TABLE OF CONTENTS

| 7 | Section 4(f) Impacts | 2 |
|-----|---|----|
| | 4.1 Introduction and Proposed Action | 2 |
| | 4.1.1 Purpose and Need | 3 |
| | 4.1.2 Alternatives Selected for Study in the Tier 1 DEIS | 3 |
| | 4.2 Section 4(f) Resources – Parks, Recreation Areas and Wildlife or Waterfowl Refuges | 5 |
| | 4.2.1 Buffalo Pond Nature Preserve | 6 |
| | 4.2.2 Daviess-Martin County Park (West Boggs Park) & Trails | 6 |
| | 4.2.3 Glendale Fish and Wildlife Area | 6 |
| | 4.2.4 Hoosier National Forest | 6 |
| | 4.2.5 Indiana Forest Bank Fee (Gantz Woods Nature Preserve) | 7 |
| | 4.2.6 Veale Creek Wildlife Management Area | 7 |
| | 4.2.7 Doans Creek Property - Martin State Forest | 7 |
| | 4.2.8 Jasper Multi-Use Pathway | 7 |
| | 4.2.9 Loogootee Trail System - County Line Trail | 8 |
| | 4.2.10 Martin County 4-H Fairgrounds and Speedway | 8 |
| | 4.2.11 Martin State Forest | 8 |
| | 4.2.12 Milwaukee Road Trail | 9 |
| | 4.2.13 Sultan's Run Golf Course | 9 |
| | 4.2.14 Various Wetland Reserve Program Properties | 9 |
| | 4.3 Section 4(f) Resources - Historic and Archaeological Resources | |
| | 4.3.1 Historic Resources | 9 |
| | 4.3.2 Archaeological Resources | 11 |
| | 4.4 Section 6(f) Resources | 11 |
| | 4.5 Summary | 12 |
| | 4.5.1 Parks, Recreation Areas, Wildlife or Waterfowl Refuges | 12 |
| | 4.5.2 Historic and Archaeological Sites | 12 |
| | IGURES Sure 4-1: Parks, Recreation Areas and Wildlife or Waterfowl Refuges Evaluated | 4 |
| | ABLES | _ |
| | ble 4-1: Parks, Recreation Areas and Wildlife or Waterfowl Refuges Evaluation | |
| | ble 4-2: Listed and Potentially Eligible Individual Historic Properties within 2,000 Feet | |
| ıal | ole 4-3: Archaeological Sites Directly Impacted by Right of Way | 11 |



4 SECTION 4(F) IMPACTS

4.1 Introduction and Proposed Action

Section 4(f) of the Department of Transportation Act of 1966 requires that prior to the use of any land from resources protected under this act, it must be determined that there are no prudent and feasible alternatives which avoid such use and that the project includes all possible planning to minimize harm to such resources. Protection of Section 4(f) resources are codified in 49 U.S.C §303 and 23 U.S.C. §138 and apply only to the U.S. Department of Transportation. Protected resources include two key categories:

- Historic sites of national, state, or local significance
 - These resources may be publicly OR privately owned.
 - Archaeological sites are only subject to 4(f) when they warrant preservation in place.
- Publicly owned lands specifically managed for recreation or conservation
 - Publicly owned includes permanent easements and in certain cases, long term leases.

Impacts to Section 4(f) resources are categorized as "Uses". These Uses are defined under 23 CFR 774 and include three principal types¹:

- **Permanent Incorporation Use**. This involves the resource becoming permanently incorporated into the transportation facility by acquiring the property by direct purchase or permanent control thru easement.
- **Temporary Occupancy Use.** This involves the resource becoming temporarily occupied for actions such as construction staging areas, temporary access or grading activities associated with drainage or changing the angle of slope to tie back into adjacent properties. Any easements associated with temporary occupancy are not permanent.
- Constructive Use. This involves an indirect impact to the Section 4(f) property of such magnitude as to effectively act as a permanent incorporation. In this case, the proximity of the transportation facility may severely impact important features, activities or attributes associated with it, and substantially impair it.

When considering the permanent incorporation or temporary occupancy of a Section 4(f) resource, FHWA may determine a *de minimis* impact is applicable. A *de minimis* impact is one that involves the use of a Section 4(f) resource that is usually minor, and due to avoidance, minimization, or mitigation, there is no adverse effect on the attributes, features, or activities of a Section 4(f) property. Application of a *de minimis* impact requires concurrence from the official with jurisdiction (OWJ) over the Section 4(f) resource. The OWJ is often the local parks and recreation department or other public entity; however, in the case of cultural resources, the State Historic Preservation Officer (SHPO) serves as the OWJ. An intended *de minimis* impact upon a publicly owned and accessible park, recreational facilities, or wildlife and waterfowl refuges requires the opportunity for public comment. A *de minimis* impact determination may not be made when there is a constructive use of the resource. Application of a *de minimis* finding by FHWA does not require an analysis of feasible and prudent alternatives or an avoidance alternative.

Permanent and temporary uses are considered direct impacts. Constructive uses are considered indirect impacts.



Also evaluated in this chapter are properties protected under the U.S. Land and Water Conservation Fund Act of 1965, which established the Land and Water Conservation Fund (LWCF). The fund was created to preserve, develop and assure accessibility to outdoor recreation resources. Section 6(f) of the Act disallows conversion of lands purchased or developed with LWCF funds to a non-recreation use unless approved by the Secretary of the Interior. In March 2019, the LWCF was permanently reauthorized.

The agency coordination process for Section 4(f) and Section 6(f)² evaluation is documented in **Appendix KK**. 23 CFR 774.7(e), which provides guidance for Section 4(f) evaluations in tiered EISs, states that sufficient information needed to finalize the Section 4(f) approval may not be available at the Tier 1 stage but that "the documentation should address the potential impacts" and "whether those impacts could have a bearing on the decision to be made." This chapter provides a review of potential Section 4(f) properties as appropriate for a Tier 1 EIS and does not offer any preliminary Section 4(f) approval as to whether the potential impacts resulting from the possible use of a Section 4(f) property are *de minimis* or whether more in-depth evaluations (Programmatic or Individual) are necessary requiring an analysis of feasible and prudent alternatives, including an avoidance alternative. The detailed information needed to complete the Section 4(f) approval was not available during the Tier 1 stage, which provides a broad-scale examination of the potential Section 4(f) resources in the study area. Tier 2 studies will provide a site-specific evaluation of the potential Section 4(f) resources.

4.1.1 Purpose and Need

The purpose of the Mid-States Corridor project is to provide an improved transportation link between US 231/ SR 66 and Interstate 69 (I-69), either directly or via SR 37, which:

- 1. Improves business and personal regional connectivity in Dubois County and Southern Indiana;
- 2. Improves regional traffic safety in Southern Indiana;
- 3. Supports economic development in Southern Indiana; and
- 4. Improves highway connections to existing major multi-modal locations from Southern Indiana.

See Chapter 1 – Purpose and Need.

4.1.2 Alternatives Selected for Study in the Tier 1 DEIS

The following Alternatives were carried forward for evaluation in this Tier 1 DEIS:

- 1. Alternative B
- 2. Alternative C
- 3. Alternative M
- 4. Alternative O
- 5. Alternative P

These Alternatives have a range of facility types and variations. See Chapter 2 – Alternatives.

There are 18 local improvements that would also be completed as part of the Mid-States Corridor project, with the number completed dependent on which alternative is chosen. These local improvements consist mostly of added travel lanes that are intended to reduce congestion and improve the performance of the existing roadways during and after the construction of the Mid-States Corridor project.

2 See **Section 4.4** for discussion of Section 6(f) resources.



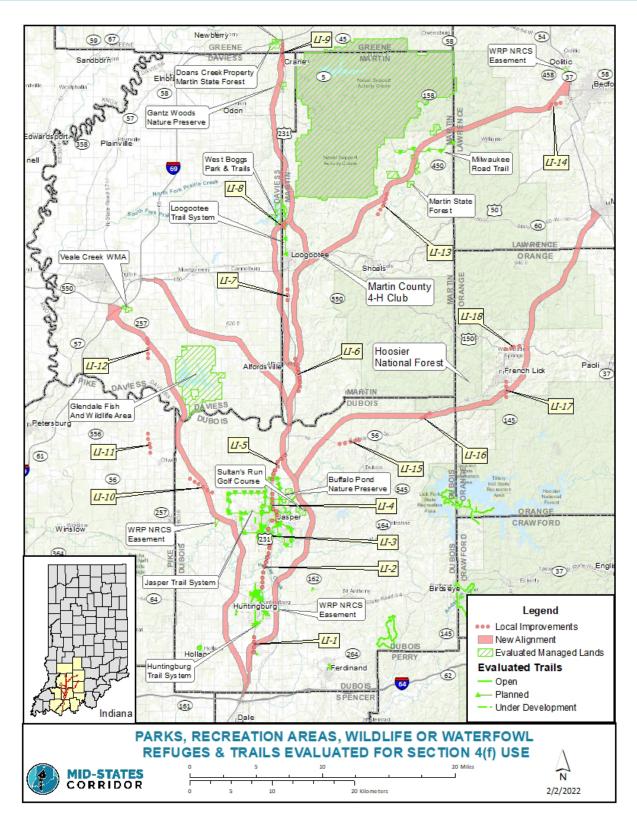


Figure 4-1: Parks, Recreation Areas and Wildlife or Waterfowl Refuges Evaluated

4.2 Section 4(f) Resources – Parks, Recreation Areas and Wildlife or Waterfowl Refuges

Potentially eligible parks, recreation areas and wildlife or waterfowl refuges within 1,000 feet of the alternatives were evaluated for Section 4(f) eligibility and potential use. As appropriate, the potential to avoid or minimize use of these resources was evaluated. The properties are depicted in **Figure 4-1** and enumerated in **Table 4-1**. **Appendix KK** provides additional information for Section 4(f) resources. Impacts to managed lands are described in **Chapter 3.27** and **Appendix GG**.

| Resource | Is it a Section 4(f) Resource? | Do any Alternatives use the Section 4(f) resource? | Can the Alternative be shifted to avoid the Section 4(f) Resource? | |
|---|---------------------------------|---|--|--|
| Buffalo Pond Nature Preserve | Yes | No | N/A | |
| Daviess-Martin County Park (West Boggs) | Yes | Yes - P _w | High potential for avoidance | |
| West Boggs Park Trails | Yes | No | N/A | |
| Glendale Fish and Wildlife Area | Yes | No | N/A | |
| Hoosier National Forest | Yes | No | N/A | |
| Indiana Forest Bank Fee (Gantz Woods Nature Preserve) | No - Private | N/A | N/A | |
| Veale Creek Wildlife Management Area - IDNR | Yes | No | N/A | |
| Doans Creek Property - Martin State Forest | Yes | No | N/A | |
| Loogootee Trail System-County Line Trail to W. Boggs Park | No - Not yet open | N/A | N/A | |
| Martin State Forest | No - Not parcels impacted | N/A | N/A | |
| Milwaukee Road Trail | No - Not yet open | N/A | N/A | |
| Sultan's Run Golf Course | No - Private | N/A | N/A | |
| Various WRP Properties | No - Private & Closed to Public | N/A | N/A | |
| Martin County 4-H Fairgrounds & Speedway | No | N/A | N/A | |
| Jasper Multi-Use Pathway | Yes | Yes - All Alternatives | Low potential for avoidance | |

Table 4-1: Parks, Recreation Areas and Wildlife or Waterfowl Refuges Evaluation



4.2.1 Buffalo Pond Nature Preserve

Buffalo Pond Nature Preserve is located in Dubois County, northeast of Jasper near Kellerville Road. It is owned by the State of Indiana and managed by the Indiana Department of Natural Resources (IDNR) Division of Nature Preserves. Data provided by IDNR in 2020 indicates that Buffalo Pond is "open per regulations". As a publicly owned nature preserve with public access, it is assumed to be a Section 4(f) resource.

The property is situated approximately 450 feet west of the C, M, O and P working alignments. Direct use of the resource is not anticipated. Temporary use of the resource should be avoided. At this Tier 1 level of analysis there is no information available indicating a possible constructive use of the Buffalo Pond Nature Preserve. Use of this Section 4(f) resource is not anticipated at this time.

4.2.2 Daviess-Martin County Park (West Boggs Park) & Trails

Daviess-Martin County Park (West Boggs Park) is located in Daviess and Martin counties north of Loogootee near US 231. It is owned and managed by Daviess-Martin County Park Board. The property is open to the public and provides recreational opportunities such as boating, fishing, hiking, camping and golfing. As a publicly owned recreational facility that is open to the public, Daviess-Martin County Park (West Boggs Park) and associated trails are assumed to be Section 4(f) resources.

The park is located partially within the Alternative P working alignment that uses the western route around Loogootee (P_w). There is less than one acre of the park located within the Alternative P_w working alignments. This alignment would impact Section 4(f) resources. Alternative P_w will need to be reviewed and modified in order to avoid potential use of any Section 4(f) resource. If Alternative P_w is selected, INDOT will engage in joint development coordination with the Board. This will ensure that planning for the roadway avoids and minimizes any impact to the park and takes into account any of the Board's planned future development of the park. It is anticipated that any potential use of this resource would not exceed a *de mimimis* level. The eastern route of Alternative P around Loogootee (P_a) does not have an impact on the park.

4.2.3 Glendale Fish and Wildlife Area

Glendale Fish and Wildlife Area is located in Daviess County southeast of Washington. It is owned by the State of Indiana and managed by the IDNR Division of Fish and Wildlife. It includes 8,060 acres of land and over 1,400 acres of open water. The property is managed for wildlife habitat and protection and is open to the public, providing recreational opportunities such as hunting, fishing, camping and wildlife observation. As a publicly owned wildlife management area functioning as a wildlife refuge that is open to the public, Glendale Fish and Wildlife Area is assumed to be a Section 4(f) resource.

The property is approximately 830 feet east of the Alternative B working alignment. Direct use of the resource is not anticipated. At this Tier 1 level of analysis there is no information available indicating a possible constructive use of the Glendale Fish and Wildlife Area. Use of this Section 4(f) resource is not anticipated at this time.

4.2.4 Hoosier National Forest

The Hoosier National Forest occupies 202,814 acres of South-Central Indiana in Perry, Crawford, Dubois, Orange, Lawrence, Martin, Monroe, Brown and Jackson counties. The proclamation boundary for the forest comprises Management Areas interspersed with privately-owned parcels. Alternative O crosses the proclamation boundary south of French Lick but does not impact any parcels owned or managed by the Hoosier National Forest. Privately-owned parcels within the Hoosier National Forest are not considered Section 4(f) resources. No Section 4(f) use is anticipated at this time.



4.2.5 Indiana Forest Bank Fee (Gantz Woods Nature Preserve)

Gantz Woods Nature Preserve is located in Daviess County north of Loogootee near US 231 adjacent to Alternative P. It is owned by the Nature Conservancy and managed as part of the organization's Indiana Forest Bank Fee program. The property is open to the public for activities such as birdwatching and hiking. Although it is a nature preserve that is open to the public for recreational activity, Gantz Woods Nature Preserve is not a Section 4(f) resource since it is owned by a private non-profit organization. Therefore, no Section 4(f) use could occur.

4.2.6 Veale Creek Wildlife Management Area

Veale Creek Wildlife Management Area is located in Daviess County southeast of Washington near Alternative B. It is owned by the State of Indiana and managed by the IDNR Division of Fish and Wildlife as a management unit of the Glendale Fish and Wildlife Area. The site was developed by INDOT as a mitigation site for the I-69 project. The property is currently closed to the public. Although it is not currently open to the public, the Veale Creek Wildlife Management Area is assumed to be a Section 4(f) resource for planning purposes as a publicly owned wildlife management area functioning as a wildlife refuge.

While Alternative B is in close proximity to the property, no direct impacts to the site are anticipated. Direct use of the resource is not anticipated. At this Tier 1 level of analysis there is no information available indicating a possible constructive use of the Veale Creek Wildlife Management Area. Use of this Section 4(f) resource is not anticipated at this time.

4.2.7 Doans Creek Property - Martin State Forest

Doans Creek Property is located in Greene County west of the US 231 and I-69 junction near Alternative P. It is owned by the State of Indiana and managed by IDNR Division of Forestry as a part of the Martin State Forest. The site was developed by INDOT as a mitigation site for the I-69 project. The property is currently closed to the public. Although it is not currently open to the public, the Doans Creek Property is assumed to be a Section 4(f) resource for planning purposes based on wildlife refuge functions.

While Alternative P is in close proximity to the property, no direct impacts to the site are anticipated. Direct use of the resource is not anticipated. At this Tier 1 level of analysis there is no information available indicating a possible constructive use of the Doans Creek Property. Use of this Section 4(f) resource is not anticipated at this time.

4.2.8 Jasper Multi-Use Pathway

The Jasper Multi-Use Pathway is managed by the Jasper Parks and Recreation Department and can be found in the Jasper Transportation Plan. The existing paths are not located along the alternatives or local improvements. A planned segment of this trail follows US 231 from 15th Street to Scheutter Road (see **Appendix KK, Figure 4**). Several planned segments cross US 231 within the limits of Local Improvements 3 and 4. Portions of the property slated for these planned trail segments are already owned by the City of Jasper; however, areas within US 231 right-of-way have not yet been acquired. The planned segments of the trail are assumed to be a Section 4(f) resource along with the existing trail due to public ownership, recreational purpose, and formal designation in the Jasper Transportation Plan. Coordination with Jasper Parks and Recreation Department will be conducted to further evaluate proposed trail status and determine needed accommodations relative to potential future Section 4(f) use.



4.2.9 Loogootee Trail System - County Line Trail

County Line Trail to West Boggs Park is a planned trail to connect Loogootee to West Boggs Park to the north. The trail would be owned and managed by the Loogootee Park Board and the City of Loogootee (Loogootee, Indiana Parks and Recreation Master Plan 2021-2025). However, the trail does not currently have funding. Portions of the property for the planned trail segments have not yet been acquired, but the City of Loogootee does own some of the property slated for the planned trail segments. If adequate funding is obtained and the trail planning progresses, the trail will be assumed to be a Section 4(f) resource due to its public ownership, recreational purpose, and designation in the master plan referenced above. Approximately 294 feet of the planned trail is within the working alignment for Alternative P_w, and approximately 4,100 feet of the planned trail is within the working alignment for Local Improvement 8. If Alternative P_w is selected, coordination will be conducted with the Loogootee Park Board to determine needed accommodations relative to potential future Section 4(f) use. It is anticipated that any potential use of this resource would not exceed a *de mimimis* level. The eastern route of Alternative P around Loogootee (P_e) does not have an impact on the planned trails.

4.2.10 Martin County 4-H Fairgrounds and Speedway

The Martin County 4-H Fairgrounds and Speedway is located in Martin County east of Loogootee near US 50. It is owned by the Martin County 4-H Club Council Inc. It is currently unclear if this is a public entity. The property operates as a 4-H fairground as well as a county community center. The property is adjacent to the Alternative M working alignments. The property is currently not identified to be a general public park or recreation area that would qualify it as a Section 4(f) resource. If the property is determined to be a Section 4(f) resource as a result of further coordination, further evaluation of potential use and avoidance of the property is anticipated. If Alternative M is selected, further coordination will occur to further define the nature of the ownership of the property and park functions to determine if it is a Section 4(f) resource.

4.2.11 Martin State Forest

Martin State Forest is located in Martin County northeast of Shoals. It is owned by the State of Indiana and managed by the IDNR Division of Forestry and consists of 7,863 acres. The property is open to the public and provides recreational opportunities such as hunting, fishing, camping, and picnicking as a multiple-use public land holding. As a publicly owned multiple-use land holding that is open to the public, Martin State Forest may include features that qualify as Section 4(f) resources.

Between 27 acres and 35 acres of Martin State Forest would be impacted by the Alternative M working alignments No specific park or recreational facilities have been identified within the parcels of Martin State Forest that would likely be impacted by Alternative M. As part of a multiple-use land holding, these parcels provide general recreation opportunities and may provide wildlife or waterfowl refuge function. Based on this, the parcels of Martin State Forest crossed by Alternative M may be identified to be Section 4(f) resources. Due to the location of other Martin State Forest tracts in the vicinity of Alternative M and the proximity of the East Fork White River to the east of Alternative M, it may be difficult to avoid the Martin State Forest property; however, it may be possible to shift the alignment to the west to avoid impacts to this resource. At this Tier 1 stage, the properties crossed have been identified as a potential Section 4(f) resource.Based on this preliminary determination there would be a use of this resource with the current alignment. Additional evaluation and coordination with the OWJ will be conducted as the project development process and planning continues if Alterative M is selected. Opportunities to minimize harm or impact to this resource have not been precluded by decisions made at this Tier 1 stage.



4.2.12 Milwaukee Road Trail

The Milwaukee Road Trail is a 10.9-mile public rail trail extending from Williams to Bedford through the Hoosier National Forest in Lawrence County. The trail is owned and managed by the Hoosier National Forest and is open to the public. There are plans to extend the trail from Williams to Indian Springs in Martin County. As a publicly owned recreational trail that is open to the public, and that is assumed to be significant unless the official with jurisdiction over it determines that it is not, the Milwaukee Road Trail is a Section 4(f) resource. However, only the planned trail is potentially impacted.

Between 502 feet and 556 feet of the planned extension of the Milwaukee Road Trail would be impacted by Alternative M. Portions of the property slated for the planned trail segments are already publicly owned. If Alternative M is selected, coordination will be conducted with the Hoosier National Forest to determine needed accommodations relative to potential future Section 4(f) use.

4.2.13 Sultan's Run Golf Course

Sultan's Run Golf Course is located in Dubois County east of Jasper. It is open to the public but privately owned. The property resides approximately 500 feet west of the C, M, O and P working alignments. Although it is a recreational facility that is open to the public, since it is privately owned, Sultan's Run Golf Course is anticipated not to be a Section 4(f) resource.

4.2.14 Various Wetland Reserve Program Properties

Each alternative has the potential to impact properties protected with easements through the National Resources Conservation Service Wetlands Reserve Program. Three properties were identified in Dubois and Lawrence counties, and each are protected by permanent easements. The properties are privately owned and closed to the public and are anticipated not to be considered Section 4(f) resources.

4.3 Section 4(f) Resources - Historic and Archaeological Resources

Historic properties and archaeological sites that are listed in or are eligible for the National Register of Historic Places (NRHP) are subject to Section 4(f) protection. Historic properties and documented archaeological sites within 2,000 feet of the new alignments were evaluated for applicability of Section 4(f) protection, potential use, avoidance and minimization. The number of properties are listed in **Tables 4-2** and **4-3**; **Appendix KK** provides additional details. Impacts to cultural resources are described in **Chapter 3.13** and **Appendices N, O, and P**.

Efforts were made to avoid and/or minimize use of Section 4(f) historic resources. Individual historic resources within the 2,000-foot corridor may be avoided by shifting the working alignment during the Tier 2 studies.

4.3.1 Historic Resources

Aboveground historic properties within 2,000 feet of the new alignments were evaluated for Section 4(f) eligibility. Property data were collected using methods outlined in **Chapter 3.13** and the Indiana State Historic Architectural and Archaeological Research Database (SHAARD). A GIS-based proximity analysis was performed to identify properties which may be directly impacted. During Tier 2 studies, alternative footprints will be determined and compared to the boundaries of NHRP-listed and eligible properties. This Tier 1 proximity analysis is an approximate evaluation, appropriate for Tier 1 comparisons of alternatives.



The results of the analysis are listed in **Table 4-2**. **Table 2** in **Appendix KK** identifies the properties associated with each alternative.

| Analysis of Historic Properties within 2,000 feet | | | | | | | |
|---|---|---|---|----|---|--|--|
| Historic Designation | В | С | М | 0 | Р | | |
| National Historic Landmarks | 0 | 0 | 0 | 0 | 0 | | |
| Historic Properties on National Register | 0 | 0 | 0 | 0 | 0 | | |
| Potentially Eligible Individual Properties | 0 | 5 | 2 | 14 | 8 | | |

Table 4-2: Listed and Potentially Eligible Individual Historic Properties within 2,000 Feet

No currently-listed resources on the NRHP were identified within 2,000 feet of the new alignments. Twenty-four historic properties that may be eligible for listing on the NRHP were identified within 2,000 feet of the new alignments. These include no properties in proximity to Alternative B, five in proximity to Alternative C, two in proximity to Alternative M, 14 in proximity to Alternative O and eight in proximity to Alternative P.

Two properties were identified that may be directly impacted by the alternatives. These properties were identified as the Morgan C. Keane Farm in Lawrence County (Alternative O), and Orange County Bridge Number 21 in Orange County (Alternative O). Impacts to these properties could constitute direct use of Section 4(f) resources. See discussion in **Appendix KK** regarding avoidance alternatives and measures to mitigate harm. If **Alternative** O or **Alternative P** is selected, **Appendix KK** describes alignment shifts which could be considered to avoid these resources. Any such shifts will be considered prior to the FEIS.

Three properties were identified in close proximity, within approximately 500 feet of the new alignments. These properties were identified as the Harbison-Himsel House in Dubois County (Alternative O) and Brinegar Chapel in Daviess County (Alternative P), and Shady Nook Motel in Martin County (Alternative P_e). While direct impacts are not anticipated, proximity impacts will need additional evaluation. Minimization of these effects through alignment refinement during Tier 2 is anticipated to address this. Any Section 4(f) use associated with these resources is not exceeded a *de minimis* level.

Due to the differing construction associated with the Local Improvements, evaluation for potentially eligible historic properties was conducted separate from the new alignments. Local Improvement 4 is adjacent to seven historic resources and within four historic districts. The improvements associated with Local Improvement 4 are not anticipated to require additional right of way and include limited construction. If additional right of way is required it is anticipated that it would be limited. Based on the anticipated construction and limited, if any, right of way needs, any Section 4(f) use associated with these improvements is not expected to exceed a *de minimis* level. Additional evaluation will be conducted during Tier 2 to limit any potential Section 4(f) use to *de minimis*.

Local Improvement 15 is in proximity to three historic resources including the Neukam Farm, St. John's Lutheran Church and Cemetery and a house. The improvements associated with Local Improvement 15 include expansion of the existing highway. No impact to any of these structures are anticipated. Based on the anticipated construction any Section 4(f) use associated with these improvements is not expected to exceed a *de minimis* level. Additional evaluation will be conducted during Tier 2 to limit any potential Section 4(f) use to *de minimis*.



Local Improvement 18 is in proximity to one historic resource, the Dalton Gas Station. The improvements associated with Local Improvement 18 include expansion of the existing highway. No impact to the structure is anticipated. Based on the anticipated construction, any Section 4(f) use associated with these improvements is not expected to exceed a *de minimis* level. Additional evaluation will be conducted during Tier 2 to limit any potential Section 4(f) use to *de minimis*.

4.3.2 Archaeological Resources

Belowground archaeological resources within the working alignments were evaluated for Section 4(f) eligibility. Site data were collected using methods outlined in **Chapter 3.13** and SHAARD. A proximity analysis was performed using GIS to identify properties with direct impacts. The results of the analysis are listed in **Table 4-3**.

| Archaeological Sites Directly Impacted by Right of Way | | | | | | | | |
|--|------------|-------------------|----------------------|-------------------|--------------|-------------------|------------|-------------------|
| | Eligible | | Potentially Eligible | | Not Assessed | | Total | |
| Route | Site Count | Impacted Acres | Site Count | Impacted Acres | Site Count | Impacted Acres | Site Count | Impacted Acres |
| В | 0 | 0 | 0 | 0 | 11 - 12 | 9 - 10 | 23 - 27 | 11 - 13 |
| С | 1 | 1 - 2 | 2 | 2 | 11 - 14 | 13 - 19 | 44 - 57 | 34 - 46 |
| М | 1 | 1 - 2 | 6 | 5 - 6 | 23 - 26 | 23 - 31 | 48 - 60 | 38 - 51 |
| 0 | 2 | 1 - 2 | 2 | 2 | 13 - 14 | 33 - 40 | 35 - 45 | 45 - 55 |
| Р | 1 | 1 - 2 | 2 | 2 | 14 - 17 | 13 - 20 | 38 - 50 | 26 - 37 |

Table 4-3: Archaeological Sites Directly Impacted by Right of Way

No archaeological sites within the working alignments have been listed on the NRHP, and only two sites have definitively been determined to be eligible for the NRHP. One site is associated with Alternatives C, M, O and P, and the other site is only associated with Alternative O. Additional sites have been identified to be potentially eligible or have not been assessed for NRHP eligibility. Currently no sites have been identified that would warrant preservation in place and thus result in Section 4(f) use considerations. Further investigation into the eligibility of these sites as well as identification of other potential sites will be undertaken as needed during the Tier 2 studies.

4.4 Section 6(f) Resources

Indiana has received approximately \$90 million in LWCF funds and has acquired over 30,000 acres of land with LWCF assistance. A review of 6(f) properties on the LWCF website at https://lwcf.tplgis.org/mappast/ did not disclose any 6(f) properties that would be impacted by any of the Tier 1 Alternatives. However, a review of the Indiana DNR's database of Managed Lands and the list of Section 6(f) properties on the INDOT Environmental Services website (https://secure.in.gov/indot/engineering/environmental-services/environmental-policy/) indicated that Buffalo Pond Nature Preserve and Daviess-Martin County Park (West Boggs Park) have both received LWCF funding. Section 6(f) does not allow conversion of lands purchased or developed with LWCF funds to a non-recreation use unless approved by the Secretary of the Interior. Further consultation with the National Park Service and the IDNR Division of Outdoor Recreation to determine the significance of this funding will be conducted as part of the Tier 2 studies. This coordination will also identify specific elements of the properties that received LWCF funds or if the funding was applied to the entire property for evaluation of potential conversion concerns.



4.5 Summary

The purpose of this section is to provide preliminary Tier 1 determinations about the potential for alternatives to use Section 4(f) protected resources, as well as the potential for avoiding and minimizing harm to those resources prior to the Tier 1 FEIS, as well and during Tier 2 studies. This Tier 1 Section 4(f) evaluation process considered previously catalogued natural and cultural properties to perform a determination appropriate for a Tier 1 Study. Tier 2 studies will further evaluate these resources for the selected alternative, evaluate any additional resources identified and further consider avoidance and minimization options to comply with the provisions of Section 4(f).

4.5.1 Parks, Recreation Areas, Wildlife or Waterfowl Refuges

- If the preferred Alternative P_w is selected, INDOT will engage in joint development activities with the owners of West Boggs Park.
- Alternative M is likely to result in an impact to Martin State Forest. Based on preliminary evaluation
 identifying this property as a potential Section 4(f) resource, a use of this resource is anticipated from these
 impacts. Additional coordination with the manager of Martin State Forest will be conducted to further
 evaluate avoindance and minimization for this resource if Alternative M is selected.
- If the preferred Alternative P_w is selected, INDOT will engage in joint development activities with the owner of the future Loogootee Trail System.
- If Alternative M is selected, INDOT will engage in joint development activities with the owner of the future Milwaukee Road Trail project.

4.5.2 Historic and Archaeological Sites

- The preferred Alternative P is within approximately 500 feet of two potential Section 4(f) resources, Brinegar Chapel in Daviess County and Shady Nook Motel (Pe only) in Martin County. Appendix KK identifies measures to minimize harm which should be undertaken for Alternative P. Any Section 4(f) use associated with these resources is not expected to exceed a de minimis level. The other six resources identified in Table 2 of Appendix KK are more than 500 feet from the new alignments and are not expected to be impacted or result in any Section 4(f) use.
- Alternative O could impact three potential Section 4(f) resources. These are the Morgan C. Keane Farm in Lawrence County, Orange County Bridge Number 21 in Orange County and the Harbison-Himsel House in Dubois County. Appendix KK identifies measures to minimize harm which should be undertake prior to the FEIS if Alternative O is selected.
- Each alternative would result in direct impacts to archaeological sites, whose NHRP eligibility has not yet been determined.
- Alternative M would result in the direct impact of a potentially eligible archaeological site.
- Impacts to archaeological properties may constitute direct use of Section 4(f) resources if found eligible for listing on the NRHP and warrant preservation in place for archaeological resources. Further investigation into the eligibility of these sites for inclusion in the NRHP will be undertaken during the Tier 2 studies.