Record of Decision

Illinois Route 29 from Illinois 6 to I-180 Peoria, Marshall, Putnam, and Bureau Counties, Illinois

FHWA-IL-EIS-06-01-F/4(f)

January 2010
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1. Decision

The Federal Highway Administration (FHWA) has identified the Selected Alternative for improving Illinois Route 29 (IL 29) from Illinois 6 (IL 6) to Interstate 180 (I-180). The Selected Alternative is the preferred alternative identified in the Final Environmental Impact Statement (FEIS). The Selected Alternative includes a 10-mile-long, access-controlled, 4-lane freeway on new right-of-way between the existing IL 6 interchange near Mossville and a proposed interchange on the north side of Chillicothe. From north of Chillicothe to I-180, the Selected Alternative will convert 25 miles of existing IL 29 to a partial access-controlled, 4-lane divided expressway, largely on existing right-of-way (Exhibit 1).

The purpose of the proposed IL 29 improvements is to improve transportation continuity, facilitate modal interrelationships, improve travel efficiency, and enhance economic stability within the IL 29 corridor from IL 6 in Peoria County to I-180 in Bureau County. The need for the proposed IL 29 improvements is based on a combination of factors related to the following:

- Travel efficiency, which includes existing and future traffic, highway operations, and existing highway characteristics
- System linkage, facility continuity, and route importance
- Modal interrelationships
- Economic stability

The Selected Alternative is described in Section 3 below and in Section 2.3 of the FEIS. The remainder of this document identifies the rationale for the Selected Alternative and responds to substantive comments received on the FEIS. The FHWA’s identification of the Selected Alternative was based upon full consideration of information in the Draft Environmental Impact Statement (DEIS) (approved in April 2006), the FEIS (approved in April 2009), and public and agency comments received.

This Record of Decision complies with the regulations of the National Environmental Policy Act (NEPA), implementing NEPA (40 CFR 1505.2) and FHWA requirements (23 CFR 771).

2. Alternatives Considered

The DEIS and FEIS evaluated the Build Alternative, No-Build Alternative, and transportation control measures/transportation system management alternatives. Transportation control measures were eliminated from consideration because the rural nature of the project area makes transit service or carpooling infeasible means of improving transportation continuity, facilitating modal interrelationships, or improving travel efficiency between IL 6 and I-180. Transportation system management, which includes such measures as intersection capacity improvements, adding passing lanes at critical locations, and widening shoulders, was eliminated because it is not a feasible standalone solution for addressing future traffic demand, improving transportation continuity, or improving travel efficiency between IL 6 and I-180.

The No-Build Alternative was evaluated as a basis of comparison to the Build Alternative, but it does not satisfy the purpose and need for the project. The Build and No-Build Alternatives were evaluated in detail in the DEIS and FEIS. The Build Alternative described
in the DEIS and FEIS evolved from alignment studies conducted between 2002 and 2005. The object of the studies was to evaluate a wide range of alternatives to address the transportation deficiencies described in the project’s purpose and need statement. To facilitate the development and comparison of alignments in the 35-mile-long study corridor, the project was divided into a 10-mile South Section, a 12-mile Central Section, and a 13-mile North Section. The sections were subdivided for further refinement. Because of the length of the project corridor and the numerous possible alignments within each section, the project team focused on developing and screening alignments within sections and subsections instead of a single alternative extending from IL 6 to I-180.

The text that follows is a summary of the alternatives development and screening process in the project’s South, Central, and North Sections. Separate summaries are presented for mainline screening decisions and interchange screening decisions within each project section. Project screening decisions were presented to the project’s Technical Advisory Committee during regular meetings from 2003 through 2005 and to the public at public information meetings in June 2003 and July 2004. A detailed description of the alternatives development and refinement process is found in Section 2 of the DEIS and FEIS. It should be noted that the alternatives development and refinement process in the DEIS and FEIS is described chronologically from 2003 to 2005, not by project section.

### 2.1 South Section

#### 2.1.1 Mainline Screening Decisions

Six alignments were developed in the South Section, five on relocated alignments ranging from 1 mile to 4 miles west of IL 29, and one improving existing IL 29 through Chillicothe (Exhibit 2). The screening decisions in the South Section are summarized in Table 1.

<table>
<thead>
<tr>
<th>Alignments Eliminated</th>
<th>Location</th>
<th>Reasons for Eliminating</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-1</td>
<td>Along edge of bluff</td>
<td>Proximity impacts to Singing Woods Nature Preserve; poor access to Chillicothe</td>
</tr>
<tr>
<td>S-2</td>
<td>Along Wayne Road</td>
<td>Greatest floodplain impacts (137 acres); most stream crossings (6); highest cost</td>
</tr>
<tr>
<td>S-3</td>
<td>Along Krause Road</td>
<td>Most residential displacements (9)</td>
</tr>
<tr>
<td>S-5</td>
<td>On new alignment 1.3 miles south of Krause Road</td>
<td>Constructability issues caused by crossing the deep and wide area in Galena Road Gravel Quarry. Also, less compatible with Chillicothe's Land Use Plan than Alternative S-4</td>
</tr>
<tr>
<td>Improving existing IL 29</td>
<td>IL 29 through Chillicothe</td>
<td>Developing a 65-mph facility between IL 6 and Truitt Road would displace a large number of businesses and residences and create a barrier in the heart of the community's commercial district</td>
</tr>
</tbody>
</table>

Alignment S-4/S-6, which is located on new alignment from the existing IL 6 interchange to the end of the South Section, north of Chillicothe, is the sole remaining alternative in the South Section. A detailed description of this alignment is found in Section 3.

#### 2.1.2 Interchange Screening Decisions

The Illinois Department of Transportation (IDOT) developed and evaluated interchange designs at Cedar Hills Drive, Rome West Road, McGrath Street, and Truitt Road.
Two interchanges were evaluated at Cedar Hills Drive: a diamond and diamond with a loop in the southwest quadrant. The diamond with a loop in the southwest quadrant would maximize use of IDOT’s right-of-way south of Cedar Hills Drive. The diamond interchange with the loop ramp in the southwest quadrant was selected to maximize use of existing IDOT right-of-way south of Cedar Hills Drive. The standard diamond interchange was eliminated from further consideration because it would require 10 more acres of right-of-way from private property than the diamond interchange with a loop ramp.

A standard diamond interchange was developed at McGrath Road. A new connection would be developed between the interchange and Krause Road to the west. A connection is also planned along the north side of Three Sisters Park between the interchange and existing IL 29. IDOT has determined that the east connection to existing IL 29 would be funded by others. The impacts, however, along the east connection to existing IL 29 are included in the Final EIS.

Six interchange types were evaluated at Rome West Road. Four interchanges were eliminated because IL 29 was grade separated over Rome West Road. These alternatives would result in higher initial construction costs and greater maintenance costs. The fifth alternative was eliminated because it would align Rome West Road to the north. IDOT selected a standard diamond interchange with Rome West Road over IL 29 because it would better meet driver expectations and would have lower construction and maintenance costs.

At the proposed Truitt Road interchange, the diamond interchange with a loop ramp in the southeastern quadrant was selected over the traditional diamond interchange because it would not acquire new right-of-way from the Galena Gravel Quarry operation in areas of deep quarry excavation.

2.2 Central Section

2.2.1 Mainline Screening Decisions

Three alignments were developed in the Central Section: two on new alignments located 2 and 2.5 miles west of IL 29 (known as the Bluff Alignments) and one along existing IL 29. The alignment along IL 29 contained two options through Sparland, Alignments C-3 and C-3A. The Central Section alignments are shown in Exhibit 3. The screening decisions in the Central Section are summarized in Table 2.

<table>
<thead>
<tr>
<th>Alignments Eliminated</th>
<th>Location</th>
<th>Reasons for Eliminating</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1</td>
<td>On bluff 2.5 miles west of IL 29</td>
<td>Poor access to Hopewell and Sparland; highest farmland impacts (191 acres); most new right-of-way (221 acres).</td>
</tr>
<tr>
<td>C-2</td>
<td>On bluff 2 miles west of IL 29</td>
<td>Traffic analyses found that this alignment would not divert much traffic from existing IL 29. As a result it would not alleviate future congestion on IL 29, thereby not meeting the project Purpose and Need.</td>
</tr>
<tr>
<td>C-3</td>
<td>Along west side of IL 29 through Sparland</td>
<td>More displacements than widening east of IL 29 and the railroad (30 vs.11) and poor traffic circulation.</td>
</tr>
</tbody>
</table>
Alignment C-3A, located east of existing IL 29 and the Iowa Interstate Railroad, was the sole alternative after the screening process in the South Section.

Following the identification of the sole alignment in the Central Section, IDOT continued to consider refinements to that alignment to minimize impacts. Two alternatives for widening IL 29 between IDOT’s rest area (north of the north Chillicothe interchange) and Illinois Department of Natural Resources’ (IDNR’s) Land and Water Reserve south of Sparland were considered: widening west while maintaining the same elevation between northbound and southbound lanes, or widening west with a split profile (the southbound lanes would be at a higher elevation than the northbound). Widening west at the same elevation was eliminated because it would require a strip of new right-of-way 30 to 50 feet wider than the split-level alternative for most of the distance between Chillicothe and north of Sparland. The split elevation (FEIS Exhibit 2-3) was selected because it requires less new right-of-way from the west side of IL 29, thereby reducing impacts on County Line Hill Prairie Natural Area, Hopewell Estates Hill Prairies Natural Area, Marshall State Fish & Wildlife Area, Marshall County Hill Prairie Land & Water Reserve, and Marshall County State Hill Prairie Natural Area. It also reduces the amount of excavation into the unstable bluff soils. The split profile is also used from north of the proposed Sparland interchange to a point just south of the IL 29/1100E intersection.

2.2.2 Interchange Screening Decisions

Three interchange configurations were developed and evaluated at the north Chillicothe interchange: Alternative 1 (trumpet interchange), Alternative 2 (diamond interchange with Hart Lane), and Alternative 3 (diamond interchange with Yankee Lane; see FEIS Exhibit 2-11). The three north Chillicothe interchanges had similar impacts and costs, but Alternative 1 was retained because the trumpet interchange would provide a free-flow movement for vehicles traveling between Chillicothe and Sparland, the predominant movement through the interchange. The diamond interchanges in Alternatives 2 and 3 required traffic to stop and make turns at the ramp terminals before entering or exiting IL 29 between Chillicothe and Sparland.

Because future traffic volumes on IL 29 and IL 17 will be too high to be accommodated efficiently at the at-grade intersection, five interchange alternatives were developed in Sparland to connect the two highways. The five interchange alternatives are shown in FEIS Exhibit 2-8. The object of developing the five alternatives was to provide a standard interchange design and to minimize impact to the community, to IDNR property, and to wetlands and floodplains. Interchange Alternative 3, a split diamond interchange was selected from the five alternatives because it minimized socio-economic and natural resource impacts better than the other four alternatives. See FEIS Tables 2-3 and 2-5 for more information. Based on recommendations from the Federal Emergency Management Agency (FEMA) to avoid flood buyout properties in Sparland, Interchange Alternative 3 was refined to avoid all the flood buyout properties.

2.3 North Section

Four bypass alternatives west of Henry, as well as improvements to existing IL 29 through Henry, were developed. The bypass alignments ranged from 0.5 mile to 1.5 miles west of existing IL 29 (Exhibit 4). North of Henry and the Marshall-Putnam county line, a number of sub-alternatives were developed and evaluated. For ease of documenting and describing the
sub-alternatives, they were consolidated into two alternatives, one along existing IL 29 and one east of existing IL 29. Table 3 describes the reasons for eliminating the alignments west and north of Henry.

**TABLE 3**
North Section Screening Decisions

<table>
<thead>
<tr>
<th>Alignments Eliminated</th>
<th>General Location</th>
<th>Reasons for Eliminating</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-1</td>
<td>On new alignment 1.5 miles west of IL 29 in Henry</td>
<td>Poor access to Henry and farmland impacts (191 acres).</td>
</tr>
<tr>
<td>H-2</td>
<td>On new alignment 1.2 miles west of IL 29 in Henry</td>
<td>Poor access to Henry and farmland impacts (195 acres).</td>
</tr>
<tr>
<td>H-3</td>
<td>On new alignment 1 mile west of IL 29 in Henry</td>
<td>Opposed by Henry officials, and would have greater farmland impacts (257 acres vs. 211 acres) and new right-of-way impacts (275 acres vs. 249 acres) than H-4. See discussion of H-4 below this table.</td>
</tr>
<tr>
<td>H-5</td>
<td>Improving IL 29 through Henry</td>
<td>Improving IL 29 to freeway standards would have resulted in numerous commercial displacements south and north of Western Avenue and impacts to the fairgrounds and the high school.</td>
</tr>
<tr>
<td>N-4</td>
<td>On new alignment east of IL 29 north of Henry and the Marshall-Putnam county line</td>
<td>Would affect 49 to 87 more acres of agricultural land, 9 to 15 more acres of wetlands, and 40 more acres of floodplain than improving existing IL 29. This alignment would also affect the Miller-Anderson Woods Natural Area and potentially affect two protected species.</td>
</tr>
</tbody>
</table>

The sole remaining alignment after the screening described in the Table 3 was alignment H-4 west of Henry and N-2 north of Henry. Alignment H-4 was selected because it provided better access to Henry, required fewer acres of right-of-way and farmland than other bypass alternatives, and was supported by Henry officials. Alignment N-2 was selected because it had fewer natural resource impacts than improvements east of IL 29, including impacts to Miller-Anderson Woods Natural Area.

Following the identification of a single alignment in the North Section (H-4 and N-2), IDOT continued to consider refinements to that alignment to minimize impacts. The improvements along existing IL 29 north of Henry were expanded to the following five options:

- **N-2A**: 50-foot-wide median, no retaining walls, Iowa Interstate Railroad relocation 100 feet east of the existing tracks
- **N-2B**: 50-foot-wide median, retaining wall on the east side of IL 29, Iowa Interstate Railroad relocation 44 feet east of existing tracks
- **N-2C**: 50-foot-wide median, retaining walls on the east and west sides of IL 29, Iowa Interstate Railroad relocation 28 feet east of existing tracks
- **N-2D**: 47-foot-wide median, retaining walls on the east and west sides of IL 29, no railroad relocation

- **N-2E**: 22-foot-wide median, retaining walls east and west of IL 29, no railroad relocation

Near the Miller-Anderson Woods Nature Preserve, Options N-2A, N-2B, and N-2C, each of which would relocate the railroad to the east, were eliminated from consideration because of their higher overall impacts, particularly on wetlands, floodplains, and the Miller-Anderson Woods Natural Area (FEIS Table 2-4). Option N-2D, which did not relocate the railroad but maintained a 47-foot median, was eliminated because it required a costly and complex drain system in the narrowed right-of-way between the highway and railroad. Option N-2E, which did not relocate the railroad and had a 22-foot median, was carried forward. Further refinements to N-2E included moving it 8 feet to the east to eliminate the need for a retaining wall on the west side of IL 29.

Different options were evaluated in the Crow Creek area to minimize impacts to floodplain and wetlands west of IL 29. The standard typical section with a 50-foot median and a ditch on the west side of IL 29 would affect 28 acres of floodplain and 13 acres of wetland.

Constructing a retaining wall on the west side of IL 29 would reduce floodplain impacts to 15 acres and wetland impacts to 5 acres. To balance construction costs and wetland impacts IDOT selected a third option, using a guardrail on the west side of IL 29 with 2:1 side slopes to minimize floodplain and wetland impacts (FEIS Exhibit 2-12). The guardrail would cover two areas with a total length of 5,200 feet. This option would affect 25 acres of floodplain, 11 acres of wetland, and cost $24 million. The feasibility of using steeper than 2:1 side slopes with reinforced earth foreslopes will be investigated in a future design phase.

### 2.3.1 Interchange Screening Decisions

The Western Avenue interchange is the only proposed interchange in the North Section. Only a diamond interchange was considered at that location. In the DEIS, Western Avenue was proposed to be grade-separated over IL 29. In the FEIS, IDOT changed the configuration so that IL 29 would be grade-separated over Western Avenue. While the interchange footprint/impacts remain the same with either option, the following are advantages of having IL 29 grade-separated over Western Avenue:

- The vertical sight distance on Western Avenue would be improved.

- The proposed retaining walls located on the south side of Western Avenue, west and east of the IL 29 ramp intersections, would not be as high as would be necessary with Western Avenue passing over IL 29.

### 2.4 Environmentally Preferred Alternative

The Council on Environmental Quality regulations for implementing NEPA require that the Record of Decision specify “the alternative or alternatives which were considered to be environmentally preferable” (40 CFR §1505.2[b]). As noted in this document and in the FEIS, alternatives’ screening decisions leading to the preferred alternative were regularly made based on minimizing impacts to the built and natural environment. The DEIS and FEIS preferred alternative (now the Selected Alternative) is the environmentally preferable alternative.
3. Description of the Selected Alternative

The Selected Alternative identified and discussed in this Record of Decision is the preferred alternative identified in the FEIS. Its identification was based on the analysis of environmental impacts, engineering and traffic service considerations, and public and agency comments. The Selected Alternative was also concurred upon by the project’s interagency resource group. The Selected Alternative is shown in Exhibit 1 and described below.

Between the north terminus of IL 6 and the north side of Chillicothe, IL 29 will be a 4-lane, divided freeway on a new location west of existing IL 29, with interchanges at Cedar Hills Drive, Rome West Road, McGrath Road, and Truitt Road. Between the north terminus of IL 6 and Cedar Hills Drive, a distance of about 2 miles, IL 29 will be located primarily within existing right-of-way. The freeway section will end just east of the relocated Benedict Street Bridge on the north side of Chillicothe. The typical freeway section consists of two 12-foot travel lanes in each direction and a 56-foot-wide median with paved shoulders and grassed areas. The typical paved shoulders will be 10 feet wide on the right and 6 feet wide on the left (with another 2 feet unpaved). Wildlife crossings are included throughout the freeway section in the design of box culverts and bridges. No bicycle accommodations are included along the freeway section.

The 4-lane, partial access-controlled expressway section will begin east of the relocated Benedict Street Bridge north of Chillicothe and extend to the north project terminus near Kentville Road and I-180. Access to the expressway will be provided at interchanges, major crossroads, residences, and farms but not at businesses. The typical expressway section is similar to the freeway section, except that the median varies in width from 22 feet in areas with constraints on both sides of the road to 50 feet in others. The 22-foot median requires a concrete median barrier because the clear zone between opposing lanes of traffic would not be adequate. Wildlife crossings are included throughout the expressway section in the design of box culverts and bridges. Bicyclists will be accommodated on the 10-foot paved outside shoulders on both sides of IL 29.

North of Chillicothe, in the area between Hart Lane and IL 29, an interchange will be constructed to provide a free-flow movement for travel between Chillicothe and Sparland. The interchange will provide a connection between existing IL 29 and the freeway section to the west of Chillicothe. Improvements to IL 29 within Chillicothe are planned between Truitt Road and the north Chillicothe interchange, including capacity expansion, extending sidewalks, and reconstructing a railroad viaduct that carries the tracks of the Burlington Northern Santa Fe railroad over IL 29.

North of Chillicothe, the proposed IL 29 facility will rejoin existing IL 29. To minimize impacts to the bluff, natural areas, and IDNR property on both sides of IL 29, a split profile will be used intermittently from north of Chillicothe to south of Sparland. The typical section for the split profile includes a retaining wall between the northbound and southbound roadways and a concrete median type barrier and retaining wall on the west side of the southbound roadway next to the bluff. The treatment on the east side of the road varies between retaining wall, concrete barrier, and guardrail depending on the right-of-way width available.
South of Sparland, the split profile ends as the proposed facility moves to the east of existing IL 29 to avoid the impacts of improving IL 29 through Sparland. An interchange will be constructed in Sparland to provide access to the community and IL 17. North of the Sparland interchange, IL 29 will rejoin the existing highway alignment. A split profile will resume at that point and extend to near the Camp Grove Road intersection to minimize cuts into the bluff.

South of Henry, IL 29 will leave the existing alignment, crossing agricultural fields toward Western Avenue (County Highway 6). An interchange is proposed at Western Avenue, about 0.5 mile west of Henry. North of the interchange, IL 29 will rejoin the existing alignment north of the Marshall-Putnam county line and continue through Putnam to the project terminus just north of the Kentville Road intersection.

4. Section 4(f)

The U.S. Department of Transportation’s Section 4(f) law (49 U.S.C. 303) states that federal funds may not be approved for projects that use land from a significant publicly owned park, recreation area, wildlife or waterfowl refuge, or significant historic site unless there is no feasible and prudent alternative to the use of land from such properties, and the action includes all possible planning to minimize harm to the property resulting from such use.

4.1 Section 4(f) Properties

The Selected Alternative requires the removal of bridge SN 062-0011 over Barrville Creek in Marshall County. The Barrville Creek Bridge, constructed in 1924, is listed on the Illinois Historic Bridge Survey and is eligible for listing in the National Register of Historic Places. A description of the bridge can be found in Section 3.18 of the FEIS.

The Selected Alternative will not affect any significant publicly owned park, recreation area, or wildlife/waterfowl refuge.

4.2 Section 4(f) Summary

4.2.1 No Prudent and Feasible Alternatives

The Barrville Creek Bridge is located west of existing IL 29. The Selected Alternative would widen IL 29 to a 4-lane, divided facility in the area of the bridge. The No-Build Alternative and a Build Alternative on a new alignment (the Bluff Alignment) were considered as avoidance alternatives but determined not to be prudent because neither met the project purpose and need.

In addition, IDOT investigated shifting the Selected Alternative 20 feet east to avoid the bridge. That shift was determined not to be prudent because it would make maintenance of traffic during construction more difficult and costly, resulting in one extra stage of construction, and it would require a 4,000-foot-long retaining wall between the highway and the railroad because there would not be enough space for sideslopes.

4.2.2 Planning to Minimize Harm

Because impact to the bridge cannot be avoided or minimized, mitigation measures have been developed by the Illinois Historic Preservation Agency (IHPA), FHWA, and IDOT. As stipulated in the Memorandum of Agreement signed in December 2005, IDOT will advertise
the bridge as available for relocation to an alternative site acceptable to the State Historic Preservation Office. If one cannot be found, IDOT will attempt to identify a bridge similar to the Barrville Creek Bridge for listing on the Historic Bridge Survey.

4.2.3 Section 4(f) Conclusion
Based on the considerations discussed above and in the FEIS, there is no feasible and prudent alternative to affecting the Barrville Creek Bridge. The Memorandum of Agreement signed by IHPA, FHWA, and IDOT, and developed under the stipulations of a Programmatic Agreement for Historic Bridges ratified by IHPA and FHWA in 2004, specifies measures to be undertaken to mitigate adverse effects of removing the Barrville Creek Bridge. The Selected Alternative includes all possible planning to minimize harm to the Barrville Creek Bridge resulting from its proposed removal.

5. Measures to Minimize Harm
All practicable means to avoid or minimize environmental harm from the Selected Alternative have been adopted. Mitigation proposed for the impacts are summarized below and fully described in Section 3.21 of the FEIS. The mitigation measures will be implemented either prior to, or concurrent with, proposed project construction activities.

5.1 Traffic
A traffic management plan will be developed and implemented during the construction phase of the project to provide reliable access to agricultural fields, residences, businesses, community facilities and services, and local roads. Local roads intersected by the Selected Alternative will remain open to traffic with minor interruptions during construction. IDOT will coordinate construction activities, sequencing, and traffic management plans with fire, police, and emergency rescue services to minimize delays and response times during the construction period. Lengthy detours will be minimized, but it is expected that, for various durations, side road connections will be closed to accommodate construction.

5.2 Property Acquisition
The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, provides for payment of just compensation of private property acquired for a federal-aid project. Offers of just compensation for the 44 residences and 4 businesses displaced by the project will be based upon approved estimates of fair market value supported and documented by professional real estate appraisals obtained by IDOT. The Act provides for certain relocation assistance and payment to displaced homeowners, residential tenants, and businesses that must relocate because of the project. IDOT will offer and provide relocation assistance to each displaced family and business. Displaced families will be eligible for moving costs and may be eligible for replacement housing payments. Displaced businesses will be eligible for searching and moving costs to relocate.

Septic tanks, drain fields, irrigation systems, or wells on acquired properties will be abandoned in accordance with state regulations and local zoning standards.
5.3 Agriculture

The Selected Alternative is designed to parallel property lines, where feasible, so as to minimize farm severances, severance management zones, and uneconomical remnants. Where practical, field access roads will be constructed to maintain access to farm fields.

Existing surface and subsurface drainage will be maintained. Subsurface field tiles draining to or intersected by the proposed highway’s right-of-way will be located by trenching to ensure that proper field drainage is maintained during construction.

Areas of cropland and non-native grasses on landlocked parcels will be investigated for use as borrow areas. If suitable, they will be given priority as sources of borrow, thereby reducing additional impacts to agricultural lands.

To reduce agricultural impacts, landlocked parcels rather than agricultural land will be used to mitigate natural resource impacts where feasible.

5.4 Cultural Resources

As described above in the Section 4(f) discussion, impacts to the Barrville Creek Bridge (SN 062-0011), a property eligible for listing in the National Register of Historic Places, will be mitigated in accordance with the Memorandum of Agreement between the Illinois State Historic Preservation Officer, IDOT, and FHWA, executed in December 2005.

All mounds and cemeteries will be avoided by the Selected Alternative. No archaeological sites that merit preservation in place will be affected by the Selected Alternative. Not all locations within the Selected Alternative footprint were surveyed for archaeological resources because access could not be obtained. The locations within the construction limits of the Selected Alternative that have moderate or high research potential will be subjected to subsurface evaluations (test excavations) in consultation with the Illinois State Historic Preservation Officer in accordance with the Memorandum of Agreement executed on 01/06/2010.

5.5 Noise and Air Quality

Noise impacts were identified at four noise sensitive locations. An analysis of noise abatement measures found that options for reducing noise levels at affected locations are neither feasible nor reasonable based on IDOT’s noise policy. Therefore, it is not likely that noise barriers will be constructed to mitigate the noise impacts associated with the implementation of the Selected Alternative.

Noise and air quality impacts during construction will be reduced by implementing measures required in IDOT’s latest edition of the Standard Specifications for Road and Bridge Construction. The Standard Specifications and any other special provisions developed during coordination with the Illinois Environmental Protection Agency (IEPA) will be followed during the location of pavement material batch plants. Regulations for demolition and disposal of structures can also be found in the Standard Specifications.

Special provisions will require that motorized construction equipment not be operated between 10 PM and 6 AM without the written approval of the project engineer. Open burning of construction waste or brush will be done in accordance with local ordinances.
No part of the Selected Alternative lies within a designated nonattainment or maintenance area for the six criteria pollutants established under the National Ambient Air Quality Standards by the U.S. Environmental Protection Agency (USEPA). Therefore, an air quality conformity determination is not required.

5.6 Geology, Soils, and Surface Water Resources

High cut and fill slopes will be benched, where necessary, to minimize soil erosion and long-term maintenance including sloughing. The use of split profiles for certain sections of the project will reduce the disturbance to erodible soils, the risk of landslides, and the risk of encountering abandoned mines.

Principles and standards from IDOT’s policies and other erosion control best management practices will be used to minimize soil erosion. The erosion control plan developed for the project reflects IDOT’s erosion control practices. The preliminary plan includes the following concepts: temporary ditch checks, ditch linings, culvert outlet and channel treatments, perimeter erosion barrier, inlet and pipe protection, and stormwater detention ponds.

The size of disturbed area exposed at any one time and the duration of exposure will be minimized. Construction contracts will include limits on the amount of soil that can be exposed at any one time, measures to prevent erosion during spring thaw if construction is not completed before winter, and specifications to complete grading as soon as possible and to revegetate with temporary and permanent cover.

Control methods will be used to prevent erosion and sedimentation in sensitive areas. Such methods include proper design of drainage channels with respect to width, depth, gradient, side slopes, and energy dissipation; protective ground cover such as vegetation, mulch, erosion mat, or riprap; dikes and intercepting embankments to divert sheet flow away from disturbed areas; and sediment control devices such as ditch checks, erosion bales, silt fences, and retention or detention basins.

5.7 Wetlands

Twenty acres of wetland that will be affected will require 61.7 acres of wetland compensation. A total of 657 acres of land east of IL 29, from just south of the Peoria/Marshall County Line to just north of Sparland, will be purchased to mitigate the project’s environmental impacts and will be transferred to IDNR. Wetland preservation credits will be granted for the high-quality wetlands protected by the purchase and transference of these wetlands to IDNR. In addition, three farm fields within these parcels will be converted to wetlands. The remaining wetland compensation required will be obtained by expanding wetlands northeast of the IL 6 interchange near Mossville and by expanding wetlands in the northeastern quadrant of the proposed Western Avenue/IL 29 interchange in Henry. Compensation for affected wetlands is based on the IDOT’s Wetlands Action Plan. Wetland issues have been coordinated with IDNR according to the processing procedures of Standard Review Actions in the plan. In the design phase, IDOT will investigate additional measures to minimize wetland impacts.

The project has been developed pursuant to Executive Order 11990, Protection of Wetlands. The evaluation of alternatives concluded that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable
measures to minimize harm to wetlands that may result from such action. This finding and the mitigation of wetland impacts are discussed in Section 3.9 of the FEIS.

5.8 Floodplains
IDOT will implement the following mitigation measures to meet the requirements of Executive Order 11988 to “restore and preserve the natural and beneficial values served by floodplains:”

- **Dickison Run Creek Floodplain**
  - A 61-acre area purchased by IDOT along the stream will remain protected from development and be used for wetland and tree mitigation.
  - A 14-acre area purchased by IDOT east of the stream will be protected from development and planted with trees.

- **Senachwine Creek (South) Floodplain**
  - The project will landlock a 15-acre area within the Senachwine Creek Floodplain owned by Galena Road Gravel, Inc. It is proposed that the landlocked parcel be protected from development by transferring ownership to IDNR. Prior to transferring the property to IDNR, IDOT will plant the farmed section of the parcel with trees.
  - The project will landlock a privately owned 21-acre area within the Senachwine Creek Floodplain. IDOT will purchase the parcel and fund preservation of the vegetation along the stream bank, planting part of the parcel with trees and part with prairie grass. IDOT will maintain the parcel.

- **Illinois River Floodplain**—IDOT will purchase 657 acres east of IL 29, from just south of the Peoria/Marshall County Line to just north of Sparland, including 321 acres of floodplain forest and 57 acres of cropland. To protect the area from development, IDOT will transfer ownership to IDNR.

It is determined that there is no practicable alternative to the proposed construction in floodplains and that the proposed action includes all practicable measures to minimize harm to floodplains that may result from such use.

5.9 Designated Lands
The proposed design of the Selected Alternative incorporated measures to limit impacts to the corridor’s many designated lands. A split profile (and associated retaining wall/barrier) and 22-foot-wide median, rather than the standard 50-foot median, will be used to reduce the expansion into County Line Hill Prairie Natural Area, Hopewell Estates Hill Prairies Natural Area, Marshall State Fish and Wildlife Area—Spring Branch Unit, Marshall County Hill Prairie Land and Water Reserve, and Marshall County State Hill Prairie Natural Area. A guardrail will be used on the east side of IL 29 to reduce impacts to the Spring Branch Unit of Marshall State Fish and Wildlife Area. Guardrail, retaining walls, and a 22-foot-wide median will be used to limit impacts to the Miller-Anderson Woods Natural Area.

In a Memorandum of Agreement signed August 15, 2006, IDOT and IDNR agreed to mitigation and enhancement measures to compensate for impacts to IDNR property resulting from the proposed improvements. The agreement is included in Appendix A
(pages A-122 to 126) of the FEIS and a summary of the provisions is described in Section 3.21.5 of the FEIS.

5.10   Plant Communities and Wildlife Resources

IDOT will plant trees and prairie grasses on landlocked and unused parcels. In addition, roughly 32 acres of high-quality upland forest on landlocked parcels north of IL 17 and 59 adjacent acres on land owned by IDOT will be protected from development by transferring the land to IDNR. In accordance with applicable IDOT policies, the backslopes of the proposed roadway will be seeded with prairie seed mixes where appropriate, resulting in about 200 acres of prairie.

Improving existing IL 29 between Chillicothe and Camp Grove Road and along Miller-Anderson Woods limits the Selected Alternative’s prime wildlife habitat impacts to edge impacts. Narrowing the cross section by using narrower medians and a split profile in select locations will help minimize wildlife habitat impacts, although the split profile may present a barrier for wildlife (see Sections 2.3.2 and 2.3.3 of the FEIS for locations where the split profile and narrower medians are proposed). To mitigate impact to wildlife habitat, IDOT will transfer 657 acres of landlocked parcels containing floodplain, forested wetland and cropland east of IL 29 to IDNR to create a continuous strip of protected wildlife habitat land from Senachwine Creek on the north side of Chillicothe to about 0.75 mile south of IL 17 in Sparland.

Tree removal during construction will not be allowed between April 15 and August 15 of any given year to avoid construction impacts to nesting neotropical migratory birds. To minimize animal–vehicle collisions and the effects of retaining walls/median barriers on wildlife movement, the Selected Alternative is designed with 44 wildlife passages spaced at approximately 0.5-mile intervals (Table 4). Wildlife passages consist of bridges and large and small culverts. Wildlife crossings will provide a sufficiently wide and dry area adjacent to the stream for animal movement.

**TABLE 4**
Wildlife Crossing Location Summary

<table>
<thead>
<tr>
<th>Station/Creek</th>
<th>Bridge/Culvert</th>
<th>Animal Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Section</td>
<td>Bridge/Culvert</td>
<td>Animal Size</td>
</tr>
<tr>
<td>2743+00/Dickison Run</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>2744+00/Frontage Road</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>3176+50/Senachwine Creek South</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>3214+00</td>
<td>Culvert</td>
<td>Large</td>
</tr>
<tr>
<td>3236+37</td>
<td>Culvert</td>
<td>Large</td>
</tr>
<tr>
<td>Benedict Rd. (50+00) /Senachwine Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>Central Section</td>
<td>Bridge/Culvert</td>
<td>Animal Size</td>
</tr>
<tr>
<td>3269+50</td>
<td>Culvert</td>
<td>Large</td>
</tr>
<tr>
<td>3322+00/Coon Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>Existing IL 29/Boehle Road</td>
<td>Bridge</td>
<td>Large</td>
</tr>
</tbody>
</table>
### TABLE 4
Wildlife Crossing Location Summary

<table>
<thead>
<tr>
<th>Location</th>
<th>Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>3324+00/Service road</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>3330+00</td>
<td>Culvert</td>
<td>Small</td>
</tr>
<tr>
<td>3344+00</td>
<td>Culvert</td>
<td>Small</td>
</tr>
<tr>
<td>IL 29 connector (72+50)/Senachwine Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>3372+36</td>
<td>Culvert</td>
<td>Small</td>
</tr>
<tr>
<td>3391+00</td>
<td>Culvert</td>
<td>Small</td>
</tr>
<tr>
<td>3440+20</td>
<td>Culvert</td>
<td>Small</td>
</tr>
<tr>
<td>3452+87/Unnamed Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>3488+35/Rattlesnake Hollow</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>3515+20/Barville Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>3545+64</td>
<td>Culvert</td>
<td>Small</td>
</tr>
<tr>
<td>3583+40</td>
<td>Culvert</td>
<td>Large</td>
</tr>
<tr>
<td>Existing IL 29/Gimlet Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>3629+50/Gimlet Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>Existing IL 29/Thenius Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>3653+50/Thenius Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>3709+40</td>
<td>Culvert</td>
<td>Large</td>
</tr>
<tr>
<td>3753+11</td>
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<td>Small</td>
</tr>
<tr>
<td>3758+58</td>
<td>Culvert</td>
<td>Small</td>
</tr>
<tr>
<td>3778+00</td>
<td>Culvert</td>
<td>Large</td>
</tr>
<tr>
<td>3795+00/Crow Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>3833+50</td>
<td>Culvert (Dry)</td>
<td>Small</td>
</tr>
</tbody>
</table>

### North Section

<table>
<thead>
<tr>
<th>Location</th>
<th>Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>5015+60</td>
<td>Culvert (Dry)</td>
<td>Small</td>
</tr>
<tr>
<td>5020+26/Crow Creek Overflow</td>
<td>Culvert (Extension)</td>
<td>Small</td>
</tr>
<tr>
<td>5024+60</td>
<td>Culvert (Dry)</td>
<td>Small</td>
</tr>
<tr>
<td>5287+00/Dry Hollow Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>6088+80</td>
<td>Culvert</td>
<td>Large</td>
</tr>
<tr>
<td>6118+60/Senachwine Creek Overflow</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>6132+00/Senachwine Creek</td>
<td>Bridge</td>
<td>Large</td>
</tr>
<tr>
<td>6159+30</td>
<td>Culvert</td>
<td>Large</td>
</tr>
<tr>
<td>6179+20</td>
<td>Culvert</td>
<td>Large</td>
</tr>
<tr>
<td>6213+15</td>
<td>Culvert</td>
<td>Small</td>
</tr>
<tr>
<td>6225+30</td>
<td>Bridge</td>
<td>Large</td>
</tr>
</tbody>
</table>
TABLE 4
Wildlife Crossing Location Summary

<table>
<thead>
<tr>
<th>Location</th>
<th>Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>6255+50</td>
<td>Culvert</td>
<td>Small</td>
</tr>
<tr>
<td>6273+25</td>
<td>Bridge</td>
<td>Large</td>
</tr>
</tbody>
</table>

5.11 Threatened and Endangered Species
Arrowwood plants, an Illinois threatened species, are located on a property that would be landlocked by the improvements and transferred to IDNR for protection. To the extent possible, IDOT will move the 500 adult and 500 juvenile arrowwood plants potentially affected by the Selected Alternative to a location such as the landlocked property that will be transferred to IDNR.

The decurrent false aster, a federal and state threatened species, will be relocated to an agricultural field landlocked by the proposed improvements and then transferred to IDNR for management and protection. As stipulated in the IDOT/IDNR Memorandum of Agreement, IDNR will maintain the fields of decurrent false asters.

5.12 Special Waste
If contaminated soils are encountered during construction, contaminated materials will be removed in compliance with federal and state policies and procedures for their safe removal, handling, and disposal.

5.13 Visual Resources
The visual scale of the highway will increase, but landscaping features within and adjacent to the highway right-of-way will minimize adverse effects. A landscaping plan to be developed during a future engineering phase could include the following provisions:

- Preserve existing vegetation as much as possible.
- Perform landscape planting, including trees and prairie plant species, and natural revegetation of cut and fill slopes.
- Landscape the right-of-way in the communities the project passes through, specifically Putnam and Sparland.
- Replace the vegetation cleared from existing or proposed rights of way with grasses (except at habitat loss mitigation areas).

6. Monitoring and Enforcement
Permits and related approvals require coordination with IDNR, IEPA, and the U.S. Army Corps of Engineers to ensure compliance with regulations protecting environmental resources, including streams, wetlands, protected species, and stormwater. Stream and wetland impacts require compliance with the Clean Water Act. The water quality certification, pursuant to Section 401 of the Clean Water Act, must be obtained from IEPA, and the Section 404 permit must be obtained from the U.S. Army Corps of Engineers.
IDOT will ensure the development of a Stormwater Pollution Prevention Plan per the agency’s agreement with IDNR. The plan will identify reasonably expected stormwater pollution and measures that would be implemented to reduce the pollutants in the discharge. The plan will help to ensure compliance with the terms of the National Pollution Discharge Elimination System permit and Section 402 of the Clean Water Act.

Coordination with IDNR will continue to ensure commitments regarding property transfers, public use enhancements, prairie restorations, and wetland and endangered plant mitigation included in the 2006 IDNR/IDOT Memorandum of Agreement are successfully completed.

If the project requires the removal of underground storage tanks, a permit to do so must be obtained from the Office of the State Fire Marshall.

7. Comments on the FEIS

The FEIS Notice of Availability was published in the Federal Register on May 22, 2009, and the comment period closed on June 22, 2009. Letters from one federal agency (USEPA) and five area residents were received and included as part of the public record. Appendix A of this document contains copies of those letters and IDOT’s responses to the public’s FEIS letters. Substantive comments made by the public and USEPA are summarized below. FHWA has concluded that comments received on the FEIS have been adequately addressed.

7.1 Federal Agency Comments (USEPA)

1. **Comment:** We expressed concern that the DEIS proposed 142 acres or tree clearing, but provided cutting date restrictions to protect migratory bird nesting activity for only 56 acres. We recommended such wildlife protection for all 142 acres; the FEIS indicates that will be committed to in the Record of Decision (ROD). This commitment will afford neotropical migratory birds needed protection for their nesting activities.

   **Response:** The Selected Alternative would affect 122 acres of upland forest. A tree removal prohibition for all trees will be enforced between April 15 and August 15 of any given year. This commitment is found in the last bullet of Section 3.21.6 (Plant Communities and Wildlife Resources) in the FEIS.

2. **Comment:** Another DEIS comment we made concerned adherence to the IDOT Tree Mitigation Policy. Although the FEIS has addressed these concerns conceptually, the FEIS is unclear about what the total acres of impacts to trees will be, and the total acreage of mitigation commitments. Other impacts and mitigation commitments should also be quantified. Therefore, we recommend the ROD include a table that clearly presents each resource that will be impacted (e.g. wetlands, prairies, upland forests) and what mitigation the ROD is committing to. For example, wetland losses and mitigation should be quantified by wetland type. This summary table should include explanatory notes as appropriate, and indicate those mitigation measures that are voluntary. Planned mitigation sites, if known, should be shown on maps with a brief description.

   **Response:** The total acres of trees (122 acres) that would be affected by the Selected Alternative are described in Section 3.11.2.1 of the FEIS. Table 3-52 on page 3-139 of the FEIS identifies the locations of affected upland forests and the associated acreage.
impacts. In Section 3.11.3 (Measures to Minimize Harm and Mitigation), IDOT has preliminarily identified the following mitigation areas for tree replacement:

- 38 acres on IDOT property northeast of the IL 6 interchange (first aerial inset, page 3-142)
- 14 acres on IDOT property adjacent to the proposed Cedar Hills Drive interchange (second aerial inset, page 3-142)
- 4 acres on a landlocked parcel north of the BNSF Railroad (first aerial inset, page 3-143)
- 8 acres on a landlocked parcel along Senachwine Creek (second aerial inset, page 3-143)

In addition, IDOT will transfer to IDNR 32 acres of high-quality forest on landlocked parcels north of the existing IL 29/Thenius Street intersection and 59 acres of forested land owned by IDOT immediately north of the landlocked parcels. The 155 acres of proposed plantings and preservation exceed the requirements of Section 3e (Replacement of Trees) of IDOT’s Department Policy D&E 18, Preservation and Replacement of Trees, which states “For trees removed from forest areas or from wooded riparian corridors, the intent of replacement plantings should be to provide comparable functional replacement.”

Section 5 of this document, Measures to Minimize Harm, discusses the Selected Alternative’s resource impacts and proposed mitigation. Because the Selected Alternative’s impacts to the resource categories described in Section 5 and the proposed mitigation are a mix of quantitative and qualitative information, a tabular form has not been used to convey the information. The Selected Alternative’s quantifiable impacts are listed in Table 1 of the Executive Summary of the FEIS. Each resource discussion in Section 3 of the FEIS has a “Measures to Minimize Harm and Mitigation” section, and Section 3.21 summarizes, in one location, the measures to minimize harm for all resource categories. The IDOT-IDNR Memorandum of Agreement (Mitigation/Enhancement for the Expansion of Illinois Route 29), which is found in the FEIS Appendix A (pages A-122 through A-126), should also be consulted to understand this project’s mitigation commitment.

3. **Comment:** Because the project’s purpose and need specifies that existing and future traffic travel demand will be served, the ROD should provide a map (comparable to Exhibit 1-6) showing the projected 2032 Average Daily Traffic by road segment for the Preferred Alternative. A brief explanation would also be helpful if significantly disparate numbers are anticipated in adjacent segments. In the Exhibit 1-6 for example, such disparities include:

- Where is the southernmost traffic dispersing to or coming from?
- Why are the numbers around Henry so different from each other?
- Is all northern traffic accessing interstate 1-180 or dispersing locally?

**Response:** Exhibit 5 of this document shows the projected 2032 Build Alternative traffic volumes for the Selected Alternative in addition to existing 2001 traffic volumes and 2032 No-Build volumes. The 2032 Build Alternative volumes follow the same trends exhibited by the 2001 existing volumes and the 2032 No-Build volumes. Those trends are:

- The highest existing and future volumes are for the section between IL 6 and IL 17. The project’s traffic studies identified a strong travel trend from eastbound IL 17 to
southbound IL 29 (bound for employment and services in Chillicothe and Peoria) during the morning commute and the reverse movement in the evening commute.

- Forecast traffic between Sparland and Henry is lower than the forecast traffic within the communities themselves. This is expected because traffic counts within Sparland and Henry include not only through trips on IL 29 and other state routes in those communities, but also internal trips made by residents of those communities.

- Forecast volumes in Henry are lower than in Sparland, but of a similar magnitude.

- Traffic volumes from south of Putnam to the north project terminus show little to no variation suggesting that traffic is continuing north to I-180 rather than using Kentville Road (to the west) or IL 29 (to the east).

4. **Comment:** The Preferred Alternative will use an innovative "split profile," with northbound and southbound lanes at different elevations to reduce the project footprint width. This is important in such an area where steep slopes and other significant resources combine to reduce the available space for putting a major roadway through this corridor. The FEIS indicates that the Preferred Alternative traverses some areas with steep slopes that include highly erodible soils. We recognize that IDOT’s control beyond its right-of-way (ROW) along this corridor is limited and is a sensitive issue. Nevertheless, we recommend that the ROD discuss how the project will address erosion risks, both to protect the road and its travelers, and to protect land above and below the ROW. Some of these threats are not currently present, but rather could become a concern should inappropriate developments above or below the ROW occur too close to vulnerable topography. Several approaches might include:

- acquiring selective additional ROW to put sensitive slopes under IDOT control
- engineering protective reinforcement into the project at select locations
- using slope-stabilizing vegetation
- obtaining memorandums of agreement with local governments responsible for land use policies to prevent inappropriate development of sensitive sections along the bluffs
- Purchasing development rights or conservation casements for parcels considered to be potentially at risk
- Extending farmland protection programs from adjacent properties to include, where appropriate, vulnerable bluffs or lowlands needing erosion protection

**Response:** Most of the erodible soils are located at the bluffs adjacent to IL 29, from north of Chillicothe to north of Sparland (FEIS Exhibit 3-17). Split profiles have been developed between the southbound and northbound lanes in these areas, in part to minimize the lateral extent of soil disturbance.

Areas of erodible soil located west of the southbound lane retaining walls, but within the proposed right-of-way, are not expected to be notably affected by roadway construction (that is, construction will be performed primarily from the eastern side of the retaining walls). However, throughout the project, IDOT’s standard practices for
temporary and permanent erosion and sediment control will be followed to protect the roadway, adjacent properties, and local environmental resources. These practices are needed to fulfill the commitments of the proper permits that will be required for the construction of the project. Such practices include, but are not limited to, the acquisition of adequate right-of-way to implement erosion and sediment control measures; the construction of structures to protect the roadway and adjacent properties; and minimization of exposed soil and maximization of vegetative cover during construction.

The details of the devices to be used and their specific locations will be determined in future design phases of work. IDOT has identified a right-of-way width in areas of erodible soil adequate to construct the Selected Alternative in a manner that will protect IL 29 and its users. No additional right-of-way acquisition is anticipated to preempt development that may occur close to vulnerable topography.

Land use decisions about the appropriateness of development in the area are the jurisdiction of project-area communities, not IDOT. IDOT does, however, have control over direct access to the facility and will review changes in access/development for risks to the facility. There are also areas of private and publicly-owned designated land between Chillicothe and Sparland, including the County Line Hill Prairie Natural Area, Hopewell Hill Prairie Nature Preserve, Hopewell Estates Hill Prairies Natural Area, Marshall County State Conservation Area, Marshall State Fish & Wildlife Area, Marshall County Hill Prairie Land & Water Reserve, and the Marshall County State Hill Prairie Natural Area (FEIS Aerial Exhibit Sheets 8 and 9). The publicly-owned designated lands would preclude development along a portion of the west side of IL 29. IDOT will transfer to IDNR control 91 acres along the west side of IL 29 north of the IL 29/Thenius Street intersection in Sparland which would also preclude future development. In addition, on the bluff between the Marshall County line and Sparland, there are 2,000 to 2,500 acres of farmland in an agricultural areas protection program to aid in the preservation of farmland and to deter the development of nonagricultural uses in this region.

5. **Comment:** We commend FHWA and IDOT for the extensive use of wildlife crossings to reduce safety risks to motorists and wildlife and to promote habitat connectivity. However, we recommend one or more additional wildlife crossings be considered for a half-mile stretch south of Henry, adjacent to Crow Creek, which is shown in Exhibit 3-25 as having a significant number of road-kill incidents.

**Response:** The road-kill location referred to in this comment is located between the North Crow Creek crossing (Station 5020) and a ditch that extends between IL 29 and the Cameron-Billsbach Division–Chautauqua National Wildlife Refuge (Station 3836). See FEIS Aerial Exhibit sheet 12. As depicted on sheet 12, IDOT is proposing to limit impacts to wetlands 52 and 53 with a retaining wall between stations 3838 and 5000 and another retaining wall at the Crow Creek north crossing. The locations of the walls leave an area between Stations 5000 and 5015 where another wildlife crossing has been considered. A wildlife crossing in this area would connect farmland east and west of IL 29, which would be contrary to the goal of connecting wooded, wetland, and stream habitats. In addition, the inclusion of a wildlife crossing in the suggested half-mile stretch could have adverse effects on the existing wetland because the crossings would be below the 50-year flood elevation and could change the hydrological characteristics of
the area. Thus, an additional wildlife crossing is not proposed for this stretch of roadway.

7.2 Public Comments

1. **Comment:** The new extension of IL-6 will isolate Mossville grade school from Chillicothe and the school district catchment areas to the northwest and south east. How will school buses access the grade school? In what way will emergency services to the school be affected?

   **Response:** The proposed improvements will not isolate Mossville Elementary and Middle Schools from Chillicothe or the school district catchment areas to the northwest and southeast. Access from the schools to Chillicothe will still be possible via Old Galena Road from existing IL 29, Rome West Road, Cloverdale Road, or Truitt Road. No connection between the schools and Chillicothe will be disrupted by the IL 29 project. Similarly, the proposed IL 29 improvements will not isolate the schools from other parts of the school district. The only local roadways in the vicinity of the schools that will be closed are Dickison Lane and Boy Scout Road. Both roads are proposed to terminate a short distance west of the schools. A proposed frontage road will extend between Mossville Road and Cedar Hills Drive to provide access to the portions of those roads west of proposed IL 29. Routes may need to be adjusted, but access will still be available to locations currently accessed by school buses and emergency vehicles.

2. **Comment (paraphrased):** In what way will the proposed roadway increase noise and air pollution at the Elementary and Middle Schools in Mossville?

   **Response:** There are, according to IDOT data, about 10,000 vehicles per day on Old Galena Road in the vicinity of the schools, and the school buildings are approximately 200 feet from Old Galena Road. In 2032, proposed IL 29 will carry about 14,000 vehicles per day. The highway’s northbound travel lanes would be approximately 1,300 feet from the schools’ west property line and 2,300 feet from the school buildings. As noted in the FEIS, the entire IL 29 project area meets air quality standards for USEPA’s six criteria air pollutants. When an area meets air quality standards it is classified as being an “attainment area” which means that no policies or regulations need to be implemented to improve air quality. Even in “attainment areas” like the IL 29 study area, IDOT evaluates whether carbon monoxide levels at intersections would exceed USEPA standards. Intersections, with their stop-and-go traffic, would be the most likely locations to require additional carbon monoxide analysis. As a check, the project team evaluated the intersection of IL 29 and IL 17 (south leg) to determine if a carbon monoxide analysis would be required. This intersection would be one of the busiest along the project and would, therefore, provide an indication of the need for more analyses. The evaluation indicated that additional analyses would not be needed. Because the project area meets USEPA air quality standards, and because traffic will be in a free-flow condition west of the schools, there is no need for an air pollution study at the schools.

Concerning the project’s potential noise impact on Mossville Elementary and Middle Schools, FHWA requires IDOT to conduct noise studies on projects like the IL 29 Study to determine if future noise levels would exceed noise criteria established for various land uses along a new or expanded highway. In the case of the schools, IDOT’s noise policy,
which was approved by FHWA, identifies noise levels equal to or greater than 66 decibels would be considered an impact. The key issue to understand in evaluating noise impacts at the schools is that the dominant noise source will be traffic on Old Galena Road rather than proposed IL 29. Although proposed IL 29 would carry more traffic in 2032 than Old Galena Road, the schools are only 200 feet from Old Galena Road, whereas they are 1,300 feet from proposed IL 29. No substantial increase in traffic is expected on Old Galena Road at the schools. As a result, no noise study is to be conducted for Mossville Elementary and Middle Schools.

8. Approval

Based on the analysis and evaluation contained in the FEIS, after careful consideration of all the identified social, economic, and environmental factors and input received from other agencies, organizations, and the public; and the factors and mitigation measures outlined in this document, it is the decision of FHWA to approve the Build Alternative as the Selected Alternative.

January 19, 2010

Norman R. Stoner, P.E.
Division Administrator
Exhibit 5

Existing and Future Traffic on IL 29

LEGEND

Average Daily Traffic (ADT)

000 - 2001 Traffic
[000] - 2032 Traffic - No Build alt.
(000) - 2032 Traffic - Build alt.

- New Alignment

- 2001 Traffic - 2032 Traffic - No Build alt.
- 2032 Traffic - Build alt.
- New Alignment