Division Office (FHWA) and the NMDOT have worked together to deliver a program in accordance with Federal requirements including the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and Section 4(f) of the U.S. Department of Transportation Act of 1966. FHWA has delegated to NMDOT many of FHWA's responsibilities under the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA). In addition, the NMDOT must comply with state statutes such as the New Mexico Cultural Properties Act, New Mexico Cultural Properties Protection Act, and the New Mexico Prehistoric and Historic Sites Preservation Act.

These guidelines are intended to address cultural resource management as it pertains to NMDOT-managed resources, NMDOT projects, tribal and local government (T/LPA) projects funded by NMDOT, and NMDOT permitted projects. All of these must conform with the federal and state laws and regulations. Through these guidelines, NMDOT can ensure that documentation of, and consultation on, cultural resource eligibility and project effect are consistent. These guidelines are supplemental to the New Mexico Administrative Code (NMAC) 4.10.15 *Standards for Survey and Inventory* issued by the New Mexico Cultural Properties Review Committee and are in addition to the New Mexico Cultural Resource Inventory System (NMCRIS) User's Guide. Consultants performing cultural resource inventories for FHWA, for NMDOT, for T/LPAs or for clients needing NMDOT access or utility certifications must be familiar with both NMAC 4.10.15 and NMCRIS and hold a current state permit from the Historic Preservation Division. In addition, the consultant must be familiar with all other requirements and guidance from agencies that own or control land, and fund or permit projects.

## **NMDOT Project Considerations**

For all transportation projects, consultants must understand 1) who the proponent is, 2) land ownership, 2) funding source(s), and 3) which permitting agencies are involved. These all determine the regulatory framework, identification protocol, and the level of effort for documentation and consultation (see **Appendix A**). Individually or collectively, these factors will also affect the review process and project timeline. For example, NMDOT owns right of way adjacent to private land. However, if other land managing or permitting agencies are involved, cultural resource consultants will need to plan for review by other agencies in addition to the NMDOT.

Given the breadth of coverage by NMDOT and NMDOT-related projects across the state, not all eventualities are covered by this document. Therefore, NMDOT cultural resources staff are available to provide project-specific assistance to consultants regarding transportation projects. You should contact the NMDOT Cultural Resources Section if the regulations and guidance do not address a particular situation and/or if you have any questions.

### **Safety**

Before conducting any field investigations, ensure that you and your team are prepared for potential hazards and can deal with emergency situations as outlined in OSHA 3151-12R 2004. Field crews should be aware of their surroundings and know that nearby traffic and weather can be extreme hazards. Maintain awareness of the location of all field team members and consider working in pairs, especially in remote locations.

At a minimum, all field personnel are required to wear fluorescent orange or green safety vests while working in the NMDOT ROW. Old and faded safety vests are not acceptable – crew members always need to be highly visible. It is recommended that field staff wear appropriate footwear, long pants, long-sleeved shirt, a hat, and eye protection. Clothing with inappropriate or inflammatory messages or slogans is not acceptable.

Vehicles will be parked as distant from driving lanes as possible and not pose a distraction or impediment to the traveling public. Vehicles should be well-maintained and equipped with a first aid kit and other emergency supplies as specific conditions dictate.

For field investigations that involve testing and data recovery, a traffic control permit will be required from the NMDOT district in which the work is being conducted. This is usually in the form of traffic signage and barrels. Additional measures might be required if a lane closure is necessary.

## **Tribal Consultation**

Tribal consultation should be government-to-government. FHWA has authorized NMDOT to consult with tribes under Section 106 of the National Historic Preservation Act. FHWA has not delegated this authority to consultants or to T/LPAs. The NMDOT will consult with the appropriate tribes on behalf of FHWA for local government projects receiving FHWA funds administered through NMDOT. For state-funded projects, NMDOT will consult with tribes under the State-Tribal Collaboration Act when necessary. As stated, for federal FHWA projects, these responsibilities cannot be delegated to project sponsors, including local governments, permit applicants, or NMDOT consultants. T/LPAs, utility companies, and their respective consultants will need to contact tribal representatives when conducting state-funded transportation-related projects on tribal land and/or applying for an access permit on tribal land. For any questions regarding the consultation process, contact the NMDOT Environmental Bureau Tribal Coordinator at [tribalcoordinator@dot.nm.gov](mailto:tribalcoordinator@dot.nm.gov).

## **Land Ownership**

NMDOT owns most rights-of-way (ROW) adjacent to private land and NMDOT has acquired ROW easements across federal, tribal, and state lands, although there are exceptions. Consultants need to identify ROW ownership prior to fieldwork to gain appropriate permits for right of entry, and to comply with the land managing agency's permit requirements for cultural resource survey and site recording. Use current BLM, New Mexico State Land Office (State Trust), and county tax assessor's land status information to determine land ownership and easement. For surveys outside of the ROW, all permits and written permissions to access lands must be obtained before field work begins. Do not conduct pedestrian survey outside the ROW without written permission from the landowner and without the appropriate permit. For CR documentation, survey acreage must be calculated for each land-owning agency: State Trust, NM Game and Fish, NMDOT owned adjacent to private, BLM, US Forest Service, tribal lands, etc.

## **Area of Potential Effect (APE)**

The APE is based on the scale and scope of the project. This includes the activities proposed and the construction footprint, both of which are known as the undertaking. The APE can include direct, indirect, and cumulative effects from the undertaking. As described in 36 CFR 800.16 and in the New Mexico Administrative Code (NMAC) 4.10.15.7 D., the APE is "...the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic (cultural) properties, if any such properties exist."

For most undertakings, the direct effect APE is anywhere actual ground disturbance will occur. If additional ROW is needed to construct a project, additional ROW acquisitions are in the direct effect APE. ROW acquisitions include any of the following: permanent ROW “takes”, a construction maintenance easement (CME), a temporary construction permit (TCP), or a work permitted area.

For NMDOT projects, the indirect effect APE extends beyond the limits of the ground disturbance and can include visual, vibratory or noise impacts to a building, structure, site, or district. If there is a potential for vibratory effects due to blasting and demolition, then those areas would be in the direct effect APE. In New Mexico, the built environment is seldom affected by transportation undertakings unless an eligible building or structure will be removed or other (i.e., visual) adverse effect because of the project.

A visual inventory of the indirect effect APE must be conducted in person; Google Street View or other such remote investigation is not an adequate proxy but can be helpful when conducting pre-field scoping efforts and gauging the integrity of the adjacent built environment. The indirect effect APE and level of effort need to be established prior to field efforts and should always involve a discussion with the NMDOT CR Section.

## **Types of Projects and Respective APEs**

As stated previously, the consultant must know: 1) the project proponent, 2) land ownership vs easement, 3) funding sources, and 4) required permits. These all factor into how and with whom we consult. Also, these are critical to filling out the NIAF properly and accurately.

Various project types include:

1. Federally funded NMDOT projects where FHWA is the lead federal agency for meeting requirements under the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act. The FHWA NM Division Office has delegated these responsibilities to the NMDOT and the NMDOT acts on behalf of FHWA.
2. State funded NMDOT projects where NMDOT is the project proponent.
3. FHWA funded projects where the Tribal/Local Public Agency (T/LPA) is the project proponent. However, FHWA remains the lead for NEPA and Section 106 and the T/LPA coordinates with NMDOT which is the agency acting on behalf of FHWA.

4. State funded projects where the T/LPA is the project proponent and state funds are being administered by NMDOT. The T/LPA will coordinate with NMDOT first and then consult with the State Historic Preservation Officer.
5. Contractor Located Activities (CLA) when the activities are part of a FHWA funded or state funded NMDOT project. The contractor, providing the methods and means for construction, is the proponent and the NMDOT is responsible for oversight. CLAs include material pits, borrow pits, equipment and staging yards, access roads and other ancillary facilities used in support of a specific transportation improvement project;
6. NMDOT permitted projects (utility installation or other use of NMDOT ROW) whereby the entity seeking the permit is the project proponent. Often this is a public utility company but might also be a municipality or a private citizen requesting access to NMDOT ROW.

The following provides a path for navigating each and is summarized in **Appendix A**.

### **FHWA and NMDOT Lead Projects**

The Cultural Resource (CR) Section of the Environmental Bureau at NMDOT will review the scope of work and the level of effort for all projects proposed by the NMDOT, whether the projects are FHWA (federally) funded or state funded. CR Section staff will supply information to the NMDOT consultant on project scope, location, APE, funding source(s), available maps, and plans. FHWA is the lead federal agency for Section 106 consultation and the NMDOT will act on FHWA's behalf.

As stated previously, the direct effect APE will encompass areas of actual ground disturbance including proposed permanent ROW acquisitions, CMEs, TCPs, and work permit areas. For purposes of the CR desktop review and field pedestrian inventory and identification, the direct effect APE will include both sides of the road from the beginning of the project (BOP) to the end of the project (EOP) and will be from the edge of pavement to the right of way fence. Along an interstate the direct effect APE will include 1000 feet beyond the BOP and EOP. This additional 1000 feet will accommodate any minor adjustments to the BOP and/or EOP and any traffic control measures. When required, the direct effect APE shall be subjected to an intensive pedestrian cultural resource inventory to identify historic (cultural) properties. For projects along state highways and within urban settings, the coverage for desktop reviews and pedestrian survey should be commensurate with the undertaking. For example, a project within an urban setting, i.e., within an incorporated municipality or census designated location, the direct effect APE shall be from the BOP to the EOP and then to the next intersection or 100 feet, whichever is less. Determine the appropriate direct effect APE in consultation with the NMDOT CR Section staff.



As stated, prior, the indirect effect APE is the area considered for visual and vibratory effects to historic properties. The indirect effect APE will encompass an area immediately adjacent to the right of way and/or ROW to be acquired and will extend a maximum of 25 ft beyond the direct effect APE. The NMDOT CR Section staff may adjust the indirect effect APE based on the scale and scope of the project in consultation with the Historic Preservation Division.

For CR surveys on tribal lands, such as the Navajo Nation, follow the tribal requirements. For an undertaking that requires CR survey on both tribal lands and non-tribal lands, then the consultant might need to satisfy multiple land managing agency requirements.

When field survey is required, a visual inventory of the indirect effect APE must be conducted in person; Google Street View or other such remote investigations are not an adequate proxy but are helpful when conducting pre-field scoping efforts and gauging the integrity of the adjacent built environment. The indirect effect APE and level of effort need to be established prior to field efforts and should always involve a discussion with the NMDOT CR Section staff.

For state funded projects proposed by NMDOT, the state statutes are generally followed. NMDOT state funded projects tend to be maintenance projects and although require a desktop review, these types of projects don't always require field survey. In accordance with the state statutes, NMDOT is primarily looking for historic properties listed on the state and/or national registers, whether there has been any prior CR survey in the project area, and the presence of previously recorded sites.

### **T/LPA projects**

T/LPA projects receive funds from the NMDOT and these can be federal (FHWA) funds or state funds. The T/LPA is considered the project proponent and is responsible for consulting with NMDOT in all cases. For state funded projects, the T/LPA Coordinator will direct the T/LPA to the State Historic Preservation Officer for consultation when necessary. It is the T/LPA's responsibility to ensure timely project development and produce all required environmental documentation in accordance with the T/LPA's signed cooperative agreement.

The T/LPA begins their environmental certification process by providing information on a level of effort form to the NMDOT Environmental Bureau T/LPA Coordinator who will determine the appropriate level of effort for cultural resource investigations. The consultant working on behalf of the T/LPA will need to obtain the project scope and footprint, funding information, and land ownership before contacting the T/LPA Coordinator so that the T/LPA Coordinator can make an informed decision on the level of effort needed for environmental certification.



Tribal consultation for T/LPA projects will be as follows. For federal FHWA-funded projects, the NMDOT on behalf of FHWA will consult with the tribe. For state NMDOT-funded projects on tribal lands, the T/LPA will consult with the tribe.

The direct effect APE and indirect effect APE for a T/LPA project will follow the guidance outlined above for FHWA and NMDOT lead projects. Due to the typically smaller scale and nature of T/LPA projects in an urban setting, i.e., within an incorporated municipality or census designated location, the direct effect APE will be extended from the BOP and EOP to the next intersection or 100 feet, whichever is less. From the right of way, the direct effect APE will be 25 ft. Consult with the T/LPA Coordinator if there is any question on the level of effort or the APE. Include the NMDOT on consultations with HPD regarding the APE when CR survey is going to be conducted.

### **Contractor Located Activities (CLA)**

The Environmental Bureau CLA Coordinator provides oversight and review of CLA actions and issues environmental certifications for those actions. The construction contractor or their consultant will need to provide the Environmental Bureau CLA coordinator with a scope of work and indicate land ownership along with other information on a CLA Request Form. The CLA Coordinator will determine the appropriate level of effort for cultural resource investigations and for the overall environmental certification.

For CLA projects, the direct effect APE shall include an additional 50 feet beyond the newly proposed perimeter of the material pit, equipment staging yards, or other locations requiring ground disturbance. Proposed new access roads, or improvements to existing access roads, are part of the direct effect APE and shall include an additional 100 ft from the BOP and EOP and parallel to the road. An indirect effect APE will be considered on a case by cases basis if a registered Historic District or a National Historic Landmark (NHL) is present.

### **NMDOT Permitted Projects**

For NMDOT permitted projects the project proponent or their consultant will provide a scope of a work indicating land ownership, along with other pertinent information, to the Environmental Bureau Utility Coordinator who will then determine the appropriate level of effort for cultural resource investigations and subsequent environmental certification or “clearance.” (Note that Permit Application forms and supporting documentation are submitted to the NMDOT District Permitting Agent – not to the Environmental Bureau.)

Both the direct and indirect effect APE for a permitted project is from edge of pavement to the ROW fence on the side of the road that will be impacted by the utility. If a CR

pedestrian field survey is required for the project, the APE will include 100 feet beyond both the BOP and EOP. If a utility company shifts the line to the other side of the road to avoid a cultural resource, then additional CR survey might be required on the newly proposed side of the road. If the utility is overhead, the APE may extend farther depending on the character and height of the proposed utility. To assess the level of effort necessary to identify historic properties commensurate with the undertaking, the NMDOT Environmental Bureau Utility Coordinator should be contacted prior to fieldwork to assist in making APE determinations.

For permitted projects that cross multiple jurisdictions (NMDOT, BLM and tribal) and the permittee (proponent) must meet both NMDOT requirements as well as other land managing agency's requirements. The proponent or their consultant will need to provide documentation to the NMDOT Environmental Bureau Utility Coordinator demonstrating communication between the proponent and the land managing agency.

## **Identifying and Recording Historic (Cultural) Resources Within the APE**

New Mexico had the first highway salvage program in the nation, and cultural resource investigations focused on archaeological site identification and excavation. This was followed by cultural resource management (CRM) as a profession. All LA and HCPI forms as well as CR reports are curated and maintained by the New Mexico Historic Preservation Division and the Archaeological Records Management Section (ARMS) of the Department of Cultural Affairs. ARMS also administers the New Mexico Cultural Resources Information System (NMCRIS), a large, automated cultural resources database through which CRM consultants can access, remotely, results of pedestrian surveys.

### **Records Search**

As stipulated in NMAC 4.10.15.9, a pre-field records search is required prior to a CR pedestrian survey. For previously recorded sites, the consultant shall access, through NMCRIS, prior recordings including original LA forms and site maps. These documents are essential in providing a baseline for field survey efforts, including re-recording of sites that are listed as eligible or of undetermined eligibility, and to identify any significant changes to a site or building or structure since the previous recording. An ARMS GIS Map Service view and a NMCRIS Site Summary are insufficient since these lack detailed information. Contact ARMS personnel for LA and HCPI forms. Requests can be made at [e.nmcris@dca.nm.gov](mailto:e.nmcris@dca.nm.gov).

Consultants should make use of historical aerial photography curated in the Photogrammetry Unit at NMDOT and at the University of New Mexico. Historical photos can assist in dating historic properties and associated features. Consultants may

refer to the NMDOT Interactive Map Portal (see **Useful Links** below) for information on available images and how to acquire them.

Prior documentation and aerial photos are also useful for developing a historic context specific to the project area. A historic context should be commensurate with the scope of work and the consultant has numerous resources that can be accessed remotely such as town websites, Sanborn maps, and other resources. These sources will also allow the consultant to effectively address historic integrity, eligibility, and project effects once the fieldwork is complete.

### **Photography**

In urban environments, obtain a photographic panorama view of the streetscape, sidewalk, building, etc., where the work is proposed. Always take photos of the BOP and the EOP that clearly illustrate the general setting of the subject project and the APE.

Photographs of a cultural property or feature must show the relationship and distance between it and the road. Photographs of artifacts must include a scale.

When using historic photographs or other archival material not in the public domain, be sure to obtain permission for use and reproduction. Basic information for a complete citation includes author or creator's name, title of the work, date, collection name, box, folder, negative number, and repository.

### **Archaeological Sites**

All data is now entered electronically into the NMCRIS database so this will ensure that the most current LA form (format) is being used. When recording and evaluating a site, apply the eligibility criteria, consider integrity, and describe if and how the character-defining features of the property will be affected by the project (see National Register Bulletin No. 15 and Bulletin 36).

Sites, or portions of sites, found within the NMDOT ROW adjacent to private land will be recorded within the NMDOT ROW only. Do not cross the ROW fence onto private land unless NMDOT is acquiring the property for additional ROW, and if you have prior written permission from the current landowner. Sites found within NMDOT ROW on State Trust land or BLM land will need to be recorded in their entirety. This is required by both agencies, so the consultant will need to be prepared to cross over the right of way fence. When surveying lands administered by other federal or state agencies, ensure compliance with the relevant agency's requirements with respect to site recording.

When recording archaeological sites, discuss site formation processes, site condition, and any natural- or human-caused disturbances to the site resulting in its current condition. For example, if a site is on the top of a hill that has since been cut by a road, and artifacts are being washed downslope and are not in-situ in the right of way, then make this clear.

For previously recorded sites, have LA forms in the field, particularly the previous field maps. These should be used as a baseline for the current recording. Discuss any changes noted from the previous recording and clearly state whether the observations are current or are from the previous recording. Evaluate and discuss the entire site if possible. If only a portion of the site is in the ROW or APE, explicitly evaluate and discuss the portion of the site in the ROW or APE. Limited shovel testing is permissible on surveys. Refer to NMAC 4.10.15.15 LIMITED TESTS DURING SURVEY for guidance and employ testing to the maximum extent allowed to aid in eligibility recommendations.

When a site extends outside the ROW and access to the entire site is not an option, give an estimate of the portion of the site in the ROW in terms of percentage of the overall site. This is why older site forms are imperative. Sites were often recorded in their entirety on private land “in the old days”. Based on these older recordings we can sometimes determine the percentage of a site in the ROW. Percentages can also be based on remote access such as aerial imagery, experience, and expertise, and should be explicitly stated as such in the site description. Apply eligibility criteria supported by the seven aspects of integrity for the portion of the site that can be accessed and discuss the relevance to the site’s overall eligibility.

All maps, and in particular site maps, must show the nearest road and, if on the highway system, must include a milepost to a tenth of a mile (written as MP 3.5, for example). When sites cannot be recorded in their entirety, map the portion of the site in the ROW. Look over the fence and try to map what can be seen. For sites that were mapped previously on private property, only update the map with what can be legally accessed and state that the previously mapped portion could not be accessed nor verified.

Provide site shape file data to the NMDOT or to the T/LPA’s engineers. The site shape file data will be used by the NMDOT or the T/LPA to illustrate site location on the plan set and how site location relates to project activities. Discuss in detail the effects the project could have on the site within the APE and whether the site can be avoided. If the site can be avoided, site avoidance measures will be conveyed to the project development engineer (PDE) and to the contractor by station number and by mile marker. This also helps the PDE calculate the amount of temporary avoidance fencing needed for site avoidance.

## Historic Architecture

Record historic buildings and structures using HCPI digital forms. All data is now entered electronically into the NMCRIS database, so this will ensure that the most current form is being used. When recording and evaluating a property, consider the seven aspects of integrity and apply the eligibility criteria. Consider the historic context and how the property type compares to similar property types in the APE and immediate vicinity. Describe if and how the character-defining features of the property will be affected by the project (see National Register Bulletin No. 15).

When documenting buildings and structures, consult HPD's *Architectural Classification: Style and Type* and *Roadside Architecture and Objects in New Mexico* (NMDOT Technical Series 2010-1). Both are available online (see **Useful Links**) and provide information on the common architectural styles found in New Mexico. The latter document also provides background information on a variety of historic period resources that are commonly associated with roads such as gas stations, ports-of-entry, and highway markers, as examples.

Identifying and defining the geographical boundaries of historic districts and rural/cultural landscapes is usually beyond the scope of most NMDOT projects. Although identification of these property types usually is not required, inventory and identification efforts should consider the historic fabric (context) within the APE and the potential for such districts. Keep in mind that although a building or structure might lack integrity, significance, or individual distinction and is not eligible to the NRHP, they can still be considered as contributing to a district.

If a project does not have the potential to adversely affect a historic district, then an example narrative might read: *The current project APE encompasses the right of way along NM 999 which serves as the main street for Little Town, NM. The CR inventory identified three buildings that are recommended eligible and six that are recommended not eligible to the NRHP. Based on the pre-field research and inventory results these resources are consistent with other intact historic elements adjacent to the APE, which suggests a larger residential/commercial historic district. Additional inventory and identification of adjacent properties would be necessary to determine the period of significance and the geographic limits of the potential district but is beyond the scope of this project.*

## Historic Roads and Other Linear Features

Nearly all roads in New Mexico are over 50 years old and might meet the National Register criteria for listing in the National Register of Historic Places. Seldom are new roads constructed, but since all roads are continuously being maintained or upgraded (widened for example), we are sometimes left with historic alignments within the APE. Most NMDOT and T/LPA projects are minor projects as defined in *Historic Highways in the NMDOT System* (NMDOT Technical Series 2004-1, pgs. 20-26). Minor projects leave

current road alignments unchanged and include, but are not limited to, pavement rehabilitation, ROW fence replacement, adding shoulders, adding turn lanes, or signalization improvements to name a few examples. Descriptions of roads for minor undertakings can be accomplished via the report narrative and eligibility determinations are not made for these types of projects.

Major undertakings are rare and would include new road alignments or large-scale changes to a highway, both requiring significant distances (miles) to warrant a major undertaking. (Minor and major undertakings described here should not be confused with Minor and Major Undertakings as defined by the FHWA, which are based on cost thresholds.) For major projects, substantial background research is required to identify and evaluate the historic context of the road and to compile evidence to support the recommendation for eligibility to the NRHP. Appendix C of NMDOT Technical Series 2004-1 provides step-by-step guidance on researching historic roads in the NMDOT system for a major undertaking.

Since abandoned road segments are defined as structures in National Register Bulletin 15, these should be recorded using the HCPI digital form. For linear cultural resources that extend beyond the APE, such as acequias, use aerial photos and other sources to support eligibility recommendations to the NRHP for the portion of the linear feature in the APE. Do not enter private land without permission.

### **Bridges and Culverts**

Most historic bridges on the NMDOT highway system constructed prior to 1974 have been evaluated. Information on these bridges, including eligibility, can be found in *Historic Bridges in New Mexico: An Updated Guide for Evaluation* (NMDOT Technical Series 2014-1, see **Useful Links**). Bridges constructed after 1974, including bridges on a NMDOT highway system or bridges on non-NMDOT roads such as county or other municipal systems, will be evaluated using Technical Series 2014-1 or other evaluation methods in accordance with the most current Historic Bridge Programmatic Agreement between NMDOT and the NM SHPO. Whichever bridge evaluation methodology is in the most current PA will apply, so coordination with the CR Section is essential.

When evaluating integrity, do not confuse structural integrity (as found in a bridge inspection report) with the seven aspects of historic integrity. Bridges and culverts can contribute to the eligibility of a historic road, such as Route 66, and will need to be considered in the context of the road when documenting and evaluating.

Bridges that have been previously determined not eligible in consultation with the NM SHPO and are going to be removed, whether on or off the NMDOT highway system, will be recorded using the HCPI digital form.

Culverts are sometimes referred to as bridges and are assigned bridge numbers by the NMDOT. Culverts generally are not eligible to the National Register unless associated with the Work Progress Administration (WPA) or the Civil Conservation Corps (CCC) programs, and/or exhibit unique architectural characteristics. As stated, prior, culverts and bridges can contribute to the eligibility of a road.

For utility projects, if a bridge is within the project area but the bridge will not be used as part of the project, include a brief description of the bridge using *Historic Bridges in New Mexico* (NMDOT Technical Series 2014-1). If utility lines will be attached to the bridge structure, fill out an HCPI digital form and assess eligibility and effect.

### **Sidewalks and Other Street Infrastructure**

Sidewalks constructed over 50 years ago might not be individually eligible but could contribute to a historic district. Conversely, the absence of sidewalks could be a significant characteristic of a historic district and the addition of sidewalks could affect the integrity of the district. The potential for sidewalks to be eligible is not limited to those constructed under the WPA or CCC programs. (These resources and their locations are documented in *The Historic and Architectural Resources of the New Deal in New Mexico*, 1994 D. Kammer, prepared for the New Mexico Historic Preservation Division). Using the HCPI digital form, provide current photographs showing the length and extent of segments of sidewalks or other street infrastructure, and close-up photos of manufacturing stamps.

### **Roadside Markers and Objects**

Roadside markers include official Scenic Historic Markers and markers that resulted from the Federal Aid Highway Program (FAP) beginning in 1935. FAP markers can be triangular concrete posts or obelisks. Roadside markers also include iron rails used to denote ROW boundaries and USGS benchmarks. *Roadside Architecture and Objects in New Mexico* (NMDOT Technical Series 2010-1, pp. 114-115) provides details on the types of roadside markers and objects and their histories.

Official Scenic Historic Markers are not considered historic properties and are not evaluated for eligibility. Although the Historic Preservation receives nominations for these types of markers, and text is approved by the Cultural Properties Review Committee (CPRC), the NMDOT constructs the markers and approves placement along state routes in accordance with NMAC 4.10.6. Roadside markers are to be documented in the CR report with a description, a photo, and the location noted on a project map to within a tenth of a mile. If an Official Scenic Marker will be re-located as part of a project, discuss this in the CR report. If possible, the Marker should be replaced in its original location after construction is complete. If the marker will be renovated or replaced, then



the Historic Preservation Division and the CPRC will need to be contacted. A list of official Historic Markers can be found on the NM Historic Preservation Division's web site.

FAP, USGS benchmarks, and ROW markers along historic roads should be documented when those roads are recorded as part of a major project, or if related to abandoned roads.

### **Roadside Memorials**

Roadside memorials are usually referred to as *descansos* in New Mexico. These resources should be treated in accordance with NMSA 1978 Section 30-15-7 and as detailed in *Roadside Architecture and Objects in New Mexico* (NMDOT Technical Series 2010-1, pp. 116). Roadside memorials are recorded as isolated occurrences and require a brief description, location information, and a photograph. If a *descanso* must be removed for construction activities, the *descanso* should be replaced in or near its original location when activities are complete.

### **Eligibility and Effect Recommendations**

Consultants make recommendations, the agency makes determinations, and the agency seeks SHPO concurrence with the determination. The consultant is expected to exercise professional judgment based on permit qualifications and relevant experience, and to make defensible recommendations for eligibility to the NRHP. Be decisive and support recommendations for or against eligibility (see National Register Bulletins No. 15 and 36).

If resources are determined eligible or are of undetermined eligibility, describe the project effect on those resources. Since effect is to the integrity of a significant property, evaluate effect using the seven aspects of integrity. Propose measures which will avoid or minimize effect, such as redesign, if feasible, or temporary protective fencing. Do not simply state "avoidance is recommended." Work with your engineer or with NMDOT staff to arrive at feasible solutions that match the scale and scope of the project.

### **Report Standards**

When CR field surveys are positive, and before drafting the report, contact the NMDOT Cultural Resources Supervisor or the T/LPA Coordinator with a summary of the survey results and CR property location(s). In some cases, eligible or undetermined properties or portions thereof, cannot be avoided by a proposed project. Early notification allows the NMDOT an opportunity to develop alternatives through agency coordination and consultation.

All reports must be thoroughly edited by the consultant for content and clarity prior to submittal to NMDOT. This includes proofreading for correct spelling, grammar, and punctuation. Ensure that technical aspects are correct and all applicable regulatory standards have been met. Investigations need to meet either federal or state standards and sometimes both. Therefore, it is important to understand where the funding is coming from and land status. Articulate the appropriate statutes and regulations in the beginning of the report and apply these consistently throughout.

The culture history should be specific to the APE, nearest town, and the immediate surroundings to provide a proper historic context for the identified historic properties. If there is no culture history specific to the project area, then there cannot be an adequate eligibility evaluation.

Use current references in the report, particularly for the Environmental Setting and Culture History sections. References will be cited to the appropriate page number(s) for any quotations, recounting of specific ideas or information, and for all other directly attributable information. When quoting long passages make clear it is a direct quotation by prefacing it with a statement acknowledging the cited source.

In addition to the report standards established by NMAC 4.10.15.20, report titles must include the highway or state route number or the road/street name(s) if off the NMDOT system. The title must also include mileposts for the BOP and EOP or the names of the road/street termini if off the NMDOT system. If the project includes bridge replacement or maintenance of a bridge, include the bridge numbers. Always include the NMDOT and T/LPA control numbers.

### **NMCRIS Investigation Abstract Form (NIAF)**

For FHWA and NMDOT funded projects, the consultant shall review the NMCRIS User's Guide, register the activity, and submit all records in conformance with 4.10.19 NMAC. Both the NMCRIS Investigation Abstract Form (NIAF) and the report introduction will note the lead (sponsoring) agency as either the FHWA or NMDOT in accordance with the funding source(s).

In Box 7: "Description of the Undertaking," describe what the construction project will entail – NOT what the CR survey entailed. Describe your survey activities in Box 17 f: "Survey Data, Other Description." In Box 7, be sure to indicate the project proponent here (i.e., NMDOT, City of Albuquerque, etc.) as well as in the report introduction.

In Box 13: "Client/Customer (project proponent)," make very clear who is getting the funding for the project. For example, if the City of Jal is using FHWA money to

rehabilitate sidewalks, then the City of Jal is listed in Box 13 as the project proponent, not the engineering consultant being retained by the City of Jal.

In Box 15: “Land Ownership Status” acreage calculations must be made separately for each land managing agency. NMDOT is a landowner, but NMDOT also has easements across federal and state land. Identify and calculate acreage by land ownership, not easement. When NMDOT is the landowner, make this clear by stating “NMDOT ROW adjacent to private.” Always identify the state landowner. Do not simply put “state land” but rather identify the state agency: State Trust, NM Game and Fish, etc.

### **Project Map**

The project map should always include the highway clearly labeled as well as all other roads mentioned in the project description. The project map will also include the BOP and EOP and their respective mileposts, the direct effect APE including any permanent ROW acquisitions needed, as well as CMEs, TCPs, and work permit areas. The project map will show survey coverage and land ownership. The map key will include an absolute scale ratio and English and metric scales. Do not include items in the key that are not on the map.

### **Plan Sets**

When the CR report is ready for submission to the NMDOT, include the latest set of construction plans with the cultural resources clearly and accurately plotted using shape file data. If plans are not available, use current aerial imagery to plot resources within the APE.

## **Report Review and Final Submittal**

Ensure that federal and/or state standards are met commensurate with the undertaking prior to submitting reports and forms to the NMDOT Cultural Resources Section. NMDOT staff reserves the right to conduct field reviews based on the documentation submitted and provide comments accordingly.

The NMDOT does not review draft reports. A draft report should be reviewed by the consultant prior to submittal to the NMDOT to ensure the report meets all requirements prior to submittal. This includes a QA/QC review, running Spell Check, and ensuring all associated forms have been uploaded to NMCRIIS. The CR report and forms will also be submitted, in electronic format, to NMDOT cultural resources staff. Hard copies are no longer accepted by NMDOT. The electronic copy should be submitted in both MSWord (.docx) and Adobe Acrobat (.pdf) formats because one can be easier for annotation of comments than another. Should either of these formats be superseded, the industry standards for word processing shall be used. If the submittal lacks sufficient

information to consult properly on eligibility and/or effect or fails to conform to the standards outlined in federal and state cultural resource regulations and NMDOT Guidelines, the report will be returned to the consultant, via the prime contractor if applicable, for revision and resubmittal.

NMDOT will provide a single round of comments unless otherwise warranted. All comments and requested revisions will be addressed by the consultant and the report will be returned to the NMDOT by an agreed-upon deadline. If the scope of the project changes or additional survey is required, the NMDOT CR staff reviewer will be notified and revisions to the report will be made by the consultant.

Concurrent with report submittal, all forms and shape files that depict surveyed space and identified cultural resources will be uploaded by the consultant to the NMCRIS map server. **Failure to do so may result in rejection of the report by NMDOT.** This is because the SHPO and HPD can reject the consultation if the report and forms are not uploaded. The report and forms will be updated and uploaded again, if necessary, by the consultant, to address any comments from the NMDOT and HPD.

One electronic copy of the final report, along with all supporting documentation, will be provided to the NMDOT in Adobe Acrobat (.pdf) format.

Do not submit files using Dropbox or any means requiring a password from the consulting or engineering firm. Delivery with a prompt requiring NMDOT to accept a consultant's or engineering firm's user policy is also unacceptable. For large files, use an ftp site or place on a jump (flash) drive and mail or deliver to the General Office in Santa Fe. Discuss with NMDOT CR staff the most appropriate delivery method if files are too large to email.

## Glossary

**Abutment:** A substructure element supporting each end of a single span or the extreme ends of a multi-span superstructure and, in general, retaining or supporting the approach embankment.

**ADA:** The Americans with Disabilities Act program is to ensure pedestrians with disabilities have an equal opportunity to use the public rights-of-way in the transportation system.

**Arterial:** A class of roads serving major traffic movements (high-speed, high volume) for travel between major points.

**BOP:** Beginning of Project is where the project formally begins and is referenced by milepost, station number, or street name.

**Borrow Pit:** Location for obtaining earthen materials for roadway construction.

**Built Environment:** Structures, buildings, or objects that may be eligible for the state or national registers within 5 years of the date of the cultural resource survey.

**Capacity:** the ability of a transportation facility or service to meet the quantity of travel demand.

**Collector:** is a road that connects local roads and streets with arterials, provides less mobility than arterials at lower speeds and for shorter distances, and balance mobility with land use.

**CME:** Construction Maintenance Easement provides for construction and maintenance activities outside of the highway ROW when maintenance activities are anticipated to continue for an indefinite period. A CME is permanent in nature and the property owner retains underlying ownership and is offered just compensation for a CME based on a perpetual easement.

**Corridor Studies:** Transportation corridor studies typically focus on a particular travel corridor or travel shed that might result in a new roadway or a substantial change to an existing alignment. Corridor studies address purpose and need, improvement alternatives, environmental, social, and cultural effects, as well as agency coordination and public involvement.

**Culvert:** Any structure not classified as a bridge that provides an opening under the roadway, usually made of concrete or steel, that drains water from one side of the road to the other.

**Cultural Property or Cultural Resource:** These two terms are often used interchangeably but basically include any building, structure, site, district, or object having historic, archaeological, scientific, architectural, or other cultural significance.

**Divided Highway:** A multi-lane facility with a curbed or positive barrier median or median that is 4 feet (1.2 meters) or wider.

**Descanso:** A roadside memorial that commemorates a site where a person died suddenly and unexpectedly. These memorials are typically created and maintained by family members or friends and can include inscribed crosses or plaques decorated with flowers (real or plastic), wreaths, and personal mementos.

**EOP:** End of Project is where the project formally ends and is referenced by milepost, station number, or street name.

**FAP:** Federal-aid Highway Program was established in 1916 as the Federal-Aid Road Act and was the basis for the Federal-Aid Highway Act in 1921. Highways were classified as either primary (interstate) or secondary (intercounty) with federal aid being provided to each state responsible for constructing and maintaining their respective highways. This federal-state partnership is currently supported by multi-year authorizations and annual appropriations essential to a continuous Federal-aid Highway Program.

**FHWA:** The Federal Highway Administration is a branch of the US Department of Transportation that administers the Federal-aid Highway Program and provides financial assistance to states and subdivisions of a state, to construct and improve highways, urban and rural roads, bridges, trails, and other transportation-related infrastructure.

**FTA:** The Federal Transit Administration provides financial and technical assistance to local public transit systems including buses, subways, commuter rail, and ferries.

**Frontage Road:** An arterial type of roadway that parallels a major transportation facility, such as a freeway, and collects and distributes traffic along a major facility without impeding flow along the freeway. Frontage roads are also referred to as access, feeder, and service roads.

**GIS:** Geographic Information System. Computerized data management system designed to capture, store, retrieve, analyze, and display geographically referenced information.

**GLO:** The General Land Office maintains records for the conveyance of Public Lands between 1787 and the present. These consist of images of federal land patents, survey plats, field notes, land status records, and tract books. When found, a GLO marker should always be documented as an IO.

**Grade crossing:** Or “at-grade crossing” is a location where a railroad and road cross at the same level.

**Grade separation:** A crossing of two highways, or a highway and a railroad track, at different elevations or levels such as an underpass or overpass. A bridge that spans a highway or a railroad track is considered a grade-separation structure.

**Historic Marker:** Or “Official Scenic Historic Marker” is a roadside sign which has been erected pursuant to NMAC 4.10.6.

**HPD:** The New Mexico Historic Preservation Division consists of professionals in the fields of history, archaeology, architecture, and architectural history, all of whom assist the State Historic Preservation Officer. See SHPO below.

**Interchange:** A system of interconnecting roadways in conjunction with one or more grade separations that provides for the movement of traffic between two or more roadways.

**Intersection:** The point where two or more roads cross or meet.

**Interstate:** A limited access, divided facility of at least four lanes designated by the Federal Highway Administration as part of the Interstate System.

**Local Street:** A local street or road carries no through traffic movement and is used to provide access to adjacent land. This type of street accounts for the highest percentage of all roadways in terms of mileage.

**Median:** An island in the center of a street or intersection to protect pedestrians and/or to provide landscaping. Medians can prevent passing and left turns, separate opposing travel lanes, and provide visual enhancement.

**Median barriers:** A longitudinal system of physical barriers used to prevent an errant vehicle from crossing the portion of the divided highway separating traffic moving in opposite directions.

**MPO:** Metropolitan Planning Organization is a policy board designated to carry out the metropolitan transportation planning process. MPOs are required to represent localities in all urbanized areas with populations over 50,000.

**MP:** Milepost designations are required on all project and site location maps. Milepost markers are green, paddle-shaped signs on state routes and interstates and usually increase from south to north and from west to east.

**Mitigation measures:** Specific to cultural resources and Section 106, these are treatments or measures that address a project's adverse effect. Agreed upon measures are stated in an executed Memorandum of Agreement (MOA).

**Multimodal:** Transportation options within a system or corridor.

**NEPA:** The National Environmental Policy Act of 1969 established a national environmental policy requiring that any project using federal funding or requiring federal approval, including transportation projects, examine the effects of proposed and alternative choices on the environment before a federal decision is made.



**NHT:** National Historic Trail. A prehistoric or historic route significant to the nation. An NHT must meet three criteria listed in Section 5(b) (11) of the National Trails System Act and be established by Act of Congress (16 U.S.C. 1241-51).

**NSB:** National Scenic Byways are roads that have outstanding scenic, historic, cultural, natural, recreational, or archaeological qualities and qualify for federal aid.

**NTS:** The National Trails System is the network of primarily non-motorized scenic, historic, or recreational trails created by the National Trails System Act of 1968. These trails provide for outdoor recreation needs, promote the enjoyment, appreciation, and preservation of open-air, outdoor areas and historic resources, and encourage public access and citizen involvement.

**NMAC:** New Mexico Administrative Code. NMAC is the official collection of current rules (regulations) written and filed by state agencies to clarify and interpret laws passed by the New Mexico Legislature.

**Park:** A public place or area set aside by a municipality, state, or federal entity for recreation or preservation of a cultural or natural resource.

**Pedestrian walkway:** A continuous path designated for pedestrians and sometimes separated from motor vehicles by a space or barrier.

**Public involvement:** The active and meaningful participation of the public in transportation planning and programs.

**RTP:** Recreational Trails Program is a program in which FHWA provides federal funds to the states to develop and maintain recreational trails and trail-related facilities for motorized and non-motorized recreational trail uses.

**ROW:** Right of Way. Land acquired by purchase, gift, or eminent domain for, or devoted to, highway transportation purposes.

**Roadside rest area:** A designated area along state highways with amenities such as drinking water, toilets, tables and benches, telephones, information, and other facilities for travelers.

**Roadway prism:** according to FHWA, it is the volume defined by the area between the original terrain cross-section and the final design cross-section multiplied by the horizontal distance along the centerline of the roadway.

**RTPO:** A Regional Transportation Planning Organization identifies local transportation needs in non-metropolitan regions of a state.

**Stakeholders:** Individuals and organizations involved in, or affected by, the transportation planning process and can include federal/state/local officials, MPOs, transit operators, and the public.

**SHPO:** State Historic Preservation Officer. The public office and official designated to be the advocate for historic and prehistoric properties in each state and territory of the USA. This position was established by the National Historic Preservation Act of 1966. In New Mexico, the SHPO is the director of the Historic Preservation Division, within the New Mexico Department of Cultural Affairs.

**SLO:** State Land Office. State trust lands were allocated to New Mexico by the Federal Government under the Ferguson Act of 1898 and the Enabling Act of 1910. The state was granted four square miles – Sections 2, 16, 32, and 36 – in each 36-section, 36-square-mile township to be held in trust for specific beneficiaries. State trust land leases support beneficiaries such as schools, universities, hospitals, and other public institutions.

**STIP:** Statewide Transportation Improvement Program is a process whereby projects are chosen that support the vision of NMDOT and address the multimodal needs of transportation users.

**TCP:** In *cultural resources management* it means a Traditional Cultural Property and denotes a location associated with cultural practices or beliefs of a living community that are rooted in that community's history, and important in maintaining the continuing cultural identity of that community. In *road construction projects*, it refers to a Temporary Construction Permit that provides for temporary construction and/or maintenance activities outside of the highway ROW for a defined length of time.

**TIP:** Transportation Improvement Program. Each MPO is required to develop a four-year list of transportation projects that includes all regionally significant projects receiving FHWA or FTA funds or for which FHWA or FTA approval is required in addition to non-federally funded projects that are consistent with the Metropolitan Transportation Plan. The TIP must be fiscally constrained and serve as a building block for the STIP.

**T/LPA:** Tribal or Local Public Agency. A tribe or subdivision of the state which has a cooperative agreement with the NMDOT for use of funds administered by the NMDOT such as the Local Government Road Fund or Federal Aid Highway funds. A T/LPA has the same responsibilities as the NMDOT and must follow the procedures and regulations laid out in the cooperative agreement, the T/LPA handbook, and all relevant state and/or federal laws and regulations. The FHWA New Mexico Division does not delegate Section 106 authority to the T/LPAs for purposes of consultation.

## Useful Links

<https://www.dot.nm.gov/infrastructure/environment/cultural-resources-section/>

<https://www.fhwa.dot.gov/Planning/glossary/>

<https://fhwaapps.fhwa.dot.gov/bywaysp>

<https://glorerecords.blm.gov/default.aspx>

[NMDOT Historic Bridges Tech Series 2014-1] [TITLE PAGE](#)  
([realfilef260a66b364d453e91ff9b3fedd494dc.s3.amazonaws.com](https://realfilef260a66b364d453e91ff9b3fedd494dc.s3.amazonaws.com))

<http://www.nmhistoricpreservation.org/documents/arms-documents.html>

<https://www.nmhistoricpreservation.org/documents/rules-and-regulations.html>

<https://www.nps.gov/subjects/nationalregister/index.htm>

<https://www.osha.gov/sites/default/files/publications/osh3151.pdf>

[Public Map Gallery \(arcgis.com\)](#)

[Roadway Functional Class \(arcgis.com\)](#)

## Appendix A

### Cross Reference for Cultural Resource Investigations

PROJECT TYPE	FHWA-funded NMDOT	State- funded NMDOT	FHWA- funded T/LPA	State-funded T/LPA	FHWA- funded CLA	State-funded CLA	UTILITY/ ROW ACCESS	PROJECTS ON OTHER STATE, FEDERAL, OR TRIBAL LAND
<sup>†</sup> LEAD AGENCY	FHWA	NMDOT	FHWA	NMDOT	Construction Contractor	NMDOT	NMDOT (for the state access permit)	FHWA as funding agency; landholding agency may take lead in other cases
PROPONENT	NMDOT	NMDOT	T/LPA	T/LPA	Construction Contractor	Construction Contractor	Utility company or entity requesting clearance	no change
<sup>‡</sup> APE requiring pedestrian survey	entire ROW (both sides) along project corridor, plus TCPs and CMEs and 1,000 feet beyond construction BOP and EOP	entire ROW (both sides) along project corridor, plus TCPs and CMEs and 1,000 feet beyond construction BOP and EOP	entire ROW (both sides) along project corridor to the next intersection or 100 feet whichever is less, plus TCPs and CMEs	entire ROW (both sides) along project corridor to the next intersection or 100 feet whichever is less, plus TCPs and CMEs	Construction limit and 50 feet around all pits and yards. APE must include new access roads or improvements	Construction limit and 50 feet around all pits and yards. APE must include new access roads or improvements	Edge of pavement to ROW fence (ROW limits) on the side of road to be impacted and 100 feet beyond BOP and EOP	Check with the land managing agency and inform NMDOT
<sup>‡</sup> APE requiring visual assessment and recording of built environment	25 feet beyond right of way or other APE	25 feet beyond right of way or other APE	25 feet beyond right of way or other APE	25 feet beyond right of way or other APE	50 feet beyond the pedestrian survey	50 feet beyond the pedestrian survey	If buried, right of way only; if overhead, contact Utility Coordinator	Check with the land managing agency and inform NMDOT if APE is reduced or expanded
LEGAL CONTEXT	NHPA	NMSA	NHPA	NMSA	NHPA	NMSA	NMSA	On federal and tribal lands: ARPA, AIRFA, NAGPRA in addition to NHPA
STAFF CONTACT	NMDOT CR Supervisor	NMDOT CR Supervisor	T/LPA Coordinator	T/LPA Coordinator	CLA Coordinator	CLA Coordinator	Utility Coordinator	NMDOT CR Supervisor

<sup>†</sup> Tribal consultation: Contact NMDOT Environmental Bureau Tribal Coordinator

<sup>‡</sup> NMSHPO and other land managing agencies require permits and pre-field notification to conduct inventories. These may include access permits.