The Eastern Corridor

TIER 1 FINAL ENVIRONMENTAL IMPACT STATEMENT

Eastern Corridor Multi-Modal Projects
Hamilton and Clermont Counties, Ohio
PID 22970

U.S. Department of Transportation
Federal Highway Administration
Ohio Department of Transportation and
Hamilton County Transportation Improvement District

DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

U.S. Department of Transportation
Federal Highway Administration

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

FHWA-OH-EIS-04-02-F

Eastern Corridor Multi-Modal Projects, Hamilton and Clermont Counties, Ohio

TIER 1 FINAL ENVIRONMENTAL IMPACT STATEMENT

Submitted Pursuant to 42 U.S.C. 4332 (2) (c) by:

U.S. Department of Transportation Federal Highway Administration,
Ohio Department of Transportation, and Hamilton County Transportation Improvement District

Cooperating Agencies
Federal Transit Administration, U.S. Army Corps of Engineers, and National Park Service

9/30/05
Date of Approval

Division Administrator
Federal Highway Administration

9/30/05
Date of Approval

Director
Ohio Department of Transportation

The following persons may be contacted for additional information concerning this document:

Mr. Dennis A. Decker, Division Administrator
Federal Highway Administration, Ohio Division Office
200 North High Street, Columbus, Ohio 43215-2048
(614) 280-6896

Mr. Gordon Proctor, Director
Ohio Department of Transportation
1980 West Broad Street, Columbus, Ohio 43223
(614) 644-0377

The Tier 1 Final Environmental Impact Statement (EIS) presents updates to the Tier 1 Draft EIS for the proposed Eastern Corridor Multi-Modal Projects in Hamilton and Clermont Counties, Ohio. The Eastern Corridor project is being conducted in a two-tiered NEPA process. The Tier 1 work, as presented in this document, identifies feasible alternatives for different multi-modal components that will be carried through into Tier 2 for more detailed study, including: various transportation system management (TSM) actions, improved bus transit (expanded bus routes, new community circulators, feeder routes to compliment rail transit, and new bus hubs), new rail transit capacity extending from downtown Cincinnati to Milford, new highway capacity from Red Bank Road at I-71 to SR 32/I-275 in the Eastgate area of Clermont County, and new bikeway. The Tier 2 work will involve further refinement of these alternatives, including more detailed engineering and environmental analyses, comparative impact evaluation, identification of preferred alternatives for different parts of the multi-modal plan, and final NEPA documentation.

The purpose of the project is to implement a multi-modal transportation program consistent with the adopted long range plan for the region, addressing priority needs and supporting transportation goals and concept plans established during the Eastern Corridor Major Investment Study (April 2000) and subsequent metropolitan area planning actions. The need for the action stems from growing travel demand on an inadequate existing transportation network (including both highway and transit infrastructure), which is characterized by insufficient capacity, safety issues, limited transportation options, and inadequate linkage to the region's key transportation corridors for efficient movement of people, goods and services.

The preliminary impact evaluation presented in Tier 1 is based on conservative estimates of corridor widths and footprint areas. Primary impact concerns include potential residential and business relocations, crossing of the Little Miami River (a state-administered component of the national wild and scenic river system), possible encroachment on parkland, and possible impacts to several National Register Districts and other cultural resources. The Tier 1 Final EIS contains a list of preliminary mitigation measures and environmental commitments, updated since publication of the Draft EIS, for these and other impact categories to be carried through into Tier 2 for further development and finalization.

The implementation strategy for the Eastern Corridor anticipates that the various parts of the multi-modal transportation program will be constructed in prioritized segments incrementally over time until all parts of the multi-modal plan are in place. With the issuance of a Tier 1 Record of Decision (ROD), the Eastern Corridor will proceed with a series of separate Tier 2 environmental and design studies for each of the identified implementation segments ("by mode and by project") with appropriate NEPA evaluations. As each Tier 2 environmental document is completed and approved, final design and construction may begin for that project.

TABLE OF CONTENTS

TABLE OF CONTENTS

3. UPDATES TO THE PRELIMINARY ENVIRONMENTAL MITIGATION STRATEGY AND ENVIRONMENTAL COMMITMENTS

4. RECOMMENDATIONS FOR THE TIER 2 WORK PROGRAM

LIST OF TABLES

LIST OF FIGURES

APPENDICES

SUMMARY

SUMMARY

PROJECT DESCRIPTION AND APPROACH

The goal of the Eastern Corridor project is to implement planned improvements for improving long-term travel mobility between the City of Cincinnati and its eastern suburbs. The project is overseen by a partnership of state, county and city governments and transportation agencies, and is led locally by the Hamilton County Transportation Improvement District (HCTID). The study area extends from the Cincinnati Central Business District / riverfront redevelopment area in Hamilton County, east to the I-275 outerbelt in Clermont County.

The project is being conducted using a tiered NEPA approach. The Tier 1 work, as presented in this Tier 1 Final Environmental Impact Statement (EIS), identifies feasible alternatives in conservative footprint corridors for different multi-modal components that will be carried through into Tier 2 for more detailed study, including:

- Transportation System Management (TSM) actions;
- Improved bus transit, including expanded bus routes, new community circulators, feeder routes to compliment rail transit, and new bus hubs;
- New rail transit capacity extending from downtown Cincinnati to Milford;
- New highway capacity from Red Bank Road at I-71 to SR 32/I-275 in the Eastgate area of Clermont County; and
- New bikeway.

The Tier 2 work will involve further refinement of alternatives, including more detailed engineering and environmental analyses, comparative impact evaluation, identification of preferred alternatives for different parts of the multi-modal plan, and final NEPA documentation.

The purpose of the project is to implement a multi-modal transportation program consistent with the adopted long range plan for the region, addressing priority needs and supporting transportation goals and concept plans established during the Eastern Corridor Major Investment Study (April 2000) and subsequent metropolitan area planning actions. The need for the action stems from growing travel demand on an inadequate existing transportation network (including both highway and transit infrastructure), which is characterized by insufficient capacity, safety issues, limited transportation options, and inadequate linkage to the region's key transportation corridors for efficient movement of people, goods and services.

PURPOSE OF THE FINAL EIS

The Tier 1 Final EIS for the Eastern Corridor addresses updates to the Tier 1 Draft EIS since notice of availability was published in the Federal Register on November 19, 2004 and its circulation. Specifically, this Tier 1 Final EIS serves to: a) document revisions to the draft document based on new information received during the public comment period or to clarify or supplement information included in the draft document; b) present and address public and resource agency comments on the Tier 1 Draft EIS; and c) update project environmental commitments and recommendations for Tier 2 work.

FINAL EIS SUMMARY AND CONCLUSIONS

Key Resources and Preliminary Environmental Impacts

Sections 1.4.3 and 1.4.4 of this Final EIS summarize information from the draft document regarding key environmental resources in the Eastern Corridor, and expected ranges of impacts by feasible alternatives evaluated in Tier 1, including minor updates since publication of the Draft EIS.

Public and Agency Comments

Availability of the Tier 1 Draft EIS was published in the Federal Register on November 19, 2004 and a Public Hearing was held on December 9, 2004. Meeting attendees and other interested persons were provided opportunity to formally submit comments in writing (using a comment form) or orally via a court recorder at the hearing, or could submit their written comments by mail or email on or before January 10, 2005. Attendance at the December 9th public hearing was approximately 131 persons, with 31 hand-written comments and 14 verbal comments obtained. An additional 223 letters and email were sent by January 10, 2005, for a total of 268 public comments received on the Draft EIS. Public comments are compiled in summary form in Tables 3, 4 and 5 of this Final EIS.

In addition to the Public Hearing, the Eastern Corridor Tier 1 Draft EIS was distributed to state and federal agencies for opportunity to review. Comments were received from five agencies. Copies of agency comments are included in Appendix C and summarized in Table 6 of this Final EIS.

None of the comment period issues have precipitated substantive changes to the information presented in the Draft EIS. However, some issues required explanatory responses or, in some cases, additional investigation to clarify or supplement information that was included in the Tier 1 draft document. Key issues raised during review of the Tier 1 Draft EIS included questions regarding: a) river crossing alternatives, b) the scope of environmental studies, c) applicability of Section 7 of the Wild and Scenic Rivers Act, and d) Section 4(f)/6(f) coordination. Resolution of these key issues is presented in Section 2.5 of this Final EIS, and responses to public and agency comments received are provided in Tables 4, 5 and 6.

Updated Environmental Commitments

The preliminary environmental mitigation strategy and preliminary environmental commitments for the Eastern Corridor project were described in Chapter 8 of the Tier 1 Draft EIS. Updates based on new information received and comments obtained during the Draft EIS review period are described in Section 3 of this Final EIS.

Recommendations for the Tier 2 Work Program

Implementation Strategy:

The implementation strategy for the Eastern Corridor is structured as a comprehensive long-term development framework for public and private investment, where the various parts of the transportation program will be constructed in segments incrementally over time until all parts of the multi-modal plan are in place. This implementation framework is based on a “program-level” approach, where major new capacity improvements in highway and transit are coordinated with and benefited by a variety of local network improvements.

The goal of the Tier 1 work has been to identify feasible alternatives, across multiple modes, that meet the project purpose and need and that are to be carried forward into Tier 2 evaluation and further development. With the issuance of a Tier 1 Record of Decision (ROD), the Eastern Corridor will proceed with a series of separate Tier 2 environmental and design studies for each of the identified implementation segments ("by mode and project") with appropriate NEPA evaluations.

In this approach, as each Tier 2 environmental document is completed and approved within the coordinated multi-modal framework established in Tier 1, final design and construction may begin for that project segment.

Summary of Actions for Tier 2 Evaluation:

Actions targeted for implementation and recommended for detailed evaluation in Tier 2 based on the above strategy are described in Section 4.2 of this Final EIS and summarized below:

Implementation and Tier 2 Evaluation Framework

NEW HIGHWAY CAPACITY

Recommendation: The feasible alternatives developed in Tier 1 will be carried forward into Tier 2 evaluation for impact minimization and identification of a preferred alternative, according to the project implementation segments described below:

Segment I: Red Bank Road, I-71 to US 50	Consolidate and manage access points along existing Red Bank Road and Red Bank Expressway to establish a controlled access arterial roadway from existing I-71/Red Bank interchange to US 50; total length is about 2.5 miles. Feasible alternatives to be further developed in Tier 2 are described in Chapter 3 of the Draft EIS, and include two basic highway mainline alternatives and two options for improvements to the local access roadway network.
Segments II / III: relocated SR 32, US 50 east to Bells Lane, with a new US 50/Red Bank/SR 32 interchange and planning for shared Oasis rail transit, transit hubs, and bikeway	Consolidate and manage access points to establish relocated SR 32 as a controlled access arterial roadway west of I-275; includes a new interchange at US 50/Red Bank Road/SR 32 in Fairfax and planning for multi-modal improvements, consisting of a parallel Oasis rail transit corridor, a new bikeway corridor, and a multi-modal clear span crossing of Little Miami River, and associated multi-modal transit hubs (at US 50 and at Newtown Rd); total length for roadway is about 6 miles. Feasible alternatives to be further developed in Tier 2 are described in Chapter 3 of the Draft EIS, and include three interchange configurations options (for US 50/Red Bank Road/SR32) and several alternatives (and combinations of alternatives) through the Little Miami River floodplain and Newtown.
Segment IV: I-275/SR 32 interchange improvements	Includes upgrading the existing I-275/SR 32 and SR 32/Eastgate Blvd interchanges; improving capacity/access on SR 32 from Bells Lane to Gleneste-Withamsville Rd with improved intersections at these termini; improvements to Aicholtz Road, including widening east of I-275 and new connection to the west of I-275; removal of access at Old SR 74/SR 32 with creation of an over or underpass; and design/ROW considerations for future transit and collector-distributors; total length is about 3 miles.

Implementation and Tier 2 Evaluation Framework

Segment IV(a): SR 32, Gleneste-Withamsville Rd to Olive Branch-Stonelick Rd	Consolidate and manage access points to establish improved SR 32 as a limited access arterial roadway west of I-275 to the existing interchange at Olive Branch-Stonelick Road; includes elimination of access at SR 32/Gleneste-Withamsville road, replaced by the extension of and new interchange at SR 32/Bach-Buxton Rd; local road improvements will be conducted separately in support of this improvement; total length is about 1 mile. Concept level improvements for this area are described in Chapter 3 of the Draft EIS.
Segment IV(b): collector- distributor system and new I-275 interchange	Construct a new interchange at I-275/new Bach- Buxton Connector (this connector to be constructed separately as a local project), and establish a collector-distributor system along I-275 from the new interchange to the I-275/SR 32 interchange; includes consideration of local road improvements (to be conducted separately); total length is about 1 mile. Concept level improvements for this area are described in Chapter 3 of the Draft EIS.

NEW RAIL TRANSIT CAPACITY

Recommendation: The Oasis Line is recommended as the primary corridor and near-term action for rail transit in the Eastern Corridor to be carried forward into Tier 2 evaluation for impact minimization and identification of a preferred alternative, according to the project implementation segments described below. The Wasson Line is recommended to be part of the long-term project framework, with no immediate action in Tier 2 other than preservation of existing rail right-of-way.

Oasis Segment 1: Riverfront to Boathouse	Rail on new alignment or following existing trackage (2 options under consideration), from the existing Riverfront Transit Center to the Boathouse; includes 3 to 5 rail stations for connection to riverfront destinations; total length is about 1 mile.
Oasis Segment 2: Boathouse to US 50 in Fairfax	Consists of new rail transit on SORTA controlled ROW; uses existing rail corridor (double track); requires upgrade of existing structures; includes 4 rail stations for connection to traditional and redeveloping riverfront neighborhoods and Lunken Airport/Linwood economic opportunities; total length is about 7 miles; includes planning for parallel bikeway.
Oasis Segment 3: Shared ROW with relocated SR 32	Consists of rail transit on new alignment, paralleling relocated SR 32 and sharing a new multi-modal crossing of the Little Miami River; includes planning for parallel roadway (relocated SR 32), bikeway and two multi-modal transit hubs (at US 50 and at Newtown Rd); total length is about 4 miles.
Oasis Segment 4: N-S ROW from Segment 3 to Milford	Service on or along existing N-S trackage/ROW; mostly single track; includes rail station in Ancor area and multi-modal station in Milford; total length is about 5 miles.

EXPANDED BUS

Recommendation: Most of the expanded bus components are operational in nature (such as extending existing routes) and have no specific Tier 2 study implications or requirements beyond general coordination and integration in the overall Eastern Corridor implementation program; these expanded bus components will be developed in Tier 2 under appropriate environmental evaluation analyses conducted at the local level.

New or improved bus or multi-modal hubs, however, are constructed facilities and will require specific Tier 2 work. Included are new or expanded hubs, enhanced shelters or ancillary improvements at seven locations, including: Anderson, Eastgate, Madisonville, Milford, Oakley, Walnut Hills/Peebles Corner and Xavier/Evanston (description

Implementation and Tier 2 Evaluation Framework

of these hubs are presented in Chapter 3 of the Draft EIS).

TRANSPORTATION SYSTEM MANAGEMENT

Recommendation: Recommendation is for the TSM list described in the Draft EIS to be updated at the beginning of Tier 2 as the project financial strategy is finalized and priorities for TSM are refined. It is expected that most TSM actions will continue forward in Tier 2 development under appropriate environmental analyses administered at the local level. TSM actions that are not of independent utility and that have minor localized impacts will be included in the core Tier 2 analysis.

BIKEWAY

Recommendation: Bikeway actions will continue forward in Tier 2 development under appropriate environmental analyses administered at the local level.

1. PROJECT BACKGROUND AND SUMMARY OF THE DRAFT EIS

1. PROJECT BACKGROUND AND SUMMARY OF THE DRAFT EIS

1.1. PURPOSE OF THE TIER 1 FINAL ENVIRONMENTAL IMPACT STATEMENT

The Tier 1 Final Environmental Impact Statement (EIS) for the Eastern Corridor Multi-Modal Projects addresses updates to the Tier 1 Draft EIS since notice of availability was published in the Federal Register on November 19, 2004 and its circulation. Specifically, this Tier 1 Final EIS serves to: a) document revisions to the draft document based on new information received during the public comment period or to clarify information included in the draft document; b) present and address public and resource agency comments on the Tier 1 Draft EIS; and c) update project environmental commitments and recommendations for Tier 2 work.

Format of the Tier 1 Final EIS consists of the following:

- Section 1 includes description of the project and tiered approach, and summary of information presented in the Tier 1 Draft EIS. Also included in this section under "Changes Since Preparation of the Tier 1 Draft EIS" are updates to information included in the draft document since its circulation based on new information received or to respond to questions and comments by the public.

- Section 2 documents public involvement and agency coordination on the Tier 1 draft document, including description of the public hearing, summary and response to public and agency comments received, and discussion of key issues raised during the review period.

- Section 3 describes the preliminary mitigation strategy for the project and provides a listing of the preliminary environmental commitments for the project, with updated information since circulation of the Tier 1 Draft EIS.

- Section 4 summarizes conclusions and recommendations for the Tier 2 work program, updated since circulation of the draft document, and including preliminary breakdown of projects for Tier 2 study and implementation strategy.

In total, issues raised by the public or resource agencies during the Draft EIS comment period or new information obtained have not precipitated substantive changes to the information presented in the Draft EIS. However, some issues required explanatory responses or, in some cases, additional investigation to clarify or supplement information that was included in the Tier 1 draft document (these being summarized in Section 2.5 of this Final EIS).

1.0. PROJECT DESCRIPTION

The Eastern Corridor project is being conducted to implement workable strategies for improving long-term travel mobility between the City of Cincinnati and its eastern suburbs. The project is overseen by a partnership of state, county and city governments and transportation agencies, and is administratively led locally by the Hamilton County Transportation Improvement District (HCTID). The Federal Highway Administration serves as the lead agency in the NEPA process, with the Federal Transit Administration, U.S. Army Corps of Engineers and National Park Service serving as cooperating agencies. The Eastern Corridor core study area covers about 165 square miles and extends from the Cincinnati Central Business District and riverfront redevelopment area in

Hamilton County, east to the I-275 outerbelt corridor in Clermont County, near the communities of Milford to the north, Batavia to the east, and Amelia to the south (see Figure 1). Within the core study area, a 14 square detailed study area was used as the focal area for the development of feasible alternatives for major new capacity improvements (highway and rail) and the Tier 1 environmental field studies.

The 2000 Eastern Corridor Major Investment Study (MIS), described in Chapter 1.2 of the Draft EIS, recommended a comprehensive multi-modal strategy for addressing current and projected transportation problems in the area. The MIS process was a collaborative effort involving input from key federal, state and local stakeholders who evaluated a variety of alternatives and identified alternatives determined best able to meet regional transportation needs. The multi-modal components of the MIS Recommended Plan included: transportation system management (TSM) improvements, new and expanded bus transit service, new rail transit service and highway capacity improvements.

In addition, a 2002 Eastern Corridor Land Use Vision Plan (ECLUVP), described in Chapter 1.3 of the Draft EIS, evaluated economic development, greenspace preservation and quality-of-life issues identified from existing community plans and information obtained from six geographic focus area groups within the Eastern Corridor. The adopted ECLUVP consists of a future land use map, and identifies key land use issues considered high priority for the Eastern Corridor, and key local land use issues considered priority for each of the six focus areas.

The MIS Recommended Plan and the land use vision process identified the various transportation modes and local land use issues that provided the context for the current Eastern Corridor work program. Overall, the main objective of the current phase of work is to further develop and assess the MIS recommended multi-modal strategy and, in compliance with NEPA regulations, and in support of land use priorities identified during the land use vision process, identify a set of feasible alternatives for different multi-modal components that will be carried forward for further evaluation.

1.3. TIERED APPROACH

The Eastern Corridor work is being conducted in two parts, corresponding to a two-tiered NEPA process established in response to state and federal agency scoping input. Tier 1 work, which is the subject of this environmental document, consists of the preparation of a Tier 1 Environmental Impact Statement (EIS) and Record of Decision (ROD) which presents information on transportation need in the area, key environmental resources, the development and evaluation of feasible alternatives, a preliminary assessment of expected impacts, and the identification of a recommended transportation plan (set of feasible alternatives) to be carried through into more detailed study during Tier 2. The goal of Tier 1 work is not an either/or determination among modes or alternatives within a mode, but identification of how the various modal investments identified during the MIS process may be best implemented in consideration of engineering, environmental, financial, public input, land use and community development factors.

Tier 2 work, to be conducted after the completion of the Tier 1 EIS and ROD, will involve more detailed engineering and environmental analyses and final NEPA documentation on a project-by-project basis (each with independent utility or independent significance, all consistent with the multi-modal framework established in Tier 1) for the feasible alternatives identified in Tier 1. In general, Tier 2 NEPA documents will refer to the purpose and need and other background information presented in the Tier 1 EIS, but will incorporate more detailed alignment development,

environmental field assessment, impact evaluation, preferred alternative selection, and mitigation plan development on a project-by-project basis in order to complete the NEPA process.

The use of tiering is authorized under NEPA regulations issued by the Council on Environmental Quality (CEQ), 40 Code of Federal Regulations (CFR) Part 1500 and under regulations issued jointly by the Federal Highway Administration (FHWA) and the Federal Transit Authority (FTA), 23 CFR Part 771. Tiering is also addressed in guidance documents issued by both these agencies, including guidance issued in 1981, 1983 and 1988 by the CEQ, as well as tiering guidance outlined in a memorandum issued by FHWA dated June 18, 2001.

The CEQ refers to tiering in 40 CFR 1508.28 as "the coverage of general matters in broader environmental impact statements with subsequent narrower statements or environmental analyses incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared." In 40 CFR 1502.20, the CEQ encourages agencies "to tier their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review." FHWA guidance (FHWA memo dated June 18, 2001) refers to tiering as "an option available to organize analysis and decision-making in complex circumstances in a way that takes into account the different geographic scope and timing for different decisions", and "because tiering is an option available to address complex situations, we [FHWA] have deliberately stayed away from prescriptive guidelines on how to apply tiering, so that each tiered process can be custom designed to the specific situation."

The Eastern Corridor project is a long-term, multi-modal plan that addresses transportation problems affecting a number of communities in the eastern portion of the greater Cincinnati area. This project is determined to warrant a tiered NEPA approach due to the complexity involved in the coordination of multi-modal improvements, prioritization of projects, and the different construction timing expected for the needed transportation investments identified from the project MIS. The tiered process customized for the Eastern Corridor was developed with guidance and scoping input from FHWA, FTA and resource agencies.

Tier 1 Environmental Work Plans (Methods)

As part of the scoping process, coordination was conducted with environmental resource agencies early in project development to determine the appropriate sampling methodologies and level of effort to be conducted for key environmental features during Tier 1 of the Eastern Corridor project. This coordination resulted in the development, by discipline, of specific Tier 1 environmental work plans that outlined strategy of work, scope of field studies to be conducted in Tier 1, methods for the documentation of findings, and the level of resource agency review (these environmental work plans are included in Appendix A of the Draft EIS). Tier 1 studies were conducted within a 14 square mile detailed study area identified early in Tier 1 work as the focal area for feasible alternatives development (see Figure 1).

Results from the Eastern Corridor Tier 1 environmental studies are documented in the following reports: Ecological Resources Inventory Report (Balke American, February 2003), Cultural Resources Context Information in Support of the PE/EIS Part A Development and Identification of Feasible Alternatives (Gray and Pape, Inc., December 2002), Results of Hazardous Materials Environmental Study (Corridor Inventory and File Review of Priority Sites), Eastern Corridor PE/EIS (H.C. Nutting Company, December 2002) and Addendum to Part A Environmental Studies (Balke American, June 2003).

1.4. SUMMARY OF THE TIER 1 DRAFT ENVIRONMENTAL IMPACT STATEMENT AND UPDATES

1.4.1. Project Purpose and Need

Changes Since Preparation of the Tier 1 Draft EIS

The summary information presented below is from Chapter 2 of the Tier 1 Draft Environmental Impact Statement, with no changes made resulting from public comments or new information since its circulation.

Purpose and Need Summary

The purpose of the Eastern Corridor project is to implement a multi-modal transportation program consistent with the adopted long range plan for the region, addressing priority needs and supporting transportation goals and concept plans established during the Eastern Corridor Major Investment Study (April 2000) and subsequent metropolitan area planning actions. Overall, the proposed action will be developed and designed to: a) fit with identified future land use in the area, b) support and provide sustenance to the regional economy, and c) be consistent with regional environmental goals.

The need for the action stems from growing travel demand on an inadequate existing transportation network in the Eastern Corridor, including both highway and transit infrastructure. The Eastern Corridor is characterized by insufficient capacity, safety issues, limited transportation options, and inadequate linkage to the region's key transportation corridors for efficient movement of people, goods and services, as summarized below:

Travel Demand – Many key roads in the existing roadway network have current traffic volumes in excess of capacity, and projected traffic indicates that No Build average daily traffic volumes on interstates (including portions of I-71, I-275 and I-471) and most main roadways in the area (including portions of SR 32, Newtown Road, SR 125 (Beechmont Avenue), US 50 and SR 561) will increase 2% to 81% over current conditions by 2030, as presented in Table 2.1 of the Draft EIS.

Capacity and Congestion – Level of Service (LOS) analyses conducted for the Year 2020 indicate that many of the key local routes in the Eastern Corridor will be operating at a LOS below C under a No Build scenario, with many segments operating at a LOS of E or F, including portions of SR 32, SR 125 (Beechmont Avenue), Newtown Road, Red Bank Road, US 50, Clough Pike and I-275 (see Table 2.2 and Figure 2.6 of the Draft EIS). Since many local routes through the Eastern Corridor have limited capacity, most trips through the corridor are increasingly being carried by the two interstate highways in the area, including I-275 and I-471, resulting in these interstates reaching or exceeding capacity and experiencing congestion during peak hours. Congested conditions on the interstates in turn results in a trickle-down effect on local routes, resulting in stop-and-go or bumper-to-bumper conditions during peak travel periods. Key constraints in the area that contribute to this congestion problem include ineffective routing and connectivity for current travel patterns, existing development along key routes, and the limited existing river crossings in the area (resulting in bottlenecks).

Travel Times/Delays – Time spent in existing and future expected travel delays are predicted to increase by over 500% within the Eastern Corridor and 250% in the metropolitan planning region by the Year 2030, as summarized in Table 2.3 of the Draft EIS. This results in reduced productivity for individuals and businesses, increased time for delivery of goods and services, and increased operation and maintenance costs for automobiles, trucks and heavy equipment.

Safety Issues - Eighty-four percent of roadway segments evaluated in the Eastern Corridor for a three-year study period exceeded the statewide accident average, with over half the accidents occurring on US 50 and SR 32, and nearly 20% occurring on I-275. About one-third of all accidents occurred at intersections or interchanges (see Figures 2.8 and 2.9 and Table 2.5 through Table 2.6 of the Draft EIS). Many key routes in the area exhibit physical and geometric deficiencies, and, as projected traffic volumes increase and Level of Service conditions worsen, safety conditions are expected to decline.

Limited Transportation Options – The existing transportation infrastructure in the Eastern Corridor is predominantly highway based, having been established between the 1960's and 1980's, with no major capacity improvements since that time. Bus transit occurs in the vicinity, however there are many locations within the Eastern Corridor where bus service is not currently available. In addition, no rail transit occurs in the area, and bikeway corridors are limited in availability and connectivity, and cannot provide a functional transportation option for commuters.

System Linkage and Regional Connectivity – The eastern portion of the Cincinnati metropolitan area is an important pathway for movement of goods and services, with SR 32, SR 125, US 50, US 52, I-275 and I-471 being the primary land-based freight (truck) pathways. In addition, the Eastern Corridor area of Clermont County is currently the only Cincinnati suburb not directly connected by interstate highway to the employment and economic core of Cincinnati and Hamilton County. Subsequently, the commuter traffic west towards Cincinnati and the reverse commuter traffic east towards Clermont County, as well as the transport of goods and services between the Cincinnati/Hamilton County and Clermont County areas, are forced to use the substandard local roadway network or to use local road connections to limited interstate access points along I-275. Since alternative transportation options are not readily available in the area, the result is a breakdown in the existing local road and highway system linkage, regional connectivity and the effective movement of goods and services both locally and regionally.

1.4.2. Tier 1 Alternatives

Changes Since Preparation of the Tier 1 Draft EIS

Alternatives developed in Tier 1 are described in Chapter 3 of the Draft EIS, and summarized below, with no changes since circulation of the draft document.

Recommendations for alternatives to be carried forward into the Tier 2 work program are outlined in Section 4 of this Final EIS.

Description of Tier 1 Alternatives

Feasible alternatives were identified in Tier 1 to effectively execute the multi-modal components of the regional long range transportation plan for the Eastern Corridor established during the MIS phase of study, including: various transportation system management (TSM) actions (including new bike and pedestrian ways following existing transportation routes or on new alignment), improved bus transit (expanded bus routes, new community circulators, feeder routes to compliment rail transit, and new bus hubs), new rail transit extending from downtown Cincinnati to Milford, and new highway capacity from Red Bank Road at I-71 to SR 32/I-275 in the Eastgate area of Clermont County. Feasible alternatives developed in Tier 1 are not final alignment locations, but conservative corridors that will be further developed during Tier 2 of the project. Sufficient preliminary engineering work was conducted in Tier 1 to understand the general spatial requirements of the various alternatives, but alignment location, configuration and access details have not been established. The Tier 1 feasible alternatives were developed and conservatively configured (selected) to address the following: a) to be consistent with adopted long-range plans for the region and meet logical connectivity and functional need requirements identified in those plans, including general corridor locations and configurations established in the planning phase, b) to geographically encompass a reasonable and feasible range of possible detailed terminal treatments, such as transit station layouts, ramp geometrics, and access roads, c) to avoid and minimize impacts to key environmental features based on results from Tier 1 environmental field studies, d) to support land use vision goals identified during the Eastern Corridor land use vision process, and e) consideration of public and agency input. The Tier 1 alternatives provide feasible physical translation of the multi-modal concepts established in the planning phase.

Tier 2 work to be conducted for the Eastern Corridor will establish final footprint and segmental logical termini for all of the Tier 1 alternatives within the multi-modal plan being carried forward into the next phase of work. Preferred alternative selection and evaluation will also occur during Tier 2.

Feasible alternatives developed and evaluated in Tier 1 are shown on Figure 2 and summarized below from Chapter 3 of the Draft EIS. Recommendations regarding the next phase of evaluation for these alternatives are described in Section 4 of this Final EIS.

FEASIBLE ALTERNATIVES EVALUATED IN TIER 1

Transportation System Management (TSM):

- 55 TSM core projects were identified in Tier 1, consisting of a combination of operational strategies, existing roadway corridor improvements, as well as use of transportation demand management (TDM) strategies, and including: 15 intersection improvements, 34 roadway corridor improvements, 2 interchange improvements, 2 more frequent service bus routes, and 2 park-and-ride facilities. TSM core projects for the Eastern Corridor were selected based on anticipated improvement to the multi-modal transportation services within the Eastern Corridor, ability to meet key transportation needs such as safety and congestion, support of the Eastern Corridor land use vision plan, and other issues such as funding availability and project readiness.

Expanded Bus:

The expanded bus plan developed in Tier 1 contained three main components, including:

- primary (expanded bus) routes for serving identified primary and secondary linkages in the Eastern Corridor (Chapter 3, Table 3.5 of the Draft EIS),

- new community circulator and feeder routes to support rail transit (Chapter 3, Table 3.6 of the Draft EIS), and

- twelve hubs, consisting of six bus-only hubs and six bus/rail transit hubs(Chapter 3, Table 3.7 of the Draft EIS).

Rail Transit:

Two general rail transit corridors, each including minor route alternatives and alignment variations, were developed in Tier 1, including:

- The Oasis Line, extending from downtown Cincinnati to Milford (along a combination of the existing Oasis rail corridor, new alignment co-located with the highway corridor, and on or closely paralleling existing Norfolk-Southern rail right-of-way), and using Diesel Multiple Unit (DMU) technology; total length about 17.1 miles. The Oasis Line includes approximately ten rail stations, four of which are combined bus/rail transit hubs. Several alternative location options for portions of this rail line are under consideration in the downtown Cincinnati (riverfront) area, in the Lunken Airport vicinity, in the co-located right-of-way segment, and along the N-S right-of-way. This corridor and its locational alternatives is a stand-alone action that meets purpose and need independent of other major transit investments, and is recommended for specific evaluation in Tier 2.

- The Wasson Line, extending from the Xavier/Evanston vicinity to the Eastgate area in Clermont County (along a combination of the existing Norfolk-Southern Wasson rail corridor and new alignment co-located with the highway corridor), and using Electrically Powered Light Rail (LRT) technology consistent with other parts of the I-71 LRT corridor. As noted in Chapter 3.4.1 of the Draft EIS, the Wasson Line is scheduled as an extension of the planned I-71 Light Rail Transit (LRT) corridor, and is dependent upon implementation of the I-71 LRT for function and system linkage consistent with project purpose and need. A separate NEPA action will be required for the I-71 LRT project and, although a preliminary draft environmental impact statement has been prepared (but not issued), there currently is no plan to further develop the I-71 LRT due to funding and project development uncertainties.

New Highway Capacity:

Highway alternatives for the Eastern Corridor were developed for four geographic segments of the project study area (see Chapter 3.4.1 of the Draft EIS), as summarized below. Total new highway length for all segments combined is about 12.6 miles. In all cases, the general configurations and locations described do not infer final information; further adjustments and refinements will occur in Tier 2 to address impact minimization or other project development factors.

- Segment I (Red Bank Corridor, I-71 to US 50) - Roadway improvements in Segment I involve consolidation and management of access points along existing Red Bank Road and Red Bank Expressway in order to establish a controlled access arterial roadway of improved capacity and safety from I-71 to US 50. This segment has a total length of about 2.5 miles, and would expand or closely follow the existing roadway alignment. The feasible alternatives framework for Segment I consists of three main components: basic highway mainline, interchange options at US 50, and local access roadway network, as summarized below:

- Two basic highway mainline alternatives incorporating closely spaced location options, all proximate to or on existing roadway right-of-way (Alternatives A and A2),

- Three alternative configurations for a new Red Bank Road/US 50 interchange (Alternatives B1, B2 and B3), and

- Three side road/intersection improvement options for consolidating traffic access points to Red Bank Road and improving local access (Alternatives SR1, SR2 and SR3).

- Segment II (US 50/River Crossing to Newtown Road) - Roadway improvements in Segment II involve consolidation and management of access points for establishing relocated SR 32 as a controlled access arterial roadway west of I-275, with a clear span crossing (a joint roadway/rail transit crossing) of the Little Miami River; total length is about 2.6 miles. Alternatives recommended for further evaluation in Tier 2 include:

  - Four basic multi-lane mainline location alternatives for approaches to and crossing of (by clear-span) the Little Miami River (Alternatives C, D, E and F), and

  - Six basic multi-lane mainline alternatives for traversing the Little Miami River floodplain east of the river main channel and Clear Creek (Alternatives G, H, I, J, K and L).

  - Segment II alternatives include a parallel rail transit corridor, co-located in common right-of-way.

- Segment III (Newtown Road to Mt. Carmel-Tobasco Road) - Similar to Segment II, roadway improvements in Segment III involve consolidation and management of access points for establishing relocated SR 32 as a controlled access arterial roadway west of I-275; total length is about 3.4 miles. Alternatives recommended for further evaluation in Tier 2 include:

  - Four basic multi-lane mainline alternatives through Newtown and the developed Ancor area to the east of Newtown (Alternatives M, N, O and P), and

  - Four basic multi-lane mainline alternatives in the vicinity of the Mt. Carmel hillside (Alternatives Q, R, S and T).

  - Segment III alternatives may include development or preservation of a parallel rail transit corridor (impacts and costs reported in this document include the co-located transit corridor in this segment).

- Segment IV (Mt. Carmel-Tobasco Road to Olive Branch-Stonelick Road) - Roadway improvements in Segment IV involve consolidation and management of access points for establishing improved SR 32 as a limited access arterial roadway east of I-275; total length is about 4.1 miles. The range of alternatives recommended for further evaluation in Tier 2 include:

  - Alternative I(IV) - a configuration providing full directional flyover ramps connecting mainline I-275 and mainline SR 32, replacing the existing cloverleaf interchange,

  - Alternative P(IV) - a configuration consisting of a relocated I-275/SR 32 interchange, and

  - Alternative Q-3(IV) - a configuration using collector-distributors along both I-275 and SR 32.

  There are minor functional variations on these interchange configuration groups that may also be considered in Tier 2, as well as possible phasing of portions of the alternatives over time, but these variations are not outside of the general footprint established or range of impacts reported.

Bikeway:

The bikeway plan for the Eastern Corridor developed in Tier 1 included dedicated (planned) bikeways/trails and alternative bike links under consideration as described in the OKI Regional Bike Plan and incorporation of findings from the Eastern Corridor land use vision plan. Key bikeway connections include the following:

- Planned bikeway along US 50/Wooster Pike (following existing roadway and rail) and in Otto Armleder Memorial Park connecting an existing trail in Milford to existing bike trails in the Lunken Airport vicinity.
- Planned bikeway between Columbia Avenue and Eastern Avenue (following existing roadway and rail) connecting downtown Cincinnati to existing trails in the Lunken Airport vicinity.
- Planned bikeways along portions of Round Bottom Road, Newtown Road, Wasson Road, Murrey Avenue and Batavia Road (following existing roadways and/or rail) connecting area parks and greenspaces, and ultimately linking to existing trails in Milford and the Lunken Airport vicinity.
- Planned bikeway along Kellogg Road extending south from existing trails in the Lunken Airport vicinity (Ohio River Bike Trails).

1.4.3. Affected Environment

Changes Since Preparation of the Tier 1 Draft EIS

The information presented below is summarized from Chapter 4 of the Draft EIS. *Minor updates regarding threatened and endangered species in the area obtained during agency and public review of the Tier 1 Draft EIS are depicted in italics in Table 1*; otherwise there are no changes to the information presented in Chapter 4 of the Draft EIS since its circulation. Section 2.5.1 of the Final EIS presents, based on response to agency comments on the Draft EIS, an updated planning level comparison of impacts of two river crossing corridor options that were evaluated in the Major Investment Study, incorporating information from the MIS/planning phase and augmented, where available, with information from the Tier 1 work. The comparative matrix presented in Section 2.5.1 was not included in the Draft EIS.

Environmental Setting

The Eastern Corridor study area is located in the jurisdiction of two counties (Hamilton and Clermont), one metropolitan planning organization (OKI), one transit authority (SORTA/Metro) and one state transportation agency (ODOT). In addition, several cities, villages and townships are located within or immediately adjacent to the study area boundaries, including: the City of Cincinnati, Fairfax, Indian Hill, Mariemont, Newtown, Terrace Park, Norwood, Anderson Township and Columbia Township in Hamilton County, and Amelia, Batavia, Milford, Batavia Township, Miami Township, Pierce Township, Stonelick Township and Union Township in Clermont County.

Population in the 165-square mile Eastern Corridor study area was about 221,000 persons in 1995, a majority of which resided in Hamilton County. Corridor population is expected to increase by about 7% to approximately 236,000 persons by the year 2030.

Major employment centers in the Eastern Corridor include: commercialized areas along Beechmont Avenue in the west portion of study area and in the vicinity of Eastgate Mall at the east end of study area, industrial areas in Newtown at the center of study area, and the developing commercial and office park areas on SR 32 east of I-275, in the Batavia area, and in parts of Cincinnati, Fairfax and Milford. Approximately 103,000 people were employed in the Eastern Corridor area in 1995, and that total is expected to grow by about 19% to 122,000 by 2030.

The Eastern Corridor contains a mix of urban and suburban development, including residential, commercial and industrial areas, and scattered natural environmental features. Variable topography, high quality streams, groundwater resources, and developed communities all contribute to the aesthetic and environmentally important context of this part of the Cincinnati metropolitan area.

Summary of Environmental Resources

Environmental resources occurring in the Eastern Corridor study area, summarized from Chapter 4 of the Draft EIS, are presented in Table 1. Important environmental considerations for the area include: the Little Miami River and other surface streams, wetlands, floodplains, aquifer resources, plant and wildlife resources, threatened and endangered species habitat, cultural historic and archaeological resources, air quality and noise.

Table 1. Summary of Environmental Resources in the Eastern Corridor

Feature	Description[1]
Natural Environment:	
Physiography, Geology and Soils	The project is located in the Eastern Corn Belt Plains and Interior Plateau ecoregions, and within the Little Miami River and Southwest Ohio Tributaries Drainage Basins. Bedrock geology is Ordovician limestone and shale overlain by glacial drift and alluvium along floodplains. Soils are mostly derived from glacial materials, and many original soils are disturbed due to development.
Floodplains	FEMA 100-year floodplains occur along the Little Miami River, East Fork, Duck Creek, McCullough Run, Dry Run, and the Ohio River.
Groundwater and Aquifers	The eastern portion of the Eastern Corridor occurs within the boundaries of the Buried Valley Aquifer System, designated by USEPA as a sole source aquifer. One OEPA registered Public Water Supply occurs within the study area, and no designated Wellhead Protection Areas occur in the study area boundaries.
Little Miami River and Other Surface Streams	Twenty-two USGS streams occur in the study area, including the Little Miami River, East Fork, and 20 tributaries. The Little Miami River is designated as a component of the Ohio Scenic Rivers Program and a state-administered component of the National Wild and Scenic Rivers System with recreational classification in the study area. The Little Miami River and East Fork are also designated as Exceptional Warmwater Habitat by OEPA. Other streams in the area are designated by OEPA as Warmwater Habitat, Limited Resource Waters or have no OEPA designation, and most exhibit channel and/or bank disturbances along portions of their length due to adjacent development.
Wetlands	Fifty-six wetlands were identified in the study area, consisting of 22 limited quality features, 31 moderate quality features and 3 high quality wetlands, and ranging in size from less than 0.1 acre to 10 acres. About half of the wetlands occur along the Little Miami River and associated floodplain, including all three of the high quality features.
Terrestrial Habitats and Wildlife	Most of the study area consists of residential, commercial and industrial development, with some agricultural land along the Little Miami River floodplain, riparian woodlands and wetlands along the Little Miami and East Fork riparian corridors, and scattered upland

Table 1. Summary of Environmental Resources in the Eastern Corridor

Feature	Description[1]
	woods.
Threatened and Endangered Species	The study area is within the range of the federal endangered Indiana bat and running buffalo clover, and the federal threatened bald eagle. No ODNR records of these species are from within the study area, although potential habitat, mostly along the Little Miami River, was noted during field surveys*, and there have been local reports of bald eagle foraging along the Little Miami River. In addition, 13 state listed species are reported from within the study area, including 2 plants, 7 mussels, 3 fish, and 1 bird. Of these, one listed plant (carolina willow) was encountered in the field,* and potential habitat for several species occurs within the study area boundaries.
Farmland	Agricultural lands comprise roughly 11% of the detailed study area. Several large sod farms occur west of Newtown along the Little Miami River floodplain, and other smaller agricultural areas occur along Round Bottom Road, SR 32 and east of I-275 in the Eastgate area.
Parks and Greenspaces	Thirty public-owned parks and seven public-owned greenspaces occur in the study area (entirely or in part), including state, county, township and city/village owned parks, athletic fields, golf courses, nature preserves and undeveloped or minimally developed greenspaces. In addition, 15 privately-owned recreational greenspaces occur in the study area (entirely or in part), including private country clubs, golf courses, gun clubs/practice ranges, private ballfields, horse riding/boarding facilities, and a nature preserve (Horseshoe Bend).
Hazardous Waste	Twelve properties from database review were determined to be high priority hazmat concern sites, including several large quantity generator sites, several active or inactive solid waste landfills, and one spill area.
Air Quality and Noise	The project occurs in the Cincinnati Air Quality Control Region under OKI jurisdiction, and is in OKI's FY 2004-2007 Transportation Improvement Plan (TIP). The TIP is consistent with the currently adopted regional long-range transportation plan (2030 Regional Transportation Plan), which is in conformity regarding air quality. Screening level analyses were conducted to determine estimated number and location of potential noise and vibration receptors (buildings) occurring in the study area, as an indicator of noise sensitivity for use in later noise impact studies.
Visual Resources	Visually sensitive resources were identified within each of the geographic areas of the Eastern Corridor, and include various parks and greenspaces, the Little Miami River floodplain area, and East Fork.
Social Environment:	
Land Use and Development	Predominant existing land uses (within the 14 square mile Eastern Corridor detailed study area) consist of residential (19%), commercial (15%), transportation right-of-way (13%) and industrial (11%). Agricultural land and open space comprise 11% and 9% of existing land use, and vacant land comprises about 13%.
Demographics	Population in the study area was about 221,000 persons in 1995, a majority of which lived in Hamilton County. Population is expected to increase by about 7% to approximately 236,000 persons by 2030. Descriptions of communities and neighborhoods in the Eastern Corridor and associated demographic conditions and trends are presented in detail in the Eastern Corridor Economic Analysis and in the Eastern Corridor Land Use Vision Plan, and summarized in Chapter 4 of the Draft EIS.
Employment and Economics	Employment in the 165 square mile study area was about 103,000 persons employed in 1995, and is expected to increase to about 122,000 employed in the area by 2030 (a 19% increase).
Community Services	The study area encompasses portions of six school districts, and is served by eleven police districts and ten fire divisions

Table 1. Summary of Environmental Resources in the Eastern Corridor

Feature	Description[1]
Environmental Justice	Environmental justice target groups in the study area include: minority, low-income, elderly, persons with disabilities, and zero-car households. Key environmental justice populations/communities in the area include portions of: downtown Cincinnati, Madisonville, Evanston/Norwood, Camp Dennison, East End, Oakley, Milford, Fairfax, Anderson Township, Mariemont, and Batavia.
Cultural Resources	Nineteen National Register Individual Properties (including one historic bridge), and five National Register Historic Districts occur in the study area. Of these, eight - including six historic architecture resources and two archaeological districts - are entirely or partly within the feasible alternatives under consideration.

[1] italics depict updated information since circulation of the Draft EIS

1.4.4. Environmental Consequences

Changes Since Preparation of the Tier 1 Draft EIS

The information presented below is summarized from Chapter 5 of the Draft Environmental Impact Statement. While there have been no substantial changes to the impact scenarios described in the Draft EIS since its circulation, minor updates are included in the discussion below pertaining to recent agency correspondence, new information received, and/or to clarify information based on input obtained during agency and public review of the Tier 1 Draft EIS. *Minor updates since circulation of the Draft EIS are depicted in italics.*

1.4.4.a. Preliminary Ranges of Impacts

Tier 1 feasible alternatives are not final alignment locations, but conservative corridors that will be further developed during Tier 2. Consequently, the preliminary impact assessment presented in the Tier 1 environmental document is based on conservative estimates of corridor widths for the purpose of presenting an overview of the range of likely impacts expected by the different alternatives being considered for the Eastern Corridor. Actual impacts will be different (may be higher or, more likely, lower) once alignment locations and configurations are more specifically developed during Tier 2.

Table 2 summarizes information from the Draft EIS regarding expected ranges of impacts for highway alternatives and for the Oasis rail transit line. Wasson rail transit line impacts are reported in the Draft EIS (Table 5.4), but not summarized here, since recommended action for the Wasson Line is corridor preservation only, and no direct impacts are expected as part of the Tier 2 action. Also reported in the draft document, but not summarized here due to minimal expected disturbances, are preliminary qualitative impacts for TSM core projects, bus and rail transit hubs, and bikeways, which are presented in Tables 5.2, 5.3, 5.5, and 5.9 of the Draft EIS.

The information presented in the table below does not represent additional or different impacts from those described by mode and by geographic area in Chapters 5.1 and 5.2 of the Draft EIS. Rather, Table 2 presents the estimated ranges of impacts for the Eastern Corridor as a whole, as previously reported in Draft EIS Chapters 5.1 and 5.2, and recaptured here in total for summary and clarity purposes.

Table 2. Summary of Preliminary Ranges of Impacts to Key Environmental Resources by NEW HIGHWAY and RAIL TRANSIT CAPACITY in the Eastern Corridor

Impact Category	Range of Impacts	
	New Highway Capacity (alternatives for Red Bank Rd, I-71 to US 50, and for relocated SR 32, US 50 to I-275/SR 32 in Eastgate, incl. parallel Oasis rail transit along relocated SR 32 from US 50 to east of Newtown)	**New Rail Transit Capacity** (Oasis Line - CBD to Milford, segments independent of relocated SR 32 only)
Ecological Features and Haz. Materials:		
USGS Streams (#)	12 to 16	3
Estimated Stream Length:		
crossing (lf)	3,560 to 13,125	350
parallel (lf)	2,744 to 8,520	780
Little Miami river mainstem	No direct impacts anticipated (clear span)	None
Floodplain (acres)	180 to 339	40 to 59
Sole Source Aquifer (acres)	315 to 474	101
Public Water Supplies	0	1
Wetlands (acres)	2.4 to 12.2	0.1
Quality Woodlands (acres)	3 to 32	1.3
Federal/State Listed Species (#)	0 to 1	0
Parks and Greenspace (# sites; acres)	7 to 17 sites; 44 to 120 acres	7 to 9 sites ; 11 to 14 acres
Hazardous Material Concern Sites (#)	3 to 9	6
Land Use and Farmland:		
Residential Use (acres)	184 to 389	25
Commercial Use (acres)	129 to 189	11 to 15
Industrial Use (acres)	74 to 137	33 to 36
Agricultural Use (acres)	55 to 159	2.4
Cultural Resources:		
National Register Property (#)	0 to 1	3
National Register District (#)	1 to 3 (Hahn, Perin, Mariemont)	0
Other Cultural Resources (#)	9 to 28	20
Socioeconomic Factors:		
Potential Residential Displacement (#)	95 to 479 single family 3 to 21 multi-family	21 single family 0 multi-family
Potential Com./Ind. Displacement (#)	78 to 142	2
Potential Institutional Displacement (#)	3 to 11	1

Table 2. Summary of Preliminary Ranges of Impacts to Key Environmental Resources by NEW HIGHWAY and RAIL TRANSIT CAPACITY in the Eastern Corridor

Impact Category	Range of Impacts	
	New Highway Capacity (alternatives for Red Bank Rd, I-71 to US 50, and for relocated SR 32, US 50 to I-275/SR 32 in Eastgate, incl. parallel Oasis rail transit along relocated SR 32 from US 50 to east of Newtown)	**New Rail Transit Capacity** (Oasis Line - CBD to Milford, segments independent of relocated SR 32 only)
Air Quality, Noise/Vibration and Visual Resources:		
Air Quality	Regional conformity	Regional conformity
Highway Noise – # of Potentially Impacted Receptors		
Category B:	702 to 1,025	n/a
Category C:	222 to 247	n/a
Rail Noise – # of Potentially Impacted Receptors		
Category 1:	7 to 18	14 to 16
Category 2:	98 to 219	775-779
Category 3:	9 to 23	48 to 51
Vibration – # of Potentially Impacted Receptors		
Category 1:	0 to 1	14
Category 2:	20 to 109	309-310
Category 3:	0 to 4	6 to 8
Visually Sensitive Resources	Several public parks and greenspaces; NR districts; LMR; Dry Run bottom area	Parks – riverfront and Lunken areas; LMR; East Fork

1.4.4.b. Secondary and Cumulative Impacts

Preliminary evaluation of expected secondary and cumulative impacts by the project are described in Chapter 5.6 of the Draft EIS, and summary information is presented below. *Minor updates based on new information and agency and public input on the Draft EIS are presented in italics.*

Secondary Impacts

Factors in the area that would affect secondary project impacts are described in Chapter 5.6.2 of the Draft EIS, including existing and proposed highway access, and current and expected future land use and development. A unique aspect of the project has been the development and incorporation of the Eastern Corridor Land Use Vision Plan into the transportation planning process. This land use work involved a corridor-wide planning approach for managing growth in the Eastern Corridor over multiple jurisdictions, and was based on consideration of environmental resources and demographic and economic trends and forecasts. The Eastern Corridor MIS recommended that the transportation investments for the Eastern Corridor be developed to support, to the extent practicable, a desired land use scenario. As a result, land use priorities were identified first during the land use vision process, and subsequently integrated into Eastern Corridor transportation planning to identify appropriate fit of proposed transportation solutions with desired land use.

Discussion of how the Eastern Corridor multi-modal plan is expected to fit with desired land use and minimize impacts associated with secondary development is presented in Chapter 5.2 of the Draft EIS. Summary-level conclusions on secondary impacts in consideration of the template established by the adopted Land Use Vision Plan for the corridor, recognizing land capability, economic market conditions and the multi-modal framework of transportation improvements outlined in the Eastern Corridor MIS and the region's adopted Long Rang Transportation Plan, include the following:

- Some amount of residential, commercial and industrial development is expected to be associated with the Eastern Corridor multi-modal improvements.

- Most of this development is expected to be infill by nature, consisting of redevelopment of existing built-up areas, including brownfields, rather than disturbance of woodlands, greenspace, parkland or other natural areas, thereby minimizing impacts on existing natural features and further habitat fragmentation.

- Greenspace land use is planned to increase in the Eastern Corridor over time.

- Proposed transportation improvements have been developed to support local land use priorities for the area, as identified during the Eastern Corridor land use vision work. For example, controlled access proposed for relocated SR 32 across the Little Miami River floodplain is expected to deter secondary development in this environmentally sensitive area and supports local land use goals for maintaining existing agricultural/greenspace uses through this area.

- Proposed transportation improvements in the Eastern Corridor will primarily occur within existing transportation corridors and, at many locations, multi-modal investments will utilize a single corridor and the same access points (for example, parallel roadway and rail transit facilities within a single corridor, and multi-modal hubs for accessing different types of transportation, like bus, rail, car or bike). Overall, this strategy: 1) maximizes right-of-way efficiency, 2) minimizes potential secondary development at access locations, and 3) minimizes creation of new impervious surface and the associated adverse indirect environmental impacts, such as surface water quality and groundwater quality/quantity.

- Bus and rail transit improvements and new bikeway included in the Eastern Corridor multi-modal plan offer more mode choices and provide opportunity for possible creation of pedestrian-friendly neighborhoods - such as those centered around transit hub locations, and mixed-use development. This in the long-term may reduce the overall vehicle miles traveled, within individual neighborhoods and/or the Eastern Corridor as a whole, and minimize associated adverse indirect environmental impacts.

Based on the above, secondary development associated with proposed transportation improvements is not expected to occur as inadvertent, uncontrolled sprawl, but as carefully planned, desirable development, primarily infill by nature, and consistent with local and regional planning and supported by the transportation network.

Cumulative Impacts

The geographical area for the cumulative impact evaluation conducted for the project, as described in the Tier 1 draft document, consisted of the 165 square mile core study area, and temporal limits of the evaluation extend from the early 1800's when early transportation corridors were first developed in the area, to the Year 2030, which is the design and planning horizon for the project.

Specific discussion of past, present and reasonably foreseeable future actions in the project area relevant to the cumulative impact analysis are presented in Chapter 5.6.3 of the Draft EIS. Overall, existing environmental conditions and land use patterns in the area have been, and are expected to continue to be shaped by: agricultural activities; transportation development (rail and roadway); industrial, commercial and residential development; and greenspace preservation.

Resource-Specific Cumulative Impacts

Expected resource-specific cumulative impacts are summarized below from Chapter 5.6 of the Draft EIS:

- Little Miami River – The proposed multi-modal transportation improvements in the Eastern Corridor will result in a new, multi-modal roadway/rail transit crossing of the Little Miami River. The current proposal is for a clear span crossing of the river channel and immediate riparian banks, with no in-stream piers. No direct channel impacts are anticipated at this time, and use of a single crossing footprint for both roadway and rail maximizes right-of-way efficiency. In addition, during Tier 2 of the Eastern Corridor project, further project development will include evaluation of reasonable measures to avoid/minimize impacts to the 100-year flood event, in coordination with ODNR, NPS and/or other appropriate agencies.

  Past actions that have affected the Little Miami River in the vicinity of the proposed crossing include riparian clearing for agricultural activities on the east bank and land fill development on the west bank, a high-tension electrical transmission line aerial crossing, a sewer line easement with a combined sewer overflow outfall along the west bank, and a railroad bridge crossing. Preservation actions in this area include establishment of the privately-owned Horseshoe Bend Nature Preserve, located primarily along the east bank/wooded riparian area.

  The Little Miami River elsewhere in the Eastern Corridor exhibits similar disturbances from past actions, including bridge crossings (four existing roadway bridges and one rail bridge) and riparian and bottomland clearing for agricultural activities, transportation corridors, and the construction of Lunken Airport and associated commercial areas. Construction of the Lunken Airport (circa 1922) also resulted in rechannelization/relocation of a Little Miami River bend. Past disturbances, however, have been coupled with preservation efforts along the Little Miami River by both state (ODNR) and local jurisdictions, and non-profit groups; these efforts have included park and bike trail development, and, as in the case of the Horseshoe Bend, development of a privately-owned nature preserve.

  Secondary impacts to the Little Miami River as a result of the project are not expected to be substantial. Controlled access on relocated SR 32 through the Little Miami River corridor, with no new access points between US 50 and Newtown Road, is expected to deter new development in this area, and future land use, identified during the land use vision process, consists of the continuation of existing agricultural and expansion of greenspace uses in this area. *The Green Infrastructure Concept Master Plan recently developed for the Little Miami River plains area of the Eastern Corridor (see Section 3.1 of this Final EIS) establishes context for preservation of agriculture land and expansion of greenspace in this area.* Also, land use vision work conducted for the project indicates that future development in the Eastern Corridor is expected to be predominantly infill, minimizing new impervious surface areas and associated indirect water quality impacts from surface runoff that may occur within the Little Miami River drainage. Indirect water quality impacts will also be minimized, by this project and other development activities in the area, by use of specific Best Management Practices outlined in recently developed, or currently under development, state and local Storm Water Management Plans for compliance with NPDES Phase I and Phase II permit requirements for storm water discharge per the Clean Water Act. Secondary impacts to the Little Miami River will also

be offset to some degree by mitigation measures that will be further developed in Tier 2 during the 404/401 permit process, and local greenspace infrastructure planning being developed for the area.

The Little Miami River is a component of the state scenic rivers program and state-administered component of the national wild and scenic rivers system, with recreational classification in the project area, indicating that it exhibits natural values and public outdoor recreation potential that warrant preservation in a free-flowing condition. Based on consideration of the information presented in the Tier 1 Draft EIS regarding past, present and future actions in the area, as well as other background, regulatory and impact information on the Little Miami River described in the Tier 1 Draft EIS, expected cumulative effects on free-flow, water quality and values for which this feature was determined eligible for inclusion the state and national system, are summarized below.

- Free-flowing nature: The proposed project crossing will involve no in-stream piers or abutments, and *further project development conducted in Tier 2 will include evaluation of reasonable measures to avoid/minimize impacts to the 100-year flood event, in coordination with ODNR, NPS and/or other appropriate agencies. Geological studies will be conducted in Tier 2 following ODOT's Specifications for Subsurface Investigations and ODOT's Geotechnical Engineering Design Checklists and other appropriate investigations, as necessary, to identify underlying conditions in the Little Miami River valley to be used in bridge location and design. Information from these investigations will be used to develop appropriate measures for accounting for channel activity and potential impacts. Finally, all required local coordination, permit application and minimization/mitigation pertaining to floodplains will be conducted in Tier 2.*

- Water quality: Water quality is not expected to be substantially affected in the Little Miami River, and water quality may possibly be enhanced in the future since: 1) the proposed project will include required compensatory mitigation measures per regulatory statutes, and development of Best Management Practices to minimize construction and post-construction stormwater runoff, *including 401 water quality assessment and MS4 stormwater analysis conducted in Tier 2,* 2) future development in the Eastern Corridor is expected to be predominantly infill, thereby minimizing new impervious surfaces, and will require adherence to specific state and/or local Best Management Practices per current NPDES stormwater permit requirements, and 3) future expansion of greenspace in the Eastern Corridor in support of the Eastern Corridor Land Use Vision Plan a*nd the Eastern Corridor Green Infrastructure Concept Master Plan (see Section 3 of this Final EIS)*, including areas along the river corridor at the project crossing location, will increase vegetated buffers within the Little Miami drainage area.

- Scenic/aesthetic: A new structure over the Little Miami River at a location where a bridge does not currently exist may result in a visual impact depending on final configuration and location of crossing and proximity to observers. *An appropriate context sensitive design solution at the proposed river crossing will be developed in Tier 2 based on consideration of environmental, community and engineering issues, threshold criteria for protection of scenic value provided by NPS through coordination conducted for this project, and input by the public and other resource agencies.* In the long-term, the scenic value of the river in the project area may be enhanced in that adjacent undesirable land uses in the area, such as the Hafner land fill along the west bank, and/or other riparian disturbances may be replaced through measures developed as a result of project mitigation and/or by other local planning efforts in support of the Eastern Corridor land use vision goals a*nd the Eastern Corridor Green Infrastructure Concept Master Plan (see Section 3 of this Final EIS)* - such as riparian restoration, land acquisition or conservation easements.

- Recreational: Canoe navigability and fishing opportunity in the Little Miami River are not expected to be adversely affected in that no in-stream piers will be constructed, and no existing access points to the river are affected by the project; *in addition, navigational markings or other appropriate measures will be placed along the river during construction to alert canoeists and*

other users that construction activities are occurring in the area. Overall, the multi-modal transportation plan proposed for the Eastern Corridor is expected to enhance recreational opportunity in the area, including the Little Miami River corridor, by providing a variety of transportation options that are planned in conjunction with each other, and that, by multi-modal hubs and opportunity for pedestrian-friendly development, provide better access to and linkage between existing and future recreational/greenspace areas.

- Geologic: No substantial impacts to any of the existing Little Miami River meanders *(see free-flow for discussion of active channels)*, in-stream substrate, river banks or significant geological features along the river corridor are expected by the project. Future development in the Eastern Corridor, which is anticipated to be primarily infill in nature as described previously, is expected to result in minimization of encroachment on such natural features, and measures developed as a result of project mitigation and/or by other local greenspace infrastructure planning in support of the Eastern Corridor land use vision goals a*nd the Eastern Corridor Green Infrastructure Concept Master Plan (see Section 3 of this Final EIS)* will also provide opportunity for such features to be preserved.

- Fish and Wildlife: Existing aquatic communities associated with the Little Miami River are described in Chapter 4.1.4 of the Draft EIS. Overall, despite the extensive development that has occurred within the drainage area over the years, the Little Miami is known to support a variety of aquatic biota, including, within the Eastern Corridor area, 13 state-listed species, including three fishes, seven mussels, two plants and one bird. In addition, the Little Miami River riparian corridor is know to provide foraging and nesting habitat for a variety of mammals, herpetofauna, *and is included in the Audubon Society's Important Bird Habitat program*. Overall, no substantial cumulative impacts to fish and wildlife populations associated with the Little Miami River are expected in that, as described above: free-flow will not be impeded, water quality is not expected to be substantially impacted, future infill development is not expected to substantially encroach on remaining natural areas, and future land use in the Eastern Corridor is expected to include more greenspace, providing more habitat.

- Historic: The Little Miami River corridor is characterized by a cultural history and archaeological sensitivity, as described in Chapter 4.3.3 of the Draft EIS. Two National Register Archaeological Districts, the Hahn District and the Perin District, occur along the broad Little Miami floodplain within the Eastern Corridor. Past disturbances and excavations, and current agricultural and recreational uses have impacted these areas to some degree, and their historic value will be further evaluated during Tier 2. The project will result in direct encroachment on one or both of these sites, and all appropriate coordination and mitigation for NEPA compliance will be conducted during Tier 2. Future impacts to these resources, however, are not expected to be substantial in that controlled access along relocated SR 32 through this area is expected to deter secondary development and support continued existing agricultural/greenspace uses through this area (no new encroachment on these archaeological areas other than the project). Project mitigation for NEPA compliance and/or other local planning efforts in support of the Eastern Corridor land use vision goals a*nd the Eastern Corridor Green Infrastructure Concept Master Plan (see Section 3 of this Final EIS)*, which may include a historic preservation component, may also provide opportunity for preservation of these archaeological resources.

- Other Surface Streams – Direct stream impacts will be evaluated in detail during Tier 2 when specific alignment details for proposed Eastern Corridor transportation improvements are developed. Based on Tier 1 evaluation, the proposed multi-modal transportation plan for the Eastern Corridor as a whole is expected to result in an estimated USGS stream impact range of 7,430 to 22,775 linear feet (Note: headwater stream impacts were not evaluated in Tier 1, but will be further assessed on a project-by-project basis in Tier 2 when more specific alignments are developed). Based on Tier 1 studies, most features to be impacted by the project are modified or disturbed due to development activities that have occurred over the years (such as commercial and industrial development,

roadway and rail development, urban and suburban development, and the placement of utilities), although the amount of channel disturbed from past actions is undetermined.

Future development activities in the Eastern Corridor will likely result in additional stream impacts, however, further stream encroachment is not expected to be substantial since, based on desired land use identified from the land use vision process, most development is expected to occur in previously disturbed sites (infill). In addition, water quality is not expected to be substantially impacted over current conditions in that: 1) the proposed project will include required compensatory mitigation measures per regulatory statutes, and development of Best Management Practices to minimize construction and post-construction stormwater runoff, *including 401 water quality assessment and MS4 stormwater analysis conducted in Tier 2*, 2) future development in the Eastern Corridor will also require adherence to specific state and/or local Best Management Practices per current NPDES stormwater permit requirements, and 3) future expansion of greenspace in the Eastern Corridor, per the Eastern Corridor Land Use Vision Plan a*nd the Eastern Corridor Green Infrastructure Concept Master Plan (see Section 3 of this Final EIS)*, provides opportunity for the creation of vegetated buffers and riparian corridor preservation within the drainage areas of these streams.

Therefore, although past actions in the Eastern Corridor have resulted a loss of natural stream channel and general lowering of water quality since early settlement days, the proposed project and future actions are not expected to substantially contribute to additional loss, and may provide opportunity for improved conditions in the area over time - a possible cumulative benefit.

- Wetlands - Direct wetland impacts will be evaluated in detail during Tier 2 when specific alignments for proposed Eastern Corridor transportation improvements are developed. Based on Tier 1 evaluation, the proposed multi-modal transportation plan for the Eastern Corridor as a whole is expected to result in an estimated 2 to 12 acres of wetland impact, consisting of primarily low and moderate quality features.

  Early agricultural development in the area resulted in initial clearing and draining of land, resulting in an undetermined loss of wetland habitat over time, and loss of beneficial wetland functions such as flood and erosion control, runoff moderation, groundwater recharge and wildlife habitat. Existing wetlands in the Eastern Corridor are mostly small, widely scattered features associated with disturbances, such as gravel pit and drainage swale wetlands; the few remaining natural features are associated with the Little Miami River and Ohio River floodplains, and flat, poorly drained woodlands in Clermont County.

  Future development in the Eastern Corridor may result in additional wetland encroachment, however, impacts are not expected to be substantial in that most features are widely scattered and, therefore, easier to avoid during the planning stages of the project. Project mitigation and/or other local planning efforts in support of the Eastern Corridor land use vision goals a*nd the Eastern Corridor Green Infrastructure Concept Master Plan (see Section 3 of this Final EIS*) may also provide opportunity for creation, enhancement or preservation of wetlands. Therefore, although past actions in the Eastern Corridor have resulted a loss of natural wetlands and associated functions since early settlement days, the proposed project and future actions are not expected to substantially contribute to additional loss, and may provide opportunity for an increase in the amount of wetland acreage in the area over time - a possible cumulative benefit.

- Floodplains – Floodplain impact will be evaluated in detail during Tier 2 when specific alignments for proposed Eastern Corridor transportation improvements are developed. Based on Tier 1 evaluation, the proposed multi-modal transportation plan for the Eastern Corridor as a whole is expected to result in an estimated 220 to 400 acres of floodplain encroachment, primarily along the Little Miami River and portions of East Fork, Duck Creek, McCullough Run, Dry Run and the Ohio River. For Tier 2 projects involving floodplain encroachment, coordination with the appropriate local floodplain

coordinator will be conducted during detailed design to assure that proposed structures meet local floodplain requirements for design and minimization/mitigation.

Past actions affecting floodplains in the Eastern Corridor include agricultural activities, residential and commercial development, and transportation development. Past flood control efforts have included construction of flood walls along the Ohio River and Little Miami River, and rechannelization of a potion of the Little Miami in the Lunken Airport vicinity. Current land use along floodplains is predominantly parkland, agricultural, commercial and residential.

At this time, no future actions are foreseeable that would result in notable floodplain impacts. Controlled access along relocated SR 32, where the project crosses the broadest portion of the Little Miami River floodplain, will deter future development in this area. Based on the Eastern Corridor Land Use Vision Plan *and recommendations from the Eastern Corridor Green Infrastructure Concept Master Plan (see Section 3 of this Final EIS*), future land use in floodplains, consisting of primarily parkland and agriculture, is expected to be continued and may be expanded in some areas.

- Aquifer – Impacts to the Buried Valley Aquifer System Sole Source Aquifer will be evaluated in detail during Tier 2 when specific alignments for proposed Eastern Corridor transportation improvements are developed. Aquifer limits in the Eastern Corridor generally correspond to floodplain areas, and current land uses along the aquifer are similar to those described above for floodplains. Based on Tier 1 evaluation, the proposed multi-modal transportation plan for the Eastern Corridor as a whole is expected to result in an estimated 415 to 475 acres of aquifer encroachment.

  Past actions affecting the sole source aquifer are not known, although it is reasonable to assume that development activities in the area over time have resulted in some level of increase, or periodic increases, in turbidity and dissolved solids and/or the seepage of fuels, fertilizers, herbicides/pesticides or other pollutant materials into the groundwater, and possible impact on aquifer recharge. Most communities in the Eastern Corridor use the sole source aquifer as either their sole or partial water supply, and groundwater quantity may have been periodically impacted as uses fluctuate.

  At this time, no future actions are foreseeable that would result in notable aquifer impacts. Controlled access along relocated SR 32, where the project crosses the broadest portion of the aquifer, will deter future development in this area, and future development activities elsewhere in the Eastern Corridor are expected to be predominantly infill, thereby minimizing the need for additional impervious surface (minimal recharge impacts). Project mitigation and/or local greenspace/watershed protection planning efforts, such as implementation of local zoning requirements for aquifer protection, will also provide opportunity for aquifer protection in the area.

- Terrestrial Habitats - Tier 1 work, as presented in the Draft EIS, focused on preliminary evaluation of impacts to larger woodlands in the Eastern Corridor, including high quality areas identified from secondary sources or large continuous woodland tracts based on limited walk-over field survey. Woodland impacts, *including habitat fragmentation,* will be evaluated in detail during Tier 2 when specific alignments for proposed Eastern Corridor transportation improvements are developed.

  Original vegetation in the project area was over 90 percent woodland, consisting of mixed mesophytic, beech and bottomland hardwood forest types. Past development activities have substantially reduced the amount of woodland cover over the years, and associated beneficial values such as wildlife cover and habitat, soil stability, erosion control, runoff moderation, air quality and aesthetic benefits and noise reduction. As noted previously, roughly 76 percent of the Eastern Corridor is currently developed. Greenspace and agricultural land, which contain some woodland components, each comprise about 12 percent of the Eastern Corridor. Developed areas also contain some woodland components, especially the older residential urban areas of the Eastern Corridor such as Mariemont, residential areas developed along steep hillsides such as Columbia-

Tusculum and new subdivisions in Anderson Township, and along old transportation corridors such as the Oasis Line along the Ohio River. Information obtained from the National Resources Inventory (www.agecon.ag.ohio-state.edu/programs/exurbs/pdf/LUfigures) indicate an approximately 20 percent reduction in forest land in Hamilton County as a whole between 1982 and 1997, and essentially no change in forest cover in Clermont County during the same time period. Specific trends within the Eastern Corridor study area are not known.

Future development activities in the Eastern Corridor will likely result in additional woodland impacts, however, further encroachment is not expected to be substantial since most development will occur in previously disturbed sites (infill), and future land use in the area indicates an overall increase in greenspace over time - some of which will likely include woodland area. In addition, project mitigation and/or other local greenspace infrastructure planning efforts in support of the Eastern Corridor land use vision goals a*nd the Eastern Corridor Green Infrastructure Concept Master Plan (see Section 3 of this Final EIS*) may provide opportunity for restoration and/or preservation of woodlands.

Therefore, although past actions in the Eastern Corridor have resulted a loss of original woodlands and associated wildlife and other benefits since early settlement days, the proposed project and future actions are not expected to substantially contribute to additional loss, and may provide opportunity for an increase in the amount of woodland in the Eastern Corridor area over time - a possible cumulative benefit.

- Threatened and Endangered Species – State and federal-listed species known from the project area are described in Chapter 4.1.7 of the Draft EIS. Overall, the Eastern Corridor may contain potential habitat for three federal-listed species: Indiana bat, running buffalo clover and bald eagle, and *thirteen* state-listed species, most of which are fish and mussels associated with the Little Miami and Ohio Rivers. Potential habitat for Indiana bat includes relatively undisturbed upland and riparian woodlands, and buffalo clover primarily occurs in open woodlands and woodlots with a history of periodic disturbance. No bald eagles or nest sites are known from the project area, *although there have been local reports of bald eagles foraging in areas along the Little Miami River.*

  Development activities in the Eastern Corridor resulting in woodland and stream impacts have either removed or degraded some amount of preferred habitat for these listed species, and it is not known how this has affected species distribution or vitality within the area. However, as noted previously, areas such as the Little Miami River, despite extensive development, still supports diverse aquatic and terrestrial biota. No substantial impacts to state-listed fish and mussels occurring in the Little Miami River are expected since, as described previously, free-flow and water quality are not expected to be substantially impacted.

  Future development activities in the Eastern Corridor will likely result in additional impacts to potential habitat for these species, however, further encroachment is not expected to be substantial since most development will occur in previously disturbed sites (infill), and future land use in the area indicates an overall increase in greenspace over time - some of which will likely include riparian corridors and woodlands. In addition, project mitigation and/or other local greenspace infrastructure planning efforts in support of the Eastern Corridor land use vision goals a*nd the Eastern Corridor Green Infrastructure Concept Master Plan (see Section 3 of this Final EIS*) may provide opportunity for restoration and/or preservation of preferred habitat for some listed species.

- Cultural Resources – Cultural resources occurring in the Eastern Corridor are described in Chapter 4.3 of the Draft EIS, and include both historic architecture and archaeological features. Impacts to these resources will be evaluated in detail during Tier 2 when specific alignments for proposed Eastern Corridor transportation improvements are developed. Based on Tier 1 evaluation, the proposed multi-modal transportation plan for the Eastern Corridor as a whole may affect between 1

to 3 National Register Individual Properties, 1 to 4 National Register Districts and between 29 to 35 other cultural features whose significance/National Register eligibility will be determined in Tier 2.

Past disturbances, excavations, and other types of development have likely disturbed cultural resources, especially archaeological resources, in the area over time. As noted above, the project will result in direct encroachment on some resources, and all appropriate coordination and mitigation for NEPA compliance will be conducted during Tier 2. Local greenspace infrastructure planning efforts in support of the Eastern Corridor land use vision goals a*nd the Eastern Corridor Green Infrastructure Concept Master Plan (see Section 3 of this Final EIS*), which may include a historic preservation component linked with greenspace preservation, may also provide opportunity for protection and enhancement of cultural resources in the area.

- Air Quality and Noise/Vibration – The project is located in the Cincinnati Air Quality Control Region under local metropolitan planning organization jurisdiction, and is in OKI's current Transportation Improvement Plan (TIP). The TIP is consistent with the currently adopted 2030 Regional Transportation Plan, which is in conformity regarding air quality.

  Tier 1 noise and vibration studies involved evaluation of potential noise and vibration receptors (indicating noise sensitivity only, not impact), and preliminary information for the Eastern Corridor as a whole is presented in the Tier 1 Draft EIS. Impacts related to highway and transit noise, and transit vibration will be evaluated in detail during Tier 2 when specific alignments for proposed Eastern Corridor transportation improvements are developed. Detailed noise and vibration analyses will be conducted in accordance with appropriate FHWA, FTA and ODOT procedures, and abatement measures, if required, will be developed during detailed design.

  It is reasonable to assume that urbanization and other development within the Eastern Corridor over time has adversely affected air quality and has increased noise. However, additional impacts from the project and future development are not expected to be substantial in that: 1) proposed transportation improvements primarily follow existing transportation corridors, 2) future development in the Eastern Corridor will be primarily infill in areas where noise already occurs, and 3) the proposed project and future development in the area will require compliance with state and federal statutes regarding air quality and noise.

- Displacements and Property Impacts – Residential and commercial displacements and other property impacts will be evaluated in detail during Tier 2 on a project-by-project basis when specific alignment details for proposed Eastern Corridor transportation improvements are developed and preferred alternative selection takes place. Based on Tier 1 evaluation, the proposed multi-modal transportation plan for the Eastern Corridor as a whole is expected to result in an estimated range of 115 to 480 single-family displacements, 3 to 20 multi-family displacements, and 80 to 142 commercial/industrial displacements.

  Residential and commercial development has progressively increased in the Eastern Corridor over time, such that roughly 42 percent of the 165 square mile study area is currently in residential use and 10 percent is in commercial/industrial use. Future land use for the Eastern Corridor consists of an increase in residential, commercial, office, industrial and mixed-use development, which is expected to be predominantly infill by nature, with emphasis on conversion of vacant land. Displacement impacts by the project or future actions are not expected to be substantial in that ample areas to move are expected to be available. In addition, acquisition and relocation for all parties displaced will be conducted in accordance with all applicable state and federal laws.

Cumulative Benefits

The cumulative analysis also considers the comparative benefits of past, present and future actions, as well as the proposed project, when formulating conclusions regarding the overall significance of expected impacts to environmental resources in the area.

As discussed previously, predominant past, present and future actions that have affected, and will continue to affect, environmental resources and features in the Eastern Corridor include: agricultural activities, transportation development, residential and commercial/industrial development, and greenspace development. While some of these actions have resulted in loss or modification of the area's environmental resources, these actions have also resulted in notable benefits within the Eastern Corridor. These benefits primarily include economic sustenance and quality-of-life improvements. For example, from an economic standpoint, construction of transportation corridors in the Eastern Corridor - from the early railroads to the current highways and interstates - has improved community and regional connectivity. This has contributed to the viability of local economic ventures - from early, predominantly agricultural operations, to commercial and industrial operations. These ventures not only supported the local economy and improved local quality-of-life, but also provided needed consumer goods that contributed to other regional economies, and, ultimately, the quality-of-life in those areas.

The multi-modal transportation improvements proposed for the Eastern Corridor will further improve connectivity in the area by providing better connections to the interstate system, and better links from the area's economic centers in Cincinnati and Hamilton County to developing residential areas in eastern Hamilton County and western Clermont County. Providing greater mode choices, particularly transit options, also supports workforce development for non-driving individuals by better connecting them to places of employment. Proposed transportation improvements will also better link economic centers, both locally and regionally, for more efficient movement of goods and services within and through the area. All of these actions will benefit the local economy and local quality-of-life and are consistent with planned land use outcomes.

A unique aspect of the this project has been the development and implementation of a land use vision plan, such that land use priorities were identified and subsequently integrated into the transportation planning process to identify appropriate fit of proposed transportation solutions with desired land use. Overall, the Eastern Corridor land use vision plan, supported by proposed multi-modal transportation improvements, is configured to stimulate infill and expand greenspace within the Eastern Corridor. Such a strategy is beneficial to both the local economy and the environment in that it promotes redevelopment, reinvestment, as well as protection of existing natural resources. Project mitigation and local planning efforts in support of the Eastern Corridor land use vision goals a*nd the Eastern Corridor Green Infrastructure Concept Master Plan (see Section 3 of this Final EIS)* that will occur in conjunction with the project, are also expected to provide cumulative environmental benefits within the Eastern Corridor.

Based on the above, cumulative benefits of the project in conjunction with past, present and other future actions in the area, are an overall improvement in public heath, including: 1) improved safety, characterized by fewer accidents due to better roadway conditions and reduced congestion, as well as improved conditions for police, fire and emergency personnel, 2) economic vitality from linking people to jobs and employment centers, 3) preservation of natural and cultural resources due to infill development, and 4) improved recreational opportunities due to better connection to and expansion of greenspace and parks.

By comparison, present conditions, without the multi-modal improvements proposed for the Eastern Corridor, are expected to support inefficient, "leapfrog" outward growth (instead of infill development) resulting in part from a poorly configured and connected transportation system that does not respond to capacity, efficiency, access or modal option needs of businesses, communities, the regional economy or the environment.

Conclusions on Cumulative Impacts

Based on the information presented in cumulative impact evaluation presented in the Draft EIS and summarized in this Final EIS, it is concluded that although past and present actions in the Eastern Corridor have resulted in some loss or modification to the area's environmental resources, these actions have also resulted in notable benefits within the Eastern Corridor.

Furthermore, the benefits of the project, combined with other past, present and expected future actions, are considerable. These benefits have played, and will continue to play, an important role in the local economy and overall quality-of-life in the project area.

Overall, the Eastern Corridor project is not expected to critically compound conditions that have resulted from other past and present actions, or that may result from expected future actions, when the specific benefits of the project are weighed against the project's expected direct and indirect impacts (costs).

1.4.4.c. Section 7 - Wild and Scenic Rivers

The Department of the Interior National Park Service is responsible for preparing a Section 7 determination of effect on rivers included in the national system for actions qualifying as federal water resource projects under the National Wild and Scenic River Act. As described in the Draft EIS, early coordination for the project regarding Section 7 applicability for the Little Miami River was conducted with representatives from the National Park Service (NPS), the Federal Highway Administration (FHWA), the Department of the Interior (DOI), and the Ohio Department of Transportation (ODOT). The outcome of this coordination was summarized in a letter dated March 5, 2003 from ODOT to the Ohio Department of Natural Resources (see Chapter 6.4 and Appendix C of the Draft EIS).

Overall, it was determined from this coordination that Section 7 would not apply for the mainstem of the Little Miami River if the proposed bridge over the Little Miami was designed so as to not impact the bed or bank below the Ordinary High Water Mark (OHWM). However, NPS Section 7 review may be required if the selected alternative includes any instream work on the mainstem or tributaries. For activities on the mainstem of the Little Miami River, the Section 7 review would determine if the proposed action would have a direct and adverse affect on the free-flowing nature of the river and values for which the river was designated, including: scenic/aesthetic, recreational, fish and wildlife, geologic, and historic (cultural and archaeological). For developments below or above the Little Miami River or on a tributary, an evaluation would be conducted to determine if the project would invade the area or unreasonably diminish the designated values. Actions that could trigger Section 7 review include bank stabilization, the placement of temporary or permanent fills or structures, bank or channel shaping, channel dredging, or any other type of instream activities in the mainstem or a tributary channel. *This conclusion regarding Section 7 applicability has been reiterated in subsequent agency correspondence obtained during Tier 1 project development, including National Park Service letters to Ohio Department of Transportation dated May 27, 2004*

and December 7, 2004, during a project coordination meeting held January 31, 2005, and in a letter from FHWA to the Department of the Interior dated September 19, 2005.

Four possible Little Miami River crossing locations are currently under consideration in Tier 1, but no site specific impacts or bridge details have been developed at this time; this work will be conducted in Tier 2. However, it has been determined in Tier 1 that the Little Miami River crossing would consist of a shared roadway / transit clear span, with no instream piers or other instream structures, and no channel work below the OHWM. *Therefore, a federal water resources project requiring consideration under Section 7 has not been identified, given the proposed clear span crossing beyond the bed and banks of the Little Miami as described in the Tier 1 environmental document. As such, Section 7 does not apply for the project.*

1.4.4.d. Section 4(f) Resources

A preliminary Section 4(f) evaluation is presented in Chapter 5.3 of the Draft EIS, including description of known Section 4(f) resources in the project area, potential Section 4(f) involvement of these resources, and preliminary determination of feasible and prudent alternatives. *Updates to the Section 4(f) discussion since circulation of the draft document are depicted in italics (see below).* Tier 1 Section 4(f) work for the Eastern Corridor focused on public parks, recreation areas and wildlife refuges and known (currently listed) National Register cultural resources. Additional work will be conducted during Tier 2 to identify other sites potentially eligible for the National Register per Section 106 of the National Historic Preservation Act, and avoidance and minimization will be evaluated, as necessary. Once detailed plans are available in Tier 2, a full Section 4(f) evaluation will be prepared for any such properties that will be impacted by the proposed project.

Public Parks, Recreation Areas, and Wildlife Refuges

Fifteen public parks and recreation areas in the project area that are subject to Section 4(f) requirements, and three public-owned greenspaces with potential Section 4(f) applicability, have the potential to be impacted by the project based on Tier 1 work. Avoidance and minimization of impacts will further be evaluated in Tier 2, and a Section 4(f) evaluation and mitigation measures will also be developed, as necessary.

Wild and Scenic Rivers: Applicability of Section 4(f) to the Little Miami River

Public-owned waters of rivers designated wild and scenic by the National Wild and Scenic Rivers Act may be subject to Section 4(f) involvement, and public owned lands adjacent to the river may be subject to Section 4(f) if they are administered for recreational or other Section 4(f) purposes.

The lower reach of the Little Miami River was designated as a recreational component of the Wild and Scenic River in January 1980. The Little Miami Scenic Rivers Assistance Manual (February 1977) was developed as part of the application process under Section 2(a) (ii), of the Wild and Scenic Rivers Act, P.L. 90-542. The manual provided an inventory of known, proposed and authorized projects in the proposed designated area. The relocation of U.S. 50/32 was identified as a proposed project. The proposed crossing of the Little Miami in 1977 was located in approximately the location as is proposed for the current project. The possibility of a new crossing did not impact the decision to designate the lower reach of the Little Miami as a component of the National Wild and Scenic Rivers System. The lower portion of the Little Miami River was designated a recreational component of the system in 1980. As such, the Little Miami River is a

recreational resource protected under Section 4(f), and there are no other resources adjacent to the river at the bridge crossing that are protected under Section 4(f).

Section 4(f) applies to a protected resource in three ways: direct use; temporary use that is adverse; or constructive use. Regarding Section 4(f) applicability to the Little Miami River, the project sponsors have committed to construct a bridge that will span the river bed and banks to avoid direct impacts to the river either permanently or temporarily during construction. Therefore, there will be no direct use or temporary use of the 4(f) recreational resource. However, the NPS raised the issue of "constructive use" impacts on the Little Miami River's "outstandingly remarkable values" (ORVs). Constructive use only occurs in those situations where, including mitigation, the proximity impacts of a project on the 4(f) property are so severe that the activities, features or attributes that qualify the property or resource for protection under Section 4(f) are substantially impaired. Consideration of Section 4(f) constructive use to the ORVs has been given with the best available information collected during the Tier I process. The ORVs assigned to the LMR in the vicinity of this project are scenic (aesthetic), recreational, fish and wildlife (flora/fauna), geological, and historical resources (cultural and archeological).

Opportunities for a range of recreational activities exist along the Little Miami River and include canoeing and kayaking, fishing, bird watching, hiking, and walking. However, in the proposed bridge location, the primary activity is canoeing and kayaking. At this location the activity is limited by the periodic low flow conditions and the number of available take-outs downstream. The placement of a clear span across the river eliminates the concern of an obstructed river corridor for this use of the Little Miami River. Opportunities for the other types of recreation have always been limited in the build area due to the lack of available publicly-owned land for access. Recreational access to the Little Miami River could be pursued at the bridge site if the Ohio Department of Natural Resources and the local agencies find this beneficial to the local Cincinnati area. The FHWA review does not find that the value of the recreational resource in terms of its Section 4(f) significance will be meaningfully reduced or lost.

To address impacts associated with noise, FHWA directed the Ohio Department of Transportation to provide existing ambient noise readings in the project study area at several locations along the Little Miami River. The Leq (dBA) readings for these locations ranged from 51.5 to 56.0. The Ohio Department of Transportation then conducted an analysis of future noise readings based on the best information available at this time. Typically, future noise readings are conducted later in the project development process when specific design information is known for the preferred alternative. However, in an attempt to respond to the noise issue in a comprehensive but expedient way, assumptions were made for some of the input data such as planning level traffic for the 2020 design year, vehicle mix, speeds, height of the structure, roadway width, etc. The FHWA noise abatement criterion for recreational activity (Category B) is 67 dBA. The model provided predicted noise readings for forty-four receiver locations along the Little Miami River and along an assumed roadway alignment. The highest predicted noise level is 62.2 dBA. Based on these readings and the noise abatement criterion of 67 dBA, it is FHWA's position that the noise impacts needed to constitute a constructive use are not present.

Based on the above considerations, and as outlined in 23 C.F.R. 771.135(p) (5), the FHWA has determined that the activities, features, and attributes that qualify the Little Miami River for protection under Section 4(f) are not substantially impaired, therefore, constructive use does not exist. This determination will be re-evaluated in the Tier II EIS to determine if this preliminary decision remains valid.

National Register Cultural Resources

Eight cultural resources currently listed on the National Register of Historic Places, including six historic architecture resources and two archaeological resources, may potentially be impacted by feasible alternatives under consideration in the Eastern Corridor based on Tier 1 work.

Of these eight resources, the Hahn Field Archaeological District is encroached upon by all of the relocated SR 32 shared highway/rail transitway corridors developed at this vicinity. More detailed studies will be conducted in Tier 2 to determine specific occurrence and significance of archaeological resources on this site, and a Section 4(f) evaluation will be prepared and appropriate mitigation will be developed following coordination with resource agencies during the Section 4(f) process. In addition, avoidance and minimization of impacts to other identified National Register resources will further be assessed in Tier 2 work, and Section 4(f) evaluation and mitigation measures will be developed, as necessary.

1.4.4.e. Section 6(f) (L&WCF) and Section 1010 (UPARR) Resources

Two resources potentially impacted by feasible alternatives under consideration in the Eastern Corridor have received Land and Water Conservation Funds (L&WCF) and are subject to Section 6(f) evaluation in Tier 2 if impacted, including Robert Short Park (also known as Debolts Playfield) and Eden Park Waterfront (also known as Theodore M. Berry International Friendship Park). There are no facilities potentially impacted by any of the feasible alternatives that have received Urban Parks and Resource Recovery funding (UPARR), although several sites sponsored by the City of Cincinnati do occur in the general area.

1.4.5. Tier 1 Public Involvement and Agency Coordination

Changes Since Preparation of the Tier 1 Draft EIS

The information presented below is summarized from Chapter 6 of the Draft Environmental Impact Statement, with updates regarding public and agency involvement since circulation of the Tier 1 document. Recent public involvement activities are further described in Section 2 of this Final EIS. *Updates to information presented in the draft document are depicted in italics.*

Public Involvement Activities

An extensive public involvement plan was developed and is being implemented for the Eastern Corridor, using as a framework, and building upon, public involvement efforts utilized during the Major Investment Study and Eastern Corridor land use vision phases of the project. Overall, the public involvement plan consists of eighteen components for informing/educating the public and obtaining feedback on the project's development. Key components have included: a project involvement information center, an Eastern Corridor website, special interest/community workshops, speakers bureaus, public meetings, and stakeholder/advisory committee meetings (also open to the public).

Three rounds of public meetings were conducted in Tier 1. A wide range of valuable input was gathered from these meetings and other public involvement activities, and project development to date has reflected this input.

Section 106 public involvement, including coordination with historical societies and native American tribes, has also been conducted, as described in Chapter 6 of the Draft EIS.

A Public Hearing on the Tier 1 Draft EIS was held for the project on December 9, 2004. Information regarding the hearing is presented in Section 2 of this Final EIS.

Agency Coordination

Four resource agency coordination meetings were held since the beginning of the Eastern Corridor Tier 1 work phase to update and obtain scoping input from various agencies involved in the project on issues, processes and expectations; dates included: January 17, 2002; April 18, 2002; October 17, 2002 and October 14, 2003. Represented at one or more of these these sessions have been individuals from the Ohio Department of Transportation (ODOT), Federal Highway Administration (FHWA), Federal Transit Authority (FTA), Ohio Department of Natural Resources (ODNR), Hamilton County Transportation Improvement District (HCTID), the City of Cincinnati, the U.S. Environmental Protection Agency (USEPA), the U.S. Fish and Wildlife Service (USFWS), the U.S. Department of the Interior National Park Service (NPS), the U.S. Army Corps of Engineers (USCOE), Ohio Environmental Protection Agency (OEPA), the Ohio-Kentucky-Indiana Regional Council of Governments (OKI), SORTA/Metro, Clermont County and the project consultant team.

Two project coordination meetings were held between FHWA, FTA, USEPA and ODOT. The tiered NEPA approach to the project was confirmed at these meetings, and an agreement was made that FHWA would serve as the lead agency in the NEPA process, with cooperating agencies to include FTA, USCOE and the National Park Service (NPS).

A coordination meeting regarding applicability of Section 7 of the National Wild and Scenic Rivers Act for proposed actions to the Little Miami River was held on January 31, 2005 between ODOT, FHWA, NPS, ODNR, and members of the project implementation team. Results of this meeting are summarized in Section 2 of this Final EIS.

The FHWA published a Notice of Intent (NOI) in the Federal Register on May 21, 2002 announcing that a Tiered Environmental Impact Statement would be prepared for the proposed Eastern Corridor multi-modal transportation project. *Notice of Availability of the Tier 1 Draft EIS was published in the Federal Register on November 19, 2004.*

Agency comments received on the Eastern Corridor Tier 1 work phase prior to publication of the Tier 1 Draft EIS are presented in Chapter 6 and Appendix C of the draft document. *Comments obtained from agency review of the Draft EIS and subsequent correspondence are presented in Section 2 of this Final EIS.*

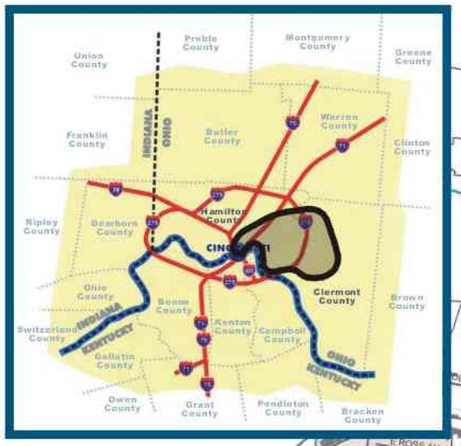
1.4.6. Implementation Considerations

Chapter 7 of the Tier 1 Draft EIS described the preliminary implementation approach and financial strategy for the Eastern Corridor multi-modal plan. *This information has been updated since circulation of the draft document, and is presented in Section 4 of this Final EIS.*

1.4.7. Draft EIS Conclusions and Recommendations

Preliminary environmental mitigation issues, expected environmental mitigation and permit requirements, and preliminary environmental commitments for the project to be further developed in Tier 2 were described in Chapter 8 of the Draft EIS. *This information has been updated based on new information received and comments obtained from resource agency and public review of the Tier 1 Draft EIS, and is presented in Section 3 of this Final EIS.*

Eastern Corridor Multi-Modal Projects



Hamilton County • Clermont County
Ohio Department of Transportation
City of Cincinnati • SORTA/Metro
OKI Regional Council of Governments

AMBERLEY
DEER PARK
SYCAMORE TOWNSHIP
KENWOOD
GOLF MANOR
SILVERTON
MADEIRA
INDIAN HILL
SYMMES TOWNSHIP
COLUMBIA TOWNSHIP
MADISONVILLE
ST. BERNARD
NORWOOD
CLIFTON
MILFORD
TERRACE PARK
MIAMI TOWNSHIP
PERINTOWN
STONELICK TOWNSHIP
FAIRFAX
MARIEMONT
PLUMVILLE
WALNUT HILLS
HYDE PARK
MOUNT LOOKOUT
CINCINNATI
NEWTOWN
MOUNT CARMEL
SUMMERSIDE
UNION TOWNSHIP
LUNKEN AIRPORT
TURPIN HILLS
ANDERSON TOWNSHIP
MOUNT WASHINGTON
GLEN ESTE
NEWPORT
COVINGTON
FORESTVILLE
TOBASCO
OLIVE BRANCH
BATAVIA
WITHAMSVILLE
BATAVIA TOWNSHIP
CALIFORNIA
OHIO
KENTUCKY
HAMILTON COUNTY
CLERMONT COUNTY
PIERCE TOWNSHIP
LOCUST CORNER
AMELIA

ANDERSON TOWNSHIP = Township
CINCINNATI = Incorporated Area
HYDE PARK = Neighborhood
= Major Roads
= Eastern Corridor Study Area
= Tier 1 Detailed Study Area

Figure 1: Eastern Corridor Study Area

Tier 1 Final Environmental Impact Statement
Eastern Corridor Multi-Modal Projects
Hamilton and Clermont Counties, Ohio

North

Scale: 0 2000 4000

Eastern Corridor Multi-Modal Projects

Hamilton County • Clermont County
Ohio Department of Transportation
City of Cincinnati • SORTA/Metro
OKI Regional Council of Governments

Modal Convergence Area (bus, rail, highway, bike; not all detail shown)

Modal Convergence Area (bus, rail, highway, bike; not all detail shown)

Modal Convergence Area (bus, rail, highway, bike; not all detail shown)

Rail Transit Corridors and SR 32 Alternatives Parallel In This Area (see Figure 3.12)

SILVERTON
GOLF MANOR
MADEIRA
INDIAN HILL
MILFORD
OAKLEY
NORWOOD
XAVIER UNIVERSITY
TERRACE PARK
FAIRFAX
MARIEMONT
EVANSTON
HYDE PARK
ANCOR
UNIVERSITY OF CINCINNATI
MT. LOOKOUT
WALNUT HILLS
MT. CARMEL
UNION TOWNSHIP
LINWOOD
NEWTOWN
DOWNTOWN CINCINNATI
Ohio River
LUNKEN AIRPORT
Little Miami River
ANDERSON TOWNSHIP
EASTGATE
MT. WASHINGTON
BEECHMONT MALL

Figure 2: Tier 1 Feasible Alternatives

Tier 1 Final Environmental Impact Statement
Eastern Corridor Multi-Modal Projects
Hamilton and Clermont Counties, Ohio

North

Scale: 0 1500 3000

- Detailed Study Area Limits
- Major Surface Streams
- Feasible Highway and Rail Transit Alignment Corridor Footprint
- Possible At-Grade Intersection
- Possible At-Grade Intersection or Urban Interchange
- Possible Signalized Interchange
- Possible Interchange (free flow) With Grade Separation
- Roadway Corridor Improvement (TSM project)
- Approximate Centerline - Feasible Highway Alternative Corridors
- Approximate Centerline - Oasis Rail Transit Corridor
- Primary Bus Service Routes (Preliminary)
- Bus Community Circulator Routes (Preliminary)
- More Frequent Bus Service (TSM project) (separate project)
- Proposed I-71 Light Rail Transit Corridor
- Rail Transit Station Location (Preliminary)
- Bus Transit Hub Location (Preliminary)
- Bus Hub/Rail Transit Station Location (Preliminary)
- Intersection Improvement (TSM project)
- Park and Ride Location (TSM project)
- Existing Bike Path
- Dedicated Bikeways and Trails
- Alternative Bike Links Under Consideration
- Minor Interchange Improvement or Addition (TSM project)
- Access at These Locations Varies by Alternative

2. COMMENTS ON THE DRAFT EIS

2. COMMENTS ON THE TIER 1 DRAFT EIS

2.1 NOTICE OF AVAILABILITY

Availability of the Tier 1 Draft Environmental Impact Statement was published in the U.S. Environmental Protection Agency Federal Register of Environmental Documents on November 19, 2004 (see Appendix A). Legal notification of the Tier 1 draft document and public hearing was published in the legal section of the Cincinnati Enquirer, Cincinnati Post and Community Press on November 24, 2004 and December 1, 2004. Public hearing notification was also handled by the following: paid newspaper advertisements; email announcement to approximately 6,000 local stakeholders and citizens; placement of fliers in local community centers, libraries and municipal buildings; announcement on the project website; and press release to local newspapers, television and radio stations. Copies of the Tier 1 Draft EIS were made available for public viewing at 11 public libraries and 11 municipal buildings in the study area. Public comment period on the Tier 1 draft document ended January 10, 2005.

2.2 PUBLIC HEARING

A Public Hearing was held on December 9, 2004 to provide opportunity for interested persons to review and comment on the Tier 1 Draft Environmental Impact Statement and new information completed since the last public workshop. The public hearing was the fourth meeting opportunity in the Tier 1 work program. The first round of Eastern Corridor workshops held in May 2002 confirmed project purpose and need, and provided information on the geographic area for Tier 1 studies and work scope. The second round of workshops held in May 2003 provided information on preliminary alternatives and environmental data from Tier 1 field studies. The third round of workshops in January 2004 focused on the recommended feasible alternatives for further development, and preliminary information on impacts and costs.

Public Hearing Format

The Eastern Corridor Public hearing was held on December 9, 2004 at the Fairfax Recreation Center, 5903 Hawthorne Avenue, Fairfax, Ohio from 5:30 to 8:00 p.m. This location was selected because it is a central point of the project area familiar to citizens and stakeholders, located along a bus line, proximate to targeted environmental justice communities, and is ADA accessible. The hearing was conducted in an informal, open house style format to facilitate public review, allow for individual discussion between the public and project representatives, and to solicit individual input on the project and Tier 1 draft document.

Structure of the hearing included the following:

- Sign-in and orientation table, with fact sheet and comment form handout materials
- Power-point presentation area, providing information on project history and development to date (including information from previous workshops); continuous loop with self-narrating text
- Comment area with sign-language interpreters and court reporters for transcribing verbal comments
- Five information stations, including:
    - Introduction – comprised of two boards, including a project fact sheet and a map depicting the recommended multi-modal alternatives;

- Project History – comprised of three boards summarizing project development, project timeline, and steps completed to date;
- Multi-modal Components and Alternatives – comprised of eight boards depicting the Tier 1 alternatives by geographic area within the Eastern Corridor;
- Key Findings and Recommendations from the Tier 1 Draft EIS – comprised of ten boards providing information on recommended alternatives, impact summary, expected mitigation and permits, and preliminary environmental commitments; and
- Next Steps in Project Development – comprised of two boards explaining the next steps in the tiered NEPA process and preliminary project construction information.

Handouts provided at the hearing included a comment form, Eastern Corridor fact sheet, and a study area map depicting the recommended feasible alternatives. Feedback mechanisms included a receptacle for placement of hand-written comment forms, two sign language interpreters, and two court reporters to take verbal comments.

Meeting Attendance and Comments Received

Attendance at the public hearing was approximately 120 persons based on sign-in and head counts. Media attended the hearing, resulting in a story airing on one local television station and several newspaper articles. Overall, a total of 31 hand-written comments and 14 verbal comments were obtained at the December 9th hearing. An additional 223 public comments were received after the hearing and within the public comment period, which ended on January 10, 2005. Comments on the Tier 1 draft document were also received from five resource agencies. Summaries of the public and agency comments received on the Tier 1 Draft EIS are presented in Sections 2.3 and 2.4 below.

2.3. SUMMARY OF PUBLIC COMMENTS AND RESPONSES

A total of 268 public comments were received on the Tier 1 Draft EIS through written or verbal comment submitted at the hearing, and by mail and email submitted after the public hearing through the end of the January 10, 2005 comment period (see Appendix B).

Overall, public comments consisted of the following general themes:

- Form letters submitted in opposition to a new Little Miami River bridge – 140 total
- Individual letters submitted in opposition to a new Little Miami River bridge – 64 total
- Other environmental and personal property concerns – 6 total
- Support proposed multi-modal plan – 26 total
- Support transit components of the plan only – 7 total
- Individual community issues – 10 total
- Various Draft EIS, NEPA or public hearing concerns – 3 total
- Suggestion of other alternatives – 4 total
- Comments received from environmental groups or jurisdictions – 8 total (representing 6 different groups)

All of the comments received on the Draft EIS, as well as responses to these comments, are compiled in summary form in Tables 3, 4, and 5 (found after Section 4 of this Final EIS). Table 3 lists all the individual public comments received, Table 4 addresses comments according the general themes noted above, and Table 5 addresses comments received by various environmental groups on the Tier 1 Draft EIS. Whereas Tables 3, 4 and 5 summarize and address specific comments, Section 2.5 (below) describes the key issues and concerns conveyed by the public and resource agencies through review of the draft document.

2.4. AGENCY COORDINATION

Draft EIS Distribution

Following notification of availability in the Federal Register, the Eastern Corridor Tier 1 Draft Environmental Impact Statement was distributed to the following agencies for opportunity to review:

Federal Agencies:

- U.S. Department of the Interior Fish and Wildlife Service
- U.S. Department of the Interior National Park Service
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- U.S. Coast Guard
- Federal Transit Administration

State Agencies:

- Ohio Department of Natural Resources
- Ohio Environmental Protection Agency
- Ohio Historic Preservation Office

Eastern Corridor Implementation Group:

- Ohio-Kentucky-Indiana Regional Council of Governments
- Clermont County
- Hamilton County
- City of Cincinnati
- SORTA/Metro

Agency Comments and Coordination

Formal comments on the Tier 1 Draft EIS were received from five agencies. Comment letters are included in Appendix C of this Final EIS, and summarized in Table 6 below. A meeting was held on January 31, 2005 at the Ohio Department of Transportation in Columbus, Ohio regarding Section 7 of the National Wild and Scenic Rivers Act and related issues, and included representatives from the Department of the Interior National Park Service, Ohio Department of Natural Resources, Ohio Department of Transportation, Federal Highway Administration, Ohio-Kentucky-Indiana Regional Council of Governments, Hamilton County, and the project consultant team. Following this meeting and subsequent coordination efforts, FHWA summarized Section 7 applicability issues in a letter to U.S. Department of the Interior dated September 19, 2005. Comments and coordination from the January 31st meeting and the September 19th letter from FHWA are also included in Table 6.

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
U.S. Department of the Interior, National Park Service December 7, 2004 (faxed letter) RE: review of Tier 1 Draft EIS	NPS notes that the Little Miami River (LMR) is a state-administered component of the National Wild and Scenic Rivers System under section 2(a)(ii) of the Wild and Scenic Rivers Act, and that the purpose for designating the LMR was to preserve its free-flowing character, water quality, and outstanding scenic, recreational, biologic, geologic and historic values. NPS concerns and comments include: a) NPS was not included in decisions on a river crossing during the Eastern Corridor MIS planning process, and MIS Option 2 for a relocated SR 32, which involved an LMR crossing within an existing crossing corridor, was eliminated without providing NPS the opportunity for review and comment. ***As described in the Draft EIS, MIS work for the Eastern Corridor was conducted by the OKI Regional Council of Governments and followed USDOT guidelines and metropolitan area rules for transportation planning per 23CFR450(c). The MIS considered a broad range of information, including performance and environmental factors and public and stakeholder input, in recommending long-range improvements for the Eastern Corridor. Technical analyses, including consideration of environmental factors, were at a scale and level of detail appropriate for the regional transportation planning issues under consideration. Local, state and federal agency stakeholders were invited to participate in the process. ODNR, as administrator of state wild, scenic and recreational river areas under Section 1517 of the Ohio Revised code, and administrator of the state component of the national system under Section 2(a)(ii) of the National Wild and Scenic Rivers Act, represented scenic rivers issues and concerns as an active member of the MIS Task Force. NPS, in a letter submitted to OKI in August 1997, and in subsequent correspondence submitted during the Tier 1 DEIS work phase, has noted that, for projects qualifying as federal water resource projects under Section 7 of the National Wild and Scenic Rivers Act, it is their authority to determine effect on the river's free-flowing nature and values that resulted in the river meeting criteria for inclusion in the state and national scenic river systems. A federal water resource project requiring consideration under Section 7 has not been identified, given commitment to construct a clear span crossing beyond the bed and banks of the Little Miami as proposed and described in the Tier 1 Draft EIS (see also response to Comment "d", below). Please see response to Comment "c" regarding MIS Option 2.*** b) absence of a "no new bridge" alternative is in direct contradiction to the State's approved management plan (LMR Assistance Manual, 1977) and is opposed to by the Little Miami Scenic River Advisory Council. ***A new river crossing does not contradict ODNR's plan for protecting the Little Miami River. The Little Miami Scenic Rivers Assistance Manual (February 1977) was developed as part of the application process under Section 2(a) (ii), of the Wild and Scenic Rivers Act, P.L. 90-542. The manual outlined goals and provided recommended standards as a means of coordinating efforts to protect the river, and provided an inventory of known, proposed and authorized projects in the proposed designated area. The relocation of U.S. 50/32 was identified as a proposed project. The proposed crossing of the Little Miami in 1977 was located in approximately the location as is proposed for the current project. The possibility of a new crossing did not impact the decision to designate the lower reach of the Little Miami as a component of the National Wild and Scenic Rivers System. The Assistance Manual does not preclude a new bridge crossing among its goals and recommended standards.*** ***Per Ohio Revised Code (ORC) 1518.18, the primary role of the Little Miami Scenic River Advisory Council is to "advise the chief on the acquisition of land and easements and on the land and waters that should be included in a wild, scenic, or recreational river area or a proposed wild, scenic, or recreational river area, facilities therein, and other aspects of establishment and administration of the area that may affect the local interest". Therefore, the Council's role is advisory in nature, and ODNR is the agency with approval authority over actions in the Little Miami River including new river crossings, as further described in the following paragraph.***

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	In addition to the 1977 Assistance Manual, the 1985 "Little Miami State Scenic River Management Plan" identifies, among its proposed implementation tasks, an expectation that ONDR be involved with agencies in early coordination and environmental mitigation on public projects impacting the Little Miami River (as has occurred in the Eastern Corridor project since the beginning of the MIS planning process and through the Tier 1 NEPA process). The 1985 "Little Miami State Scenic River Management Plan" does not prohibit new river crossings. Further, the Ohio Revised Code Section 1517.14 through 18 does not prohibit new crossings, but gives approval authority to ODNR for projects within 1,000 feet of the normal water line of a state designated component of the state scenic river system (ORC 1517.14) and for projects by state agencies or political subdivisions that cause channel modifications to any watercourse within a wild, scenic or recreational river outside the limits of a municipal corporation; such agencies or subdivisions must first obtain approval of the structure or channel modification from the ODNR director (ORC 1517.16). Coordination with ODNR has been conducted for the Eastern Corridor throughout project development, from the MIS through Tier 1 work. During the MIS, ODNR was represented on the project Task Force, and, although they did not vote to include a new bridge in the recommended plan, recognized local support for the project, and stated that they would consider support of a new bridge, but not without substantial mitigation for protecting the river, as summarized in a letter dated June 7, 2002 (see Draft EIS, Appendix C) and in recent correspondence dated January 4, 2005 [See Page 2-10 of this FEIS: Ohio Department of Natural Resources, January 5, 2005 (email), RE: review of Tier 1 Draft EIS, comment Scenic River: "ODNR offers 4 specific comments with regards to required mitigation for a relocated SR 32 bridge/crossing of the LMR, including: 1) fee simple purchase of undeveloped land or placement of conservation easements over lands adjacent to relocated SR 32; 2) clear spanning of the LMR with no in-stream work and elevation of all roadway sections in the 100-year floodplain to allow for unimpeded passage of the 100-year flood event; 3) implementation of stringent Best Management Practices for bridge construction in cooperation with Scenic Rivers staff; and 4) additional site-specific mitigation as the project develops. It is understood that these mitigation requirements will be further developed in Tier 2."]. During Tier 1 work, ODNR attended four agency coordination meetings, and was provided opportunity to review the preliminary Draft EIS and Draft EIS documents. Measures for protecting the Little Miami River, including those outlined by ODNR, will be further evaluated and developed in Tier 2, and all required coordination, evaluation and approvals applicable to the Little Miami River will be conducted during Tier 2, including continued coordination with ODNR Scenic Rivers through the State Scenic Rivers MOA. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS. c) NPS urges the state to fully evaluate Option 2 in the FEIS, in that this alternative supports both project purpose and need and the state's obligation to protectively manage the river. ***As described in the Draft EIS, "Option 2" for a possible highway river crossing was developed and evaluated in the MIS planning phase of work for ability to meet long-range regional transportation need. Like many other specific options evaluated and dismissed in the MIS phase (including, for example, high-speed ferry boat commuter service on the Ohio River between Coney Island and downtown Cincinnati, or exclusive busway between downtown Cincinnati and Fairfax, or extensive HOV lanes on I-275 and I-471), this option was found not to adequately address the long-range transportation needs of the region and, in consideration of technical analyses appropriate to the MIS planning work as well as stakeholder and public input, was not recommended as part of the long-range plan for the region (and therefore was not included as part of the reasonable alternative array for the Draft EIS). The planning process history and context of the project, including this particular option as well as others eliminated in planning, was part of the information presented to the public at the beginning of the NEPA process, and was also part of the information provided to cooperating state and federal agencies in the scoping process. Please see Section 2.5.1 of this Final EIS for further explanation regarding decision on MIS Option 2.***

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	d) should bridge design and construction activities qualify as a "water resources project", then a Section 7(a) determination will be required, and it is NPS's preliminary determination that an LMR bridge crossing could have a direct and adverse effect on its scenic and recreational ORVs. ***As described in the Draft EIS, early coordination between ODOT, NPS, DOI and FHWA regarding Section 7 applicability concluded that Section 7 would not apply given commitment to construct a clear span crossing of the Little Miami River with no impact or intrusion to the bed or bank below Ordinary High Water as proposed in this Tier 1 document. This conclusion was reiterated by NPS in letters to ODOT dated May 27, 2004 (page 1, paragraph 3) and December 7, 2004 (page 2, paragraph 3), during an agency coordination meeting held January 31, 2005, and in a letter from FHWA to DOI dated September 19, 2005 (see Appendix C).***
Ohio Environmental Protection Agency December 17, 2004 (letter) RE: review of Tier 1 Draft EIS	OEPA expresses that, overall, they are pleased with systematic approach used to identify and address key project concerns and ecological issues, and that the Tier 1 DEIS adequately covered concerns presented in OEPA's March 31, 2004 comments on the PDEIS. OEPA would appreciate further clarification on these issues in future reports: 1) Area #2 – minimize construction of impervious surface near the LMR, and consider alternatives such as constructing adequate stormwater detention facilities and/or creating sufficient buffer vegetation between impervious surfaces and the LMR to handle stormwater runoff and its pollutants. ***Preliminary measures for protecting the Little Miami River that will be further evaluated in Tier 2 were described in Draft EIS Chapter 8, and included in this Final EIS. Commitment is made in Tier 1 to complete all required coordination, evaluation and permit application applicable to the Little Miami River during Tier 2.*** 2) Horseshoe Bend – avoid a crossing in the Horseshoe Bend area if practicable, and consider selecting the downstream crossing location because stream quality is lowest here based on QHEI. ***Tier 1 work developed several alignment options in the vicinity of the Horseshoe Bend that avoided or minimized impacts to the numerous ecological and cultural resources occurring in this area. These alternatives will be further developed in Tier 2, and a detailed comparative analysis of environmental impacts per NEPA requirements will be conducted, including consideration of stream quality. A preferred alternative will be selected in consideration of avoidance and minimization of impacts, public input, cost, purpose and need, and other project issues.*** 3) Protect animals and plants - in Tier 2 submittals, provide further clarification on protected and rare species, and procedures that will be used to minimize impacts. ***Appropriate field surveys to determine the occurrence of populations or potential habitat for federal and state listed species will be conducted in Tier 2. All required coordination will be conducted and conservation measures will be developed, as necessary, for compliance with provisions of the Fish and Wildlife Coordination Act (48 stat. 401, as amended; 16 USC 661 et seq.), Section 7 of the Endangered Species Act of 1973, as amended, and the U.S Fish and Wildlife Service's Mitigation Policy. Specific avoidance and minimization measures will be developed following agency coordination, and incorporated into final project plans, as necessary. These commitments were described in Draft EIS Chapter 8 and are included in this Final EIS.*** 4) Holistic or watershed level analysis of ecological resources and impacts – in addition to discussion of individual impacts, OEPA would like to see an analysis of ecological impacts from a holistic perspective, preferably by watersheds within or immediately adjacent to the project area. This information may be merged in the "Secondary and Cumulative Impact Considerations" section appearing in each "Area" analysis. The analysis may contain at a minimum, a discussion of the following: percent or breakdown of impervious surface; breakdown on ecological resources and their estimated impacts; estimate of existing/projected land use and growth within and adjacent to the area; TDML rating information; endangered, threatened and rare species; and other pertinent considerations. OEPA emphasizes that they are not looking for a labor-intensive effort, but use existing/available resources; graphically display the information as points or aerial coverage units within the watershed. ***This level of***

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	analysis will be developed in Tier 2 as alignments are further developed and impact information more refined. In addition, the preliminary mitigation strategy for the Eastern Corridor, discussed in Chapters 5.6.4 and 8.3.2 of the Draft EIS, and the preliminary environmental commitments listed in this Final EIS, provide opportunity for more detailed watershed analyses; mitigation details will be further developed in Tier 2, and fully evaluated and coordinated through the 404/401 permit process, and with OEPA and other state and federal agencies, as applicable. 5) Habitat fragmentation – provide an assessment of habitat fragmentation and its impact on aquatic resources and wildlife; include discussion as to how fragmentation will be avoided and minimized, and measures that will be taken to restore fragmented habitat and habitat connectivity. ***Habitat fragmentation will be evaluated in Tier 2 as alignments are further developed, and avoidance and minimization will be considered in the preferred alternative selection process; restoration measures will be developed, as appropriate. These commitments are included in this Final EIS.*** 6) Bikeway project – create the proposed bikeway trail as far from the LMR and East Fork as practicable to minimize disturbances. ***Comment acknowledged and will be considered during Tier 2 as bikeways plans are further developed.*** 7) General mitigation suggestions – creation of a special committee to consider and develop mitigation is essential; acquire and convert brownfields; work with local watershed and conservation groups; recognize the importance of greenspace and habitat preservation in compensatory mitigation planning; develop mitigation at the watershed level, with priority to those altered or disturbed resources that have most impact on the integrity of the watershed. ***The preliminary mitigation strategy for the Eastern Corridor, discussed in Chapters 5.6.4 and 8.3.2 of the Draft EIS, and the preliminary environmental commitments listed in this Final EIS, provide opportunity for these types of mitigation strategies; mitigation details will be further developed in Tier 2, and fully evaluated and coordinated through the 404/401 permit process, and with OEPA and other state and federal agencies, as applicable.***
Ohio Environmental Protection Agency December 20, 2004 (letter) RE: follow-up to Tier 1 Draft EIS comments submitted December 17th	As a follow-up to their letter submitted 12/17/05, OEPA provides further background information on watershed studies being conducted in the Mill Creek Watershed (using TR55 model analyses) and in the Lower East Fork LMR Watershed that may be used in guiding further project development and mitigation planning for the Eastern Corridor. Based on the information provided, OEPA makes these recommendations: minimize impervious surface and convert or restore impervious surface into viable habitat such as greenway corridors; create constructed wetlands to handle excessive stormwater and provide water quality improvements; restore, create preserve and enhance riparian habitat and woodlands, especially those located at brownfields, disturbed sites, vacant or abandoned properties; the "disconnect" approach would provide some stormwater/flood relief, but at a large scale to be effective; develop a comprehensive program to convince developers and landowners of importance of the disconnect approach. ***Please see response to OEPA Comment #7 above.***
U.S. Environmental Protection Agency, Region 5 December 30, 2004 (letter) RE: review of Tier 1 Draft EIS	USEPA GENERAL COMMENTS: USEPA recognizes the complexity of large-scale transportation planning in an area with numerous Section 4(f)/6(f) resources and respects level of effort and coordination put into this and earlier documents; the projects attempt to manage all transportation needs and promote rail and bus at a Tier 1 level is notable. USEPA notes that decisions made at Tier 1 affect whether certain impacts can or cannot be avoided in Tier 2, and has concerns regarding two issues: a) a new LMR bridge and application of Section 7 of the National Wild and Scenic Rivers Act to the project; USEPA defers expertise to NPS regarding Section 7 applicability, issues regarding the state's management plan for the river and potential impacts to the river's wild and scenic nature; and b) the project's potential to traverse several Section 4(f) and 6(f) resources, since Tier 1

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	decisions may render some impacts unavoidable in the Hahn Field Archaeological District and the Cincinnati Gas Lamps District. Based on the above, USEPA recommends that the FEIS include, as much as possible, the results or status of consultation with SHPO and NPS***. As noted in Draft EIS Table 6.1 (response to NPS comments dated May 27, 2004), SHPO was involved early in the Tier 1 work phase during development of the Tier 1 environmental work plans. It was determined during a strategy meeting held in August 2002 (and subsequent follow-up), and agreed upon between FHWA, ODOT and SHPO, that the SHPO would not be involved in providing comments on the Eastern Corridor Tier 1 environmental document, but would become involved during Tier 2 of the project when more specific alignments were developed, direct impacts were better defined, and the need for affect determination(s) could be identified. SHPO was in concurrence with the strategy outlined regarding Tier 1 cultural resources studies, and attended an informal follow-up meeting on October 29, 2002, where the project team and cultural resources consultant staff provided an update on the preliminary findings of Tier 1 field cultural resources investigations. Please see Section 2 of the Final EIS for information on Section 7 applicability.*** USEPA SPECIFIC COMMENTS: Section 7 application to the project: USEPA recommends that the FEIS document resolution of the Section 7 applicability question, or, as an alternative, describe coordination efforts between NPS and project sponsors. ***Please see Section 2 of the Final EIS for information on Section 7 applicability.*** Little Miami River bridge crossings and alignments: USEPA strongly recommends describing direct, indirect and cumulative impacts from the proposed bridge as much as possible, including the following: describe stretches of the bridge that may be active channels; discuss fate of a clear span in the Horseshoe region or other potentially active channel areas; discuss potential future impacts from a bridge placed in a potentially active channel given the river's future development; discuss efforts to minimize the need for extensive bridge and pier maintenance that could significantly increase anticipated impacts to the river; document this in the FEIS. ***Direct impacts from the proposed bridge are described in Draft EIS Chapter 5.2.2, pages 5-33- to 5-42 (Area #2). Secondary and cumulative impact information associated with the bridge, including resource- specific impacts, were described in Draft EIS Chapter 5.6, pages 5-79 to 5-88, and updated secondary and cumulative impact information is presented in Section 1.4.4 of this Final EIS. Studies will be conducted in Tier 2 following ODOT's Specifications for Subsurface Investigations, ODOT's Geotechnical Engineering Design Checklists and/or other appropriate analyses, to identify underlying conditions in the Little Miami River valley to be used in bridge location and design, and this information will be used to develop appropriate measures for accounting for channel activity and potential impacts. These commitments are included in this Final EIS. Historical meanders of the Little Miami River are discussed in Chapter 4.1.4, page 4-17 of the Draft EIS.*** Impacts to the scenic aspects of the river: USEPA suggests discussing specific visual impacts and mitigation in Area #2 where scenic values are likely to be impacts by a new bridge, including discussion of possible context-sensitive design elements. ***As noted in Draft EIS Table 6.1 (response to NPS comments dated May 27, 2004), bridge design and river crossing details will be developed in Tier 2, at which time, visual impact assessment, as necessary, will be conducted following FHWA guidelines (Visual Impact Assessment for Highway Projects, Office of Environmental Policy, undated; Publication No. FHWA-HI-88-054). Appropriate context sensitive design solutions at the proposed river crossing will be developed based on consideration of environmental, community and engineering issues, and input from the public and other resource agencies. Mitigation will be developed, as necessary based on assessment of findings and public input and***

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	agency coordination. Visual mitigation measures, if required, will be developed during the detailed design phase and included in the final project plans. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS. Preliminary evaluation of cumulative impacts regarding the scenic/aesthetic value of the LMR is presented in Draft EIS Chapter 5.6. Visual impact from the proposed new river crossing as related to USDOT Section 4(f) constructive use are addressed in an FHWA letter to DOI dated September 19, 2005 (see Appendix C). Consideration of Option 2: USEPA recommends revising the DEIS discussion of Option 2 to include factors that led to its being omitted from further consideration; explain why Option 2 is not feasible, using information in the MIS and linking it to the decision against evaluating its full environmental impacts fully as another alternative. ***As described in the Draft EIS, "Option 2" for a possible highway river crossing was developed and evaluated in the MIS planning phase of work for ability to meet long-range regional transportation need. Like many other specific options evaluated and dismissed in the MIS phase (including, for example, high-speed ferry boat commuter service on the Ohio River between Coney Island and downtown Cincinnati, or exclusive busway between downtown Cincinnati and Fairfax, or extensive HOV lanes on I-275 and I-471), this option was found not to adequately address the long-range transportation needs of the region and, in consideration of technical analyses appropriate to the MIS planning work as well as stakeholder and public input, was not recommended as part of the long-range plan for the region (and therefore was not included as part of the reasonable alternative array for the Draft EIS). The planning process history and context of the project, including this particular option as well as others eliminated in planning, was part of the information presented to the public at the beginning of the NEPA process, and was also part of the information provided to cooperating state and federal agencies in the scoping process. Further discussion of this issue is provided in Section 2.5.1 of this FEIS.*** Cumulative and secondary impacts: USEPA recommends the FEIS address the following cumulative and/or secondary impacts for Area #2: cumulative impacts of a new bridge with regards to scenic values; secondary impacts of the relocated SR 32 regarding the potential for new development (in addition to the mentioned infill and brownfields), including known measures that may prevent additional development in current greenspaces such as zoning or limited access controls; cumulative and secondary impacts associated with removal of riparian woodland in Area #2 near the LMR. ***Secondary and cumulative impacts are described for Area #2 in Draft EIS Chapter 5.2.5, pages 5-40 to 5-42; resource-specific secondary and cumulative impacts including those associated with features in Area #2 were described in Draft EIS Chapter 5.6, pages 5-79 to 5-88; and updated secondary and cumulative impact information is presented in Section 1.4.4 of this Final EIS. Included in these discussions are mention of access controls along relocated SR 32 for limiting development, and current development in the Ancor area and potential future clean-up of adjacent landfills as specific examples of where infill may occur in the area. Also, as noted in the above response, details for the multi-modal corridor through Area #2 will not be developed until Tier 2, at which time avoidance and minimization of impacts to visual, riparian, and other environmental resources will be more specifically evaluated, including secondary and cumulative impacts. In addition, the preliminary mitigation strategy for the Eastern Corridor, discussed in Chapters 5.6.4 and 8.3.2 of the Draft EIS, provides opportunity for addressing these types of impacts. Appropriate mitigation will be developed in Tier 2, as necessary based on assessment of findings and agency coordination. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.*** Endangered species: USEPA notes that removal of forested land near the bridge crossing may affect habitat for bald eagle or Indiana bat, and recommends early coordination with USFWS to avoid or minimize impacts. ***Chapter 6.2 of the Draft EIS summarizes the results of coordination with USFWS conducted in Tier 1. Coordination will be continued***

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	in Tier 2 for compliance with provisions of the Fish and Wildlife Coordination Act (48 stat. 401, as amended; 16 USC 661 et seq.), Section 7 of the Endangered Species Act of 1973, as amended, and the U.S Fish and Wildlife Service's Mitigation Policy. Field surveys to determine populations or potential habitat for these species will also be conducted in Tier 2, as appropriate. Specific avoidance and minimization measures will be developed following agency coordination, and incorporated into final project plans, as necessary. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS. Wetlands: USEPA's primary interest is that Tier 2 development stages continue to avoid or reduce wetland impacts, especially natural or forested features; in Tier 2, it may be appropriate to look at spanning wetlands as well as the river itself. ***Site specific wetland avoidance and minimization will continue to be evaluated in Tier 2, and, as necessary, mitigation will be developed as part of the 404/401 permit process and included in final project plans. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.***
Ohio Department of Natural Resources January 5, 2005 (email) RE: review of Tier 1 Draft EIS	ODNR notes that listed comments have been prepared under authority of the Fish and Wildlife Coordination Act, the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws. Specific comments are summarized below: Rare and endangered species: ODNR provides current Natural Heritage Database records for the project vicinity. ***Acknowledged. Based on these updated records, information presented in the Draft EIS changes as follow: Carolina willow – status changes from State Threatened to State Potentially Threatened; red-eared slider – status changes from State Monitored to de-listed; few-flowered tick trefoil – status changes from State Potentially Threatened to de-listed; elephant ear mussel – status changes from State Monitored to State Endangered; mooneye – status changes from State Special Interest to de-listed.*** Fish and wildlife: ODNR DOW recommends the following: avoid impacts to unique wildlife habitat, especially along the LMR; if in-stream work is needed, avoid it from April 15 to June 15 to reduce impacts to fish reproduction; design the project to have no impact on mussels or their habitat; contact ODNR Cane Creek Research Station to stay current on information regarding presence of bald eagles in the area., and contact USFWS if a nest is located within ½ mile of the project. ***These measures will be further evaluated and developed in Tier 2, coordinated with ONDR, and incorporated into the project design or included as notes in the final plans as appropriate. Coordination was conducted in 1998 and, more recently in February 2005, to determine if bald eagle nests occur in the area, and none were noted; this coordination will continue through the Tier 2 process. These commitments are included in this Final EIS.*** Scenic Rivers: ODNR Scenic Rivers staff offers 5 specific comments with regard to ORC Section 1517.16, including 1) no storage of fuels, etc. in LMR floodplain; 2) no removal of riparian vegetation within 120 feet of the LMR's OHW or within 50 feet of any LMR tributaries; any disturbed areas should be reforested with native trees; 3) develop a sediment and erosion control plan, with particular attention given to drainage ways that could convey sediment-laden waters to the LMR; do not use straw bales as erosion control and seed and mulch denuded areas within 7 days; 4) stream crossing for utilities should be accomplished by directional borings and access excavated material should be disposed of above the 100-year LMR floodplain; and 5) crossing of tributaries should be clear spans whenever possible and roadway approaches should be elevated above the 100-year floodplain. ***These measures will be further evaluated and developed in Tier 2, coordinated with ONDR Scenic Rivers for approval, and incorporated into the project design or included as notes in the final plans as appropriate. These commitments are included in this Final EIS.*** ODNR offers 4 specific comments with regards to required mitigation for a relocated SR 32 bridge/crossing of the LMR, including: 1) fee simple purchase of undeveloped land or

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	placement of conservation easements over lands adjacent to relocated SR 32; 2) clear spanning of the LMR with no in-stream work and elevation of all roadway sections in the 100-year floodplain to allow for unimpeded passage of the 100-year flood event; 3) implementation of stringent Best Management Practices for bridge construction in cooperation with Scenic Rivers staff; and 4) additional site-specific mitigation as the project develops. It is understood that these mitigation requirements will be further developed in Tier 2. ***These mitigation measures will be further evaluated and developed in Tier 2, coordinated with ONDR Scenic Rivers, and included in the mitigation design as practicable. These commitments are included in this Final EIS.*** Watershed planning: ODNR Division of Soil and Water recommends 5 measures for integrating and linking to local watershed programs, including: 1) coordinate with local planning efforts currently co-sponsored by ODNR and OEPA on the East fork and LMR; 2) link local watershed planning with regional planning efforts such as OKI and SORTA; 3) link with local municipalities, counties etc. to incorporate NPDES Phase II stormwater management plans, drinking water protection plans, greenspace, etc; 4) this project provides an opportunity to set a precedent of state support for local comprehensive watershed planning; 5) use local endorsed plans and plans pursuing endorsement for targeting mitigation projects; add to page 11 of the DEIS, under Preliminary Mitigation and Environmental Commitments, language regarding contacting local watershed coordinators, including the East Fork Little Miami River Watershed and Little Miami River Partnership. ***The preliminary mitigation strategy for the Eastern Corridor, discussed in Chapters 5.6.4 and 8.3.2 of the Draft EIS, and the preliminary environmental commitments listed in this Final EIS, provide opportunity for these types of watershed strategies; mitigation details will be further developed in Tier 2, and fully evaluated and coordinated through the 404/401 permit process, and with OEPA and other state and federal agencies, as applicable.*** Navigation and Boating: ODNR Division of Watercraft recommends navigational markers be placed in the LMR during construction. ***Commitment to place navigational markings or other appropriate measures along the river to alert canoeists and other users that construction activities are occurring in the area is included in this Final EIS.*** Special Flood Hazard Area: ODNR notes that portions of the project will likely be located in a Special Flood Hazard Area, and that the local floodplain coordinator be contacted, as listed on ODNR's website. ***Commitment to conduct all required floodplain coordination, permit application and minimization/mitigation in Tier 2 is noted in Chapter 8.4 of the Draft EIS, and is included in this Final EIS.***
Agency coordination meeting (NPS, FHWA, ODNR, ODOT) January 31, 2005 RE: review of Tier 1 Draft EIS	An agency coordination meeting was held January 31, 2005 to discuss agency concerns and regulatory issues pertaining to the crossing of the Little Miami River. Basic outcomes include the following: 1) ODOT/FHWA will furnish to NPS a more complete package of information on the "Beechmont" (Option 2) MIS evaluation. ***This information was provided to NPS in a memo dated April 18, 2005, and is also summarized in Section 2 of this FEIS.*** 2) NPS will furnish to FHWA/ODOT by early February their amended comments (from December 7, 2004) on the Tier 1 DEIS. The FHWA has agreed to extend the comment period to accommodate these comments. ***Supplemental comments from DOI / NPS were received April 18, 2005 (see below).*** 3) NPS will provide, in a package separate from the Tier 1 DEIS comments (#2), specific information that will allow the ODOT/FHWA to plan for and evaluate factors that contribute to ORV's and may cause adverse effect (quantifiable attributes that were in place in 1980 when the designation was made that contribute to consideration of effect), including: • The 1980 study with the ORV's and the levels identified, (including those that the lower portion did not possess that resulted in its being not eligible).

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	• Identification of the ORV's that were improved, and the levels that they reached when the lower portion was designated a Wild and Scenic River. • The methodology/criteria used by the NPS to evaluate each ORV as improved or degraded. ***This information from NPS is pending, is not critical to the Tier 1 NEPA decision, and, as agreed to at the January 31 meeting, will be considered in scoping and conducting the Tier 2 NEPA work .*** 4) NPS confirmed that a bridge crossing does not automatically constitute an adverse effect; *however:* • NPS related that to date, in evaluating new crossings of designated rivers, NPS has judged in all cases that direct and adverse impact occurs where an existing bridge has not been removed in exchange for a new crossing. • NPS position is that widening an existing bridge or a new bridge in an existing corridor is better than a new bridge in a new corridor under the Act, regardless of external factors or considerations. • Tributary stream actions can trigger adverse effect if they cause detriment to values at confluence of designated mainstem (NPS to furnish specific on this as well per #3). The standard applied to tributaries is "unreasonably diminishes" the values. Section 7 is not triggered unless the project is categorized as a "water resource project". This is defined as a project that either impacts the "bed and banks" of the mainstem, or the cumulative impacts of actions of the tributaries unreasonably diminishes the values of the mainstem. NPS will furnish to ODOT/FHWA the factors and criteria contributing to determining affect (including values and dimensions specific to this segment) so that appropriate consideration may be made (consistent with Item #3). ***This information is pending and will be considered in the scoping and conduct of the Tier 2 work.***
Federal Transit Administration March 10, 2005 Review of Tier 1 Draft EIS	FTA comments on the Tier 1 Draft EIS include the following: 1) Displacements and environmental justice – FTA expresses concern regarding the number of potential displacements by highway and rail components of the project, and notes that the Draft EIS should give percentages of low income and minority residences and businesses that would be displaced. ***This level of analysis will be completed in Tier 2 as alternatives are further developed.*** 2) Bus rapid transit – FTA requests clarification on whether bus rapid transit was evaluated as an alternative to the proposed rail alternatives. ***Bus rapid transit was evaluated during the MIS phase of the project, and eliminated from further consideration (as summarized in Chapter 3 of the Draft EIS).*** 3) Cost/benefit analysis – FTA asks whether the cost/benefit analysis being developed for the project will be available for review prior to commencement of the Tier 2 document. ***A copy of the cost/benefit analysis will be forwarded to FTA as requested; preliminary findings of the benefit/cost analysis are presented on the Eastern Corridor project website (www.easterncorridor.org).***
U.S. Department of the Interior / National Park Service April 18, 2005 RE: Review of the Tier 1 Draft EIS	DOI notes that NPS retains Section 7(a) responsibilities under Section 2(a)(ii) of Wild and Scenic Rivers Act, and, as such, is serving as a cooperating agency in preparation of the Draft EIS for this project. DOI GENERAL COMMENTS: Comment re: MIS planning process (DOI, page 2): DOI (NPS) comments that they were not formally notified of key decisions made during the Eastern Corridor MIS planning process, and their absence appears to be in conflict with metropolitan area rules for transportation planning outlined in 23 CFR 450, specifically Section 450.316(a)13 – consult with permit agencies; Section 450.316(b)(5) – provide for involvement of local, state and federal environmental

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	resource and permit agencies, as appropriate; and Section 450.318(b), (c) and (d) - provide affected public/permit agencies an opportunity to participate and establish the range of alternatives evaluated. ***This comment was addressed previously (see response to NPS letter dated December 7, 2004, comment "a" [above]).*** Comment re: MIS Option 2 (DOI, page 3): DOI comments that, unless it can be demonstrated that Option 2 (from the MIS phase of work) is fatally flawed or is not a feasible (reasonable) alternative, they recommend consideration be given to the preparation and distribution of a supplement to the EIS to provide public and agency decision makers with a detailed, rigorous analysis of the Option 2 alternative, including a comparative analysis to Option 1. ***Please see Section 2.5.1 of this Final EIS for further explanation regarding decision on MIS Option 2.*** Comment re: environmentally preferred alternative (DOI, pages 3-4): DOI comments that improvement or expansion of existing corridors across the LMR (Option2) or a new bridge adjacent to an existing crossing would likely be found to be the environmentally preferred alternative if analyzed in detail and compared to alternatives requiring construction of a new bridge in a new corridor, and recommends identifying the environmentally preferred alternative at this stage of the planning process. ***Please see Section 2.5.1 of this FEIS for comparison of river crossing alternatives.*** Comment re: avoidance of impacts to fish and wildlife, and compensatory mitigation (DOI, page 4): DOI comments that avoidance of impacts to fish and wildlife and their habitats should be a high priority as ODOT develops final project plans, and that compensatory mitigation should be provided concurrently with project construction, or where possible, in advance of such construction. ***All required coordination and conservation measures regarding fish and wildlife impacts will be conducted as necessary in Tier 2 for compliance with provisions of the Fish and Wildlife Coordination Act (48 stat. 401, as amended; 16 USC 661 et seq.), Section 7 of the Endangered Species Act of 1973, as amended, and the U.S Fish and Wildlife Service's Mitigation Policy. Specific avoidance, minimization and mitigation measures, as necessary, will be developed following agency coordination, and incorporated into final project plans.*** DOI ENDANGERED SPECIES ACT COMMENTS: Updated information on federally listed species (DOI, page 4-5): DOI provides updated guidance, along with applicable past guidance, for considering potential impacts to Indiana bat. ***Acknowledged. Commitments regarding continued agency coordination and avoidance and minimization of impacts to federal and state listed species were described in Draft EIS Chapter 8, and are included in this Final EIS.*** Surveys for listed and candidate species (DOI, page 5): DOI comments that they look forward to continued coordination and consultation in planning of Tier II surveys for threatened and endangered species, and cautions ODOT to avoid making irreversible commitments in its planning – for example, should federally listed species be found on preferred alignments, formal consultation under section 7 of the Endangered Species Act might be necessary. ***Coordination with resource agencies will be continued in Tier 2 for compliance with provisions of the Fish and Wildlife Coordination Act (48 stat. 401, as amended; 16 USC 661 et seq.), Section 7 of the Endangered Species Act of 1973, as amended, and the U.S Fish and Wildlife Service's Mitigation Policy. Field surveys to determine populations or potential habitat for listed species will also be conducted in Tier 2, as appropriate. Specific avoidance and minimization measures will be developed following agency coordination, and incorporated into final project plans, as necessary. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.***

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	DOI SECTION 4(f) AND SECTION 6(f) COMMENTS: Summary comment re: Section 4(f) Department of Transportation Act (DOI, page 7): DOI comments that until a section 4(f) evaluation is developed and provided to the Department for review, that they cannot concur that there is no feasible and prudent alternative to the use of a section 4(f) protected resource identified in the project area, including the LMR, and cannot concur that the action includes all possible planning to minimize harm to 4(f) resources resulting from such use. ***Section 4(f) applicability to the LMR is addressed in an FHWA letter to DOI dated September 19, 2005 (see Appendix C), in which FHWA concludes that: a) the project avoids direct use of this Section 4(f) resource by commitment to clear span the LMR and avoid any permanent or temporary impacts during construction, and b) activities, features and attributes that qualify the LMR for protection under Section 4(f) are not substantially impaired, therefore constructive use does not exist. Section 4(f) evaluation and coordination will be re-evaluated in Tier 2, as necessary, during further alignment development. These commitments were described in Draft EIS Chapter 8 and are included in this Final EIS.*** Comments re: Section 6(f) Land and Water Conservation Fund Act (DOI, page 7-8): DOI provides background information on Section 6(f) (L&WCF) and Section 10 (UPARR) legislation, and notes that ODNR and Cincinnati Park Board should be contacted to determine if the project could have any impact to any L&WCR or UPARR program projects. ***Acknowledged; this information is also included in Chapter 5.4 of the Draft EIS. Coordination will be conducted in Tier 2, as appropriate, when alternatives are further developed.*** DOI WILD AND SCENIC RIVERS ACT COMMENTS: WSRA General Comments (DOI, page 8): DOI provides background information on the LMR's designation as a state-administered river under Section 2(a)(ii) of the WSRA, and its ORVs. ***Acknowledged. This information is included in the Draft EIS (Chapters 4 and 5).*** Comments re: Protecting the Little Miami River ORVs (DOI, pages 9-10): DOI expresses concern that the draft EIS recommends a new highway crossing the LMR rather than using an existing corridor, and comments that a new bridge would "significantly and substantially impact the scenic values of the LMR". ***Measures for protecting the Little Miami River will be further evaluated and developed in Tier 2, and all required coordination, evaluation and approvals applicable to the Little Miami River will be conducted during Tier 2, including continued coordination with NPS and ODNR Scenic Rivers, as appropriate. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.*** DOI comments that the proposed new bridge would degrade the recreational experience on the LMR by creating a major new visual intrusion on the natural scene and by generating noise, and that the severity and magnitude of the visual and recreational impacts are so great that they cannot be significantly mitigated. ***FHWA, in a letter to DOI dated September 19, 2005 (see Appendix C) has determined that, based on available data, the visual and recreational values of the LMR will not be substantially impaired by the proposed project. As described in the Draft EIS, the Little Miami River in the project vicinity flows through an urban area and does not exhibit pristine natural conditions (compared to the upper reaches of the stream in Greene and Warren Counties), but is characterized by riparian clearing and bank disturbances from adjacent land fill and agricultural land uses, a sewer line easement, and crossing by a high tension transmission line. Bridge design and river crossing details will be developed in Tier 2, at which time, visual and recreational impacts will be re-assessed, as necessary, and appropriate context sensitive solutions will be developed in coordination with ODNR, NPS and other appropriate state, federal and local agencies. Mitigation measures will be developed, as necessary, based on assessment of findings and agency coordination and included in the final project plans. These commitments were described in Draft EIS Chapter 8, and***

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	are included in this Final EIS. Opportunity exists for enhancement of stream conditions in the project vicinity due to the broad-based joint cooperation effort among local communities through the Eastern Corridor Land Use Vision Plan and Green Infrastructure Master Plan (see Section 3.1). ***Since circulation of the Draft EIS, existing ambient noise readings and a preliminary analysis of future noise readings along the LMR based on best available information was conducted in order to address noise impacts as related to USDOT Section 4(f) applicability, and it was determined that noise impacts needed to constitute a Section 4(f) constructive use are not present; this information is summarized in the FHWA letter to DOI dated September 19, 2005 (see Appendix C). Detailed noise and vibration studies will be conducted during Tier 2 in accordance with all state and federal guidelines when alignments are further developed and receptors are more specifically identified.*** DOI comments that the project will result in secondary development which will increase impervious surface and runoff into the LMR, appreciates the fact that a land use vision plan has been developed to help manage growth and minimize adverse environmental impacts, and recommends strict adherence to local zoning which protects the LMR ORVs. ***Draft EIS Chapter 5.6.2, pages 5-72 to 5-75, describes expected future development in the Eastern Corridor, summarizing findings from the Eastern Corridor Economic Analysis and Eastern Corridor Land Use Vision Plan that support the conclusion that secondary development is not expected to occur as inadvertent, uncontrolled sprawl, but as planned, desirable development, primarily infill by nature, consistent with local and regional planning, and supported by the transportation network. Commitments to adhere to local zoning requirements in further project development are included in this FEIS. In addition, opportunity exists for greenspace and green infrastructure enhancement along the Little Miami River bottom area, as being developed and supported by the local community through the Eastern Corridor Land Use Vision Plan and Green Infrastructure Master Plan, including potential opportunities for riparian restoration, agricultural and/or conservation easements, new bikeway connections, new river access and cultural resources protection.*** <u>Comments re: Section 10(a) management responsibilities (DOI, page 10):</u> DOI notes that State of Ohio is required to protectively manage the LMR, pursuant to Section 10(a) of the WSRA (which establishes an ant-degradation and enhancement policy for designated rivers) and, as a 2(a)(ii) river, DOI relies on the State to manage the LMR to meet requirements of the WSRA, including ensuring ORVs are protected and enhanced. ***Measures for protecting the Little Miami River will be further evaluated and developed in Tier 2, and all required coordination, evaluation and approvals applicable to the Little Miami River will be conducted during Tier 2, including continued coordination with NPS and ODNR Scenic Rivers, as appropriate. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.*** <u>Comments re: Section 7(a) applicability (DOI, pages 10-11):</u> DOI emphasizes that it is the responsibility of NPS to determine if a proposal is subject to Section 7 review, and notes that all construction activities on the LMR or its tributaries, temporary or otherwise, which are considered “water resource projects” will require evaluation pursuant to Section 7(a) of the WSRA. ***This comment was addressed previously (see response to NPS letter dated December 7, 2004 , comment ”c” [above] and Section 2 of this FEIS).*** DOI comments that the LMR river channel is actively meandering in the proposed bridge crossing area which could affect bank integrity near bridge piers, and that corrective maintenance activities could require Section 7 review, and requests that a hydrological assessment be conducted. ***Studies will be conducted in Tier 2 following ODOT’s Specifications for Subsurface Investigations, ODOT’s Geotechnical Engineering Design Checklists and/or other appropriate analyses, to identify underlying conditions in the***

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	Little Miami River valley to be used in bridge location and design, and this information will be used to develop appropriate measures for avoiding impacts to bank integrity. These commitments are included in this Final EIS. DOI ENVIRONMENTAL IMPACT STATEMENT COMMENTS: EIS General Comments (DOI, page 11): DOI recommends including LMR as a stand-alone impact topic. ***The LMR is presented as a sub-topic in Draft EIS Chapter 4.1.4 (description of existing LMR conditions), Chapters 5.3.4 and 5.5 (Section 4(f) and Section 7 applicability), and Chapter 5.6.4 (cumulative impacts). This comment was previously made by NPS during review of the PDEIS, and as noted in the Draft EIS (Table 6.1), these broader topics are presented separately as stand-alone NEPA issues, and the LMR happens to fall under numerous NEPA-related topics. For these reasons, the DEIS is concluded to be appropriately and best organized in its current format.*** DOI comments that the general direct and indirect impacts to each of the LMR ORVs should be evaluated in Tier 1, that thresholds for each impact topic should be established to assist in determining differences between minor, moderate and major or other qualifying terms, and that NPS be provided an opportunity to review and provide internal agency comments to predicted impacts prior to the release of the Final EIS. ***Impacts to LMR ORVs are described in Chapter 5.6.4 of the Draft EIS and summarized in Section 1.4.4 of this Final EIS. NPS, through coordination conducted for this project, has agreed to provide threshold criteria for protection of water quality and values for which the river was designated. This information, along with evaluation of environmental, community and engineering issues, and input from the public and other resource agencies will be considered in Tier 2 to evaluate avoidance of impacts and develop impact minimization and mitigation measures pertaining to LMR ORVs, as appropriate.*** Comment re: Draft EIS, Page 1-19 (DOI, page 12): NPS requests clarification be made regarding their attendance at agency coordination meetings held January 17 and April 12, 2002, and clarification regarding dates of NOI publication date and initial public involvement meetings. ***Page 1-9 of the Draft EIS indicates that NPS was not in attendance at the January 17 or April 12, 2002 agency coordination meetings. As noted in the Draft EIS on pages 1-9 and 6-4, the NOI for the project was published in the Federal Register in May 21, 2002, just prior to the first round of public meetings held in late May-early June 2002.*** Comment re: Draft EIS, Page 4-17 (DOI, page 12): DOI recommends a full geologic assessment of channel migration and future movements in the proposed new corridor crossings to better understand current and future impacts to the river free-flowing condition and other ORVs. ***This comment and response is similar to a previous NPS comment (see four paragraphs above).*** Comment re: Draft EIS, Page 4-38 to 4-40 (DOI, page 12): DOI recommends that LMR be classified as a category A receptor in the noise analysis. ***This comment was previously addressed in the Draft EIS, Table 6.1. As noted in the Draft EIS, the lower LMR in the project crossing vicinity has a recreational classification, but is not subject to continuous or regular on-going public use. As such, the river itself is not considered to be a Category A receptor under current federal guidelines. However, several public parks occurring along the Little Miami River floodplain, where active recreational activities take place on a regular and scheduled basis (soccer fields, golf), are Category B receptors, including Clear Creek Park, Short Park, Little Miami Golf Center and Indian Valley Golf. As described in the Draft EIS Chapter 4.1.11, the Tier I noise evaluation consisted of a preliminary screening only - to determine potential noise receptors, indicating areas of noise sensitivity - not necessarily impact. Since circulation of the Draft EIS, existing ambient noise readings and a preliminary analysis of future noise readings along the LMR based on best available information was conducted in order to***

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	address noise impacts as related to USDOT Section 4(f) applicability, and it was determined that noise impacts needed to constitute a Section 4(f) constructive use are not present; this information is summarized in an FHWA letter to DOI dated September 19, 2005 (see Appendix C). Detailed noise and vibration studies will be conducted during Tier 2 in accordance with all state and federal guidelines when alignments are further developed and receptors are more specifically identified. Noise and/or vibration abatement measures, if required, will be developed during the detailed design phase of a project and included in the final project plans. Comment re: Draft EIS, Section 5.2.2 (DOI, page 13): DOI comments that a discussion of direct, indirect and cumulative impacts is absent from the discussion of Area No. 2. ***Preliminary evaluation of direct, secondary and cumulative impacts relative to Area 2 is included in Chapter 5.6 of the Draft EIS (see LMR stand-alone sub-topic).*** Comment re: Draft EIS, Page 5-35 (DOI, page 13): DOI comments that a more rigorous and quantitative visual impact analysis be included in the EIS, including direct, indirect and cumulative impacts, as well as a visual simulation be included. ***This comment was previously addressed in the Draft EIS, Table 6.1. As noted in the Draft EIS, bridge design and river crossing details will not be developed until Tier 2, at which time, visual impact assessment, as necessary, will be conducted following FHWA guidelines (Visual Impact Assessment for Highway Projects, Office of Environmental Policy, undated; Publication No. FHWA-HI-88-054), and mitigation will be developed, as necessary based on assessment of findings and agency coordination. Visual mitigation measures, if required, will be developed during the detailed design phase and included in the final project plans. Preliminary evaluation of cumulative impacts regarding the scenic/aesthetic value of the LMR is presented in Draft EIS Chapter 5.6. Visual impact from the proposed new river crossing as related to USDOT Section 4(f) constructive use are addressed in an FHWA letter to DOI dated September 19, 2005 (see Appendix C).*** Comment re: Draft EIS, Page 5-80 (DOI, page 13): DOI disagrees that controlled access will deter new development along the LMR without zoning controls or conservation easements, resulting in secondary impacts to the LMR and its floodplain due to increased development. ***As noted in response to a previous NPS comment (above), Chapter 5 of the Draft EIS describes expected future development in the Eastern Corridor, summarizing findings from the Eastern Corridor Economic Analysis and Eastern Corridor Land Use Vision Plan that support the conclusion that secondary development is not expected to occur as inadvertent, uncontrolled outcomes, but as planned, desirable development, primarily infill by nature, consistent with local and regional planning, and supported by the transportation network. The LUVP and related guide documents are being translated by local stakeholders to specific control measures, where appropriate, at the present time. In addition, opportunity exists for greenspace and green infrastructure enhancement along the Little Miami River bottom area, as being developed and supported by the local community through the Eastern Corridor Land Use Vision Plan and Green Infrastructure Master Plan, including potential opportunities for riparian restoration, agricultural and/or conservation easements, new bikeway connections, new river access and cultural resources protection.*** Comment re: Draft EIS, Page 5-82 (DOI, page 13): DOI comments that general impacts associated with staging area, access roads and other temporary structures for bridge construction should be discussed, particularly impacts to cultural resources. ***This level of impact analysis will be conducted in Tier 2 when alternatives are further developed (information on staging areas, access roads and temporary structures has not yet been determined). Commitment is made to avoid environmentally sensitive resources (including cultural resources) during temporary actions associated with construction.***

TABLE 6. AGENCY COMMENTS ON THE DRAFT EIS AND RESPONSES

Agency and Date	Summary of Agency Comments and Response or Decision *(in bolded italics)*
	DOI SUMMARY COMMENTS: DOI reiterates previous comments regarding: evaluating an existing LMR crossing corridor in Tier 1; that a new crossing in a new corridor appears to conflict with WSRA Section 10 management objectives; that NPS's preliminary section 7 determination is that a new crossing corridor would likely have a direct and adverse affect on the LMR; that avoidance of impacts to fish and wildlife be high priority and compensatory mitigation be provided concurrently with or in advance of project construction; and that the Final EIS should not be completed until a draft Section 4(f) consultation has been completed. ***These comments are addressed above.***
Federal Highway Administration to U.S. Department of the Interior September 19, 2005 RE: Resolution of issues pertaining to Little Miami River	This letter from FHWA summarizes results of coordination efforts to resolve resource agency comments on the Draft EIS, specifically resolution pertaining to applicability of WSRA Section 7(a) and USDOT Section 4(f) to the Little Miami River as a result of the proposed crossing of this feature. This coordination letter is included in Appendix C.

2.5. KEY ISSUES AND RESOLUTION

This section of the Final EIS addresses the key topical issues raised by public and agency review of the Tier 1 Draft EIS, as reflected in the comment summaries included in Sections 2.3 and 2.4 above. None of the comment period issues have precipitated substantive changes to the information presented in the Draft EIS. However, some issues required explanatory responses or, in some cases, additional investigation to clarify or supplement information that was included in the Tier 1 draft document (these being summarized in this Section 2.5).

Minor changes and updates to the Tier 1 draft document have been made that address questions and incorporate new information received since its circulation. These revisions are documented in appropriate sections of this Final EIS, as described in Section 1.1.

2.5.1. River Crossing Alternatives

Issue: A number of comments received from the U.S. Department of the Interior/National Park Service (NPS) and, to a lesser extent, the USEPA, on the Tier 1 DEIS had to do with concerns related to a new river crossing as recommended in the Major Investment Study that concluded the planning phase of this project, and as now being evaluated and further developed in the EIS phase. Both agencies requested more information as to why "Option 2" from the MIS was dropped from consideration in the planning phase of work. The NPS expressed general opposition to a new Little Miami River crossing, and requested that the Tier 1 environmental document either: a) include Option 2 from the Major Investment Study/planning phase of work (which consisted of an expanded bridge and new bridge elements in an existing river crossing corridor) in the Tier 1 environmental evaluation, or b) further clarify why Option 2 was omitted from further consideration in the planning phase.

Response: This issue is addressed in the following paragraphs, tabulation and illustrations providing clarification of why Option 2 was eliminated from consideration during the MIS phase.

As described in the Draft EIS, MIS work for the Eastern Corridor was conducted by the OKI Regional Council of Governments and followed USDOT guidelines and metropolitan area rules for transportation planning per 23CFR450(c). The MIS considered a broad range of information, including performance and environmental factors and public and stakeholder input, in recommending long-range improvements for the Eastern Corridor. Technical analyses, including consideration of environmental factors, were at a scale and level of detail appropriate for the regional transportation planning issues under consideration. Local, state and federal agency stakeholders were invited to participate in the process. ODNR, as administrator of state wild, scenic and recreational river areas under Section 1517 of the Ohio Revised code, and administrator of the state component of the national system under Section 2(a)(ii) of the National Wild and Scenic Rivers Act, represented scenic rivers issues and concerns as an active member of the MIS Task Force. The Department of the Interior National Park Service became a cooperating agency in the Eastern Corridor Tier 1 NEPA phase of the project, at their request.

"Option 2" for a possible highway river crossing, which consisted of expansion and modification of an existing crossing corridor oriented along the Beechmont Levee, was developed and evaluated in the MIS planning work for ability to meet long-range regional transportation need. Like many other specific options evaluated and dismissed in the MIS phase (including, for example, high-speed ferry boat commuter service on the Ohio River between Coney Island and downtown Cincinnati, or exclusive busway between downtown Cincinnati and Fairfax, or extensive HOV lanes on I-275 and I-471), this option was found not to adequately address the long-range transportation needs of the region and, in consideration of technical analyses appropriate to the MIS planning work as well as stakeholder and public input, was not recommended as part of the long-range plan for the region, and therefore not included as part of the reasonable and feasible alternative array for the Draft EIS.

The Eastern Corridor MIS was a collaborative effort involving key federal, state and local stakeholders and the public working together to identify and agree on a transportation solution for the area. The findings and recommendations of the MIS/planning phase were approved and accepted by the MPO board (OKI), adopted into the region's long range transportation plan, and forwarded for continuation and further development in the Eastern Corridor Tier 1 NEPA process. Overall, the Eastern Corridor MIS process, including elimination of "Option 2" and other corridor-level and management strategy alternatives due to inability to meet regional transportation need, was conducted according to federal transportation planning guidelines. The MIS/planning phase history and context of the project has been included in information that was: a) presented to the public at the beginning of the NEPA process and subsequent public involvement activities; b) provided to and reviewed with cooperating state and federal agencies in the scoping process; and c) summarized in the Tier 1 Draft EIS.

Beyond this, an effort has been made in the following paragraphs and illustrations to recapitulate and expand on the considerations that led to elimination of "Option 2" for the river crossing corridor in the planning phase, as well as to confirm that decision based on information and factors updated and available in the EIS phase.

Figure 3 illustrates, on current project-area mapping, the two corridor/river crossing options identified in concept in the MIS planning phase, including common starting and ending points near Newtown and at the US 50 interchange near Fairfax. "Option 1" (which is the recommended

corridor from the MIS planning phase and is the basis of the scope of this EIS), extends directly northwest, with a roughly perpendicular crossing of the Little Miami River, to a connecting point at US 50 and the Red Bank Road/Relocated SR 32 corridor (this figure illustrates, in concept, one possible location and configuration alternative; the full range of current feasible alternatives is illustrated and described in Chapter 3 of the Tier 1 Draft EIS). "Option 2" (which was considered and dropped in the planning phase) extends westward from the Newtown area first generally along existing SR 32 (incorporating existing right-of-way), and then sweeping northward into the Beechmont Levee crossing corridor (again, incorporating existing right-of-way), crossing the LMR using a combination of an expanded existing structure and new bridge elements to the immediate north to accommodate minimum geometric requirements.

Figures 4 and 5 illustrate, at larger scale, the extent of footprint and local features at the complex northwest and southeast "ends" of the Beechmont Levee corridor in "Option 2". Both options incorporate and accommodate the multi-modal transportation components outlined in the Tier 1 Draft EIS.

Below is a tabulation of comparative factors that highlight fundamental differences in performance, impact potential and feasibility between the "Option 1" and "Option 2" corridors. This tabulation, which is provided here as an updated planning-level comparison, incorporates information from the MIS/planning period of study for the two options augmented, where available, with information from the Tier 1 EIS work. Impact information on specific features, for example, is updated from environmental inventory information compiled for the overall Eastern Corridor (including the "Option 2" area) at the beginning of the Tier 1 NEPA work.

Comparative Factor	**"Option 1" in MIS – Recommended Corridor**	**"Option 2" in MIS – Beechmont Levee Corridor**
Regional Transportation	• Better orientation with regional travel origins and destinations, access points for different modes (reflected in extent of benefit to local and interstate routes; see below) • More benefit to important local routes and critical interstate routes (see Figures 6a, 6b, and 6c, and further discussion below) • Provides an additional, efficient east-west river crossing to supplement the existing network without increasing demand on existing over-capacity crossings; establishes a more reliable system with more routing and river crossing options in the event of incidents or road closures • More effective for goods and services/truck freight demands	• Not as well oriented with regional travel demand origins and destinations or access points for different modes (reflected in extent of benefit to local and interstate routes; see below) • Not as much benefit to important local routes and critical interstate (see Figures 6a, 6b, and 6c, and further discussion below) • Not as many routing and river crossing options; adds no new east-west roadway connectivity to regional network at critical (river crossing) pinch points, increases travel demand on existing over-capacity pinch points (including Beechmont Levee), and provides fewer alternative routes in the event of incidents or road closures • Not as effective for goods and services/truck freight demands

Comparative Factor	"Option 1" in MIS – Recommended Corridor	"Option 2" in MIS – Beechmont Levee Corridor
	entering east side of metro area (this will provide a new, effective connection at a mid-point between US 52/Eastern Avenue and I-71 for movement of goods and services to and from the Cincinnati urban area	entering east side of metro area (US 50/Columbia Parkway is truck-prohibited at point of interchange with Beechmont Levee, and the only two primary routes for commercial traffic to the Cincinnati urban area are US 52/Eastern Avenue along the Ohio River and, to the far northeast, I-71, with circuitous secondary connections via US 50 and local arterials)
	• Shorter, more direct and efficient travel length for SR 32 corridor (1.7 miles); at an assumed average route speed of 45 mph and a corridor point-to-point daily travel demand of 20,000 vehicles per day, Option 1 would result in one-half million less vehicle operating hours per year than Option 2	• Much longer, indirect and circuitous travel length for SR 32 corridor (4.8 miles); at an assumed average route speed of 45 mph and a corridor point-to-point daily travel demand of 20,000 vehicles per day, Option 2 would result in one-half million more vehicle operating hours per year than Option 1
	• No substantial 2020 AM or PM peak traffic volume increases expected compared to Option 2 (see Figure 6a)	• Expected to result in 2020 AM or PM peak traffic volume increases of 10% or more compared to Option 1 on segments of several major roadways and the interstate, including US 50, Newtown Road, Beechmont Ave (SR 125), Five Mile Road and I-471 (see Figure 6a)
	• Provides a 5% or greater congestion reduction (2020) compared to Option 2 on segments of many major roadways and the interstate, including SR 32, US 52, Beechmont Ave (SR 125), Clough Pike, I-275 and I-471 (see Figure 6b)	• No substantial congestion reduction (2020) compared to Option 1 (see Figure 6b)
	• Provides a 5% or greater delay reduction (2020) compared to Option 2 on segments of several major roadways and the interstate, including US 50, Newtown Road, Clough Pike, US 52, I-275 and I-471 (see Figure 6c)	• No substantial delay reduction (2020) compared to Option 1 (see Figure 6c)

Comparative Factor	"Option 1" in MIS – Recommended Corridor	"Option 2" in MIS – Beechmont Levee Corridor
Conformance with Regional Plans	• Included in and consistent with OKI's constrained and conforming long-range plan	• Not included in OKI's(the regional MPO) long-range regional transportation plan, therefore not fiscally constrainted or conforming with regional air quality
Impacts on Other Transportation Facilities	• No expected encroachment on Lunken Airfield flight path clear zone, although FAA coordination will be required in Tier 2 work	• Possible adverse encroachment on FAA flight path clear zone requirements for Lunken Airfield, which directly abuts the west edge of Beechmont Levee; at minimum, lighting, mast, vegetation and/or signage will need to be restricted to meet approach clearance requirements
Impacts on Little Miami River bed and banks	• Requires a new crossing, consisting of a clear span structure or structures (for highway and rail) in a single footprint area • No impact on bed and banks	• Requires widened Beechmont Levee Bridge (pier and foundation work in water), as well as another new crossing or crossings to the north for directional roadway ramps and rail transitway (see Figure 5); single footprint impact area may be achieved for new crossing by closely paralleling road and rail (rail transitway geometric control, and will result in more parkland take), but clear span structure or structures most likely difficult due to geometric requirements and bridge curvature, therefore likely requiring piers and other in-stream work; clear span may be achievable by reducing geometric factors, but will result in further spread of impact corridor and likely further increase in parkland take • Impact on bed and banks
Impacts on Little Miami River recreational use	• No adverse impact on existing canoeing or fishing patterns or access; clear span crossing in a compact area (about 400 l.f. of river length) generally less visually intrusive to river users	• Requires expansion of existing bridge piers in river; connecting roadway would impact popular existing river access point to east river bank area (fishing area); in-stream piers and multiple

Comparative Factor	"Option 1" in MIS – Recommended Corridor	"Option 2" in MIS – Beechmont Levee Corridor
		crossing areas (for directional roadway ramps and rail transitway) spread along a greater (compared to Option 1) length of river generally more visually intrusive to river users (in-stream work and multiple crossing points spread over roughly 1200 l.f. of river length)
Other river corridor proximity and crossing considerations	• Transportation corridor avoids closely paralleling LMR, and provides for a simpler, more compactly configured crossing • Crosses at or near an existing utility crossing (high-tension power lines) with no encroachment on riparian parkland or recreational elements	• Transportation corridor closely parallels LMR for 1,500 l.f. in approach to complex crossing configuration • Crosses at or near an existing roadway crossing, but encroaches on riparian parkland and recreational elements
Number of Other USGS Stream Crossings	• One USGS unnamed feature (no OEPA designation)	• Two OEPA Warmwater Habitat streams (McCollough Run, Clough Creek)
NWI Wetlands	• One NWI emergent feature	• None
Impacts on Parks	• Impacts 2 public facilities (Clear Creek Park, Little Miami Golf Center)	• Impacts 6 public facilities (Armleder Memorial Park, Airport Playfield, CPB-LMR Elstun Easement, Little Miami River Access, Clear Creek Park, Little Miami Golf Center)
Impacts on National Register (NR) Cultural Resources	• Potential impacts to 1 NR District (Hahn Archaeological District)	• Potential impacts to 2 NR Districts (Clough Creek and Sand Ridge Archaeological District and Hahn Archaeological District) • Impacts 1 NR Individual Property (Turpin Site – possible mound involvement) • Potential additional historic property impacts in Linwood and along SR 32

Comparative Factor	"Option 1" in MIS – Recommended Corridor	"Option 2" in MIS – Beechmont Levee Corridor
Impacts on Communities and Neighborhoods	• Avoids communities and built-up areas • Displaces an estimated three businesses and two single-family residences	• Rework of existing Wilmer/Wooster and US 50 connections and rail transit connections required in this area will physically disrupt historical central core of Linwood community (businesses and residences), including low income areas, and encroach on residential areas along edge of Mt. Lookout and Mt. Washington communities • Displaces an estimated 13 businesses, 81 single-family residences, 12 two-family residences, two multi-family apartment residences, and seven institutional properties (church, school, and public utility buildings)
Land Use Issues	• Consistent with Eastern Corridor Land Use Vision Plan and local land use plans • Provides substantial opportunity for greenspace and "green infrastructure" enhancement in river plains area, as being developed and supported by the local community through the Eastern Corridor Land Use Vision Plan and Green Infrastructure Master Plan, including potential opportunities for: riparian restoration, agricultural and/or conservation easements, new bikeway connections, new river access, cultural resources protection, etc	• Not consistent with Eastern Corridor Land Use Vision Plan or local land use plans • Provides less opportunity for greenspace and "green infrastructure" enhancement in river plains area (primarily developed)
Utilities	• High-tension power line (aerial) may require modification • Maintenance of service during construction not a major consideration	• Complex subsurface and aerial utilities network along key parts of corridor • Maintenance of service during construction a major consideration

Comparative Factor	"Option 1" in MIS – Recommended Corridor	"Option 2" in MIS – Beechmont Levee Corridor
Costs	• The MIS planning work estimated the cost of this option to be less expensive than "Option 2"; current estimate, including appropriate geometrics and multi-modal components, is in the order of $71.8 million, including right of way.	• The MIS planning work estimated the cost of this option to be more expensive than "Option 1"; current estimate, including appropriate geometrics and multi-modal components, is in the order of $159.5 million, including right of way.
Constructability and Maintenance of Traffic	• This option is "new location" and would not disrupt existing river crossings or the region's major arterial or freeway system. There are no maintenance of traffic issues, and would allow the construction approach and methods to be optimized for impact minimization relative to the river. • No maintenance of traffic issues or complexities, or increased demand due to re-routing or detours, placed on Beechmont Levee or other existing river crossing • Construction period would be anticipated to be of shorter duration compared to Option 2, with less duration-related construction-period impacts	• This option would be effectively "overlain" on an existing Level of Service "F" facility that is critical to east-west movement in the region, and would be difficult to construct without sacrificing either impact minimization or maintenance of traffic, including adverse effects on the regional freeway and major arterial system. • At least partial traffic would need to be maintained on Beechmont Levee to minimize local access impacts and regional system congestion during construction, also placing additional demand on other existing river crossings due to construction-period re-routing and demand-management detours (the only proximate river crossing options are Newtown Road 2 miles to the north and Kellogg Avenue 2 miles to the south, both already with congestion problems) • Because of MOT issues and complexities, construction period duration would be longer, with attendant duration-related construction-period impacts (e.g., erosion and siltation)
Finding and Recommendation of Eastern Corridor MIS Task Force (confirmed by public and OKI Board; 1999 and 2000)	• Feasible strategy for meeting regional transportation need; carry forward to PE/EIS phase (develop location alternatives within general recommended corridor)	• Not a feasible strategy for effectively or appropriately meeting long-term regional transportation need; drop from further consideration (no further evaluation in NEPA phase)

The MIS/planning work considered a broad range of information in concluding that "Option 2" was not a feasible corridor-level strategy for addressing the long-range transportation needs of the region. The primary focus of this conclusion was performance, particularly regarding the shortcomings of Option 2 in several key areas important to addressing regional transportation need:

- The fact that the existing Beechmont Levee facility is starting at a 1995 (and predicted 2020) Level of Service of "F", and that Option 2 would rely on accommodating east-west regional travel demand on this already overloaded facility
- Looking "downward" into the regional network, Option 2 would provide substantially less benefit to key congested local routes (including Beechmont Avenue; Figure 6b),
- Looking "upward" into the regional network, Option 2 would provide less benefit to key congested major interstate segments (including I-275 and I-471; Figure 6b), and
- Option 2 would provide substantially less benefit to many key local routes and the interstate regarding reduction in delays (Figure 6c).

Option 2 was also viewed from the standpoint of being more costly and as resulting in a less favorable impact scenario for both the natural and built environment. In a practical and intuitive sense, these factors were well understood by the involved stakeholders and public, and contributed to informed decision-making by the MIS Task force. The 58-member Task Force guiding the MIS/planning work concluded that the "Option 2" corridor was not reasonable in response to regional transportation need and not supportable or implementable as local strategy, and forwarded only the "Option 1" corridor for further development in the NEPA/EIS phase.

In total, the "Option 2" offers no advantages in any comparative category. This review of the MIS/planning phase decision confirms that "Option 2" does not appropriately or reasonably meet the transportation purpose or the long-term regional transportation need for the Eastern Corridor, and does not warrant further consideration in the NEPA phase of work. Alternatives within the "Option 1" corridor will be further developed and evaluated in the Tier 2 work as described in this Tier 1 Final EIS.

2.5.2. Additional Environmental Analyses

Issue: A common issue in the comments received had to do with the request for additional environmental studies and/or impact information for various resources, such as: air quality, noise, visual impacts, threatened and endangered species, highway runoff and vehicular pollution, water quality, floodplain and aquifer impacts, and cultural resources.

Response: This issue is addressed by clarifying project approach. As noted in the Draft EIS and described in Section 1.3 of this Final EIS, the Eastern Corridor is being conducted in a two-tiered (two-part) environmental process. The Council on Environmental Quality refers to tiering as "covering general matters in broader environmental impact statements, with subsequent narrower statements or environmental analyses incorporating, by reference, the general discussions, and concentrating solely on issues specific to the statement subsequently prepared" (40 CFR 1508.28). FHWA refers to tiering as "an option available to organize analysis and decision-making in complex circumstances in a way that takes into account the different geographic scope and timing for different decisions" (June 18, 2001). The Eastern Corridor was determined to warrant a tiered environmental approach due to the complexity involved in developing, coordinating and implementing the multi-modal transportation recommendations identified from the Major Investment Study.

A tiered process customized for the Eastern Corridor was developed with guidance and scoping input from FHWA, FTA and resource agencies. Tier 1, which is the subject of this environmental document, addresses broad issues such as project purpose and need, developing preliminary alternatives, identifying important environmental resources in the area, assessing preliminary ranges of impacts for general location corridors, and public input. Coordination was conducted with resource agencies early in project development to determine environmental sampling methods and level of effort appropriate for the Tier 1 analysis. This coordination resulted in the development of Tier 1 environmental work plans that outlined strategy of work, scope of field studies to be conducted in Tier 1, documentation methods, and level of resource agency review, with the understanding that more detailed studies would be completed in Tier 2. The Tier 1 environmental work plans are included in Appendix A of the Draft EIS.

Tier 2 work for the Eastern Corridor will complete the environmental process by preparing individual environmental documents for each of the projects carried through from Tier 1. Detailed analyses for the resources noted above, following state and federal requirements and methodologies, will be appropriately conducted in Tier 2 when more specific alignment details are developed, and detailed impact evaluation, preferred alternative selection, and mitigation plan development take place on a project-by-project basis. As such, all NEPA requirements regarding environmental studies, impact assessment, evaluation of alternatives, and mitigation will be completed by the end of Tier 2. Commitments to conduct detailed environmental studies to complete the NEPA process, by resource, are included in Section 3 of this Final EIS.

2.5.3. Section 7 Applicability – Wild and Scenic Rivers Act

Issue: An issue raised by several reviewers had to do with Section 7 review under the National Wild and Scenic Rivers Act, and resolution of its applicability pertaining to the proposed crossing of the Little Miami River.

Response: The Department of the Interior National Park Service is responsible for preparing a Section 7 determination of effect on rivers included in the national system for actions qualifying as federal water resource projects under the National Wild and Scenic River Act. As described in the Draft EIS and noted in Section 1.4.4 of this Final EIS, early coordination between ODOT, NPS, DOI and FHWA regarding Section 7 applicability concluded that Section 7 would not apply based on information available at this point in project development (which plans for a clear span crossing of the Little Miami and no impact or intrusion to the bed or bank below Ordinary High Water). This conclusion regarding Section 7 applicability has been reiterated in subsequent agency correspondence obtained during Tier 1 project development, including National Park Service letters to Ohio Department of Transportation dated May 27, 2004 and December 7, 2005, during an agency coordination meeting held January 31, 2005 and in an FHWA letter to DOI dated September 19, 2005. As project details are developed in Tier 2, Section 7 issues will continue to be monitored and fully coordinated with NPS and the appropriate federal agencies, as applicable.

2.5.4. Section 4(f) / 6(f) Issues

Issue: An issue raised by several reviewers had to do with the project's potential to traverse Section 4(f) resources pertaining to the Department of Transportation Act of 1966, and Section 6(f) resources pertaining to the Land and Water Conservation Fund Act, since Tier 1 decisions may render some impacts unavoidable, such as in the case of the Hahn Field Archaeological District; and requested that State Historic Preservation Office (SHPO) coordination be included in the environmental document.

Response: This issue is addressed by clarifying coordination conducted in Tier 1 and the circumstances surrounding the Hahn Site and other Section 4(f)/6(f) resources. As noted in Draft EIS, SHPO was involved early-on in the Tier 1 process during development of environmental work plans. It was determined during a strategy meeting held in August 2002 (and subsequent follow-up), and agreed upon between FHWA, ODOT and SHPO, that the SHPO would not be involved in official review of the Eastern Corridor Tier 1 environmental document, but would become involved during Tier 2 of the project when more specific alignments were developed, direct impacts were better defined, and the need for affect determination(s) could be identified. SHPO was in concurrence with the strategy outlined regarding Tier 1 cultural resources studies, and attended an informal follow-up meeting on October 29, 2002, where the project team and cultural resources consultant staff provided an update on the preliminary findings of Tier 1 cultural field investigations. SHPO was also provided a copy of the Tier 1 Draft EIS as a project information update, but did not submit formal comments on the document.

The Draft EIS notes that the project, especially the Ohio 32/Wooster West area encompassing the Little Miami River floodplain area near Newtown, contains a number of Section 4(f) and 6(f) resources potentially impacted by feasible alternatives under consideration, including several National Register Districts and public-owned parks. Avoidance of encroachment on these resources was conducted to the extent possible during development of feasible alternative in Tier 1. However, the Hahn Archaeological District is expected to be encroached upon by the project regardless of alternative, although with varying degrees of encroachment. It should be noted that official National Register boundaries for the Hahn District date back to 1974, and cover a broad, rectangular, generally defined area covering about 690 acres. While past excavations, disturbances and information from local landowners have indicated a possible range of features within the district boundaries, comprehensive studies have never been conducted to determine the actual location, extent and significance of archaeological resources remaining in this area, or to confirm possibly more accurate boundaries for the overall district. Further studies conducted during Tier 2 will be required to determine the extent of archaeological resources present on the site, and possible refinement of the National Register boundaries may be proposed.

Overall, Section 4(f) is expected to be an important issue in the Ohio 32/Wooster West area of the Eastern Corridor due to the number and proximity of known cultural resources and parkland. Avoidance of one resource, for example, will in some circumstances result in encroachment on another Section 4(f) or 6(f) resource in the same vicinity, especially along the Little Miami River floodplain in the area west of Newtown. Appropriate studies and agency coordination for compliance with Section 106 of the Historic Preservation Act, Section 4(f) of the 1966 DOT act, and other applicable state and federal regulations will be conducted in Tier 2, and detailed Section 4(f)/6(f) analyses, will be prepared at that time, as necessary. Avoidance and minimization of impacts to these resources will be further evaluated in Tier 2, and mitigation will be developed, as necessary, based on agency input. These commitments are included in this Final EIS (see Section 3).

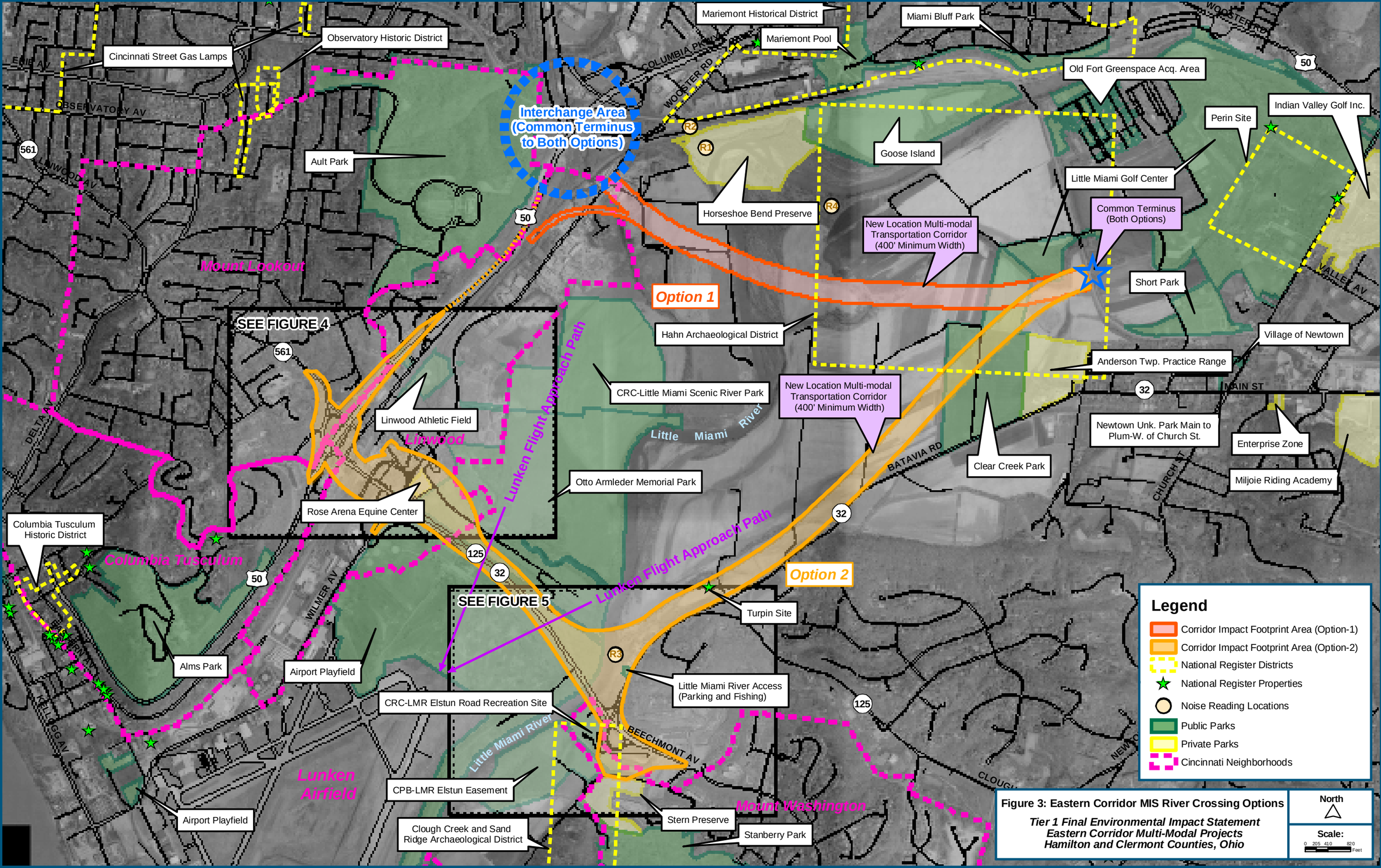


Figure 3: Eastern Corridor MIS River Crossing Options

Tier 1 Final Environmental Impact Statement
Eastern Corridor Multi-Modal Projects
Hamilton and Clermont Counties, Ohio

Transition to Existing Four-lane Section on US 50

Linwood Athletic Field

561

LINWOOD AV

50

COLUMBIA PKWY

WOOSTER RD

CRC-Little Miami Scenic River Park

Mount Lookout

Multi-level Directional Ramps and Rework of Existing Connections Required this Area

Transition to Existing Four-lane Section on US 50

EASTERN AV

Linwood

Otto Armleder Memorial Park

Rail Transit Connection and Geometric Transition Area

BEECHMONT AV

Rose Arena Equine Center

Multi-level Directional Ramps and Rework of Existing Connections Required this Area

Rail Transit Connection and Geometric Transition Area

Columbia Tusculum

Complex Rework of Wilmer/Wooster Connection Required this Area

125

32

50

Airport Playfield

Complex Rework of Wilmer/Wooster Connection Required this Area

Legend

- Corridor Impact Footprint Area (Option-2)
- National Register Districts
- National Register Properties
- Public Parks
- Private Parks
- Cincinnati Neighborhoods

Figure 4: MIS Option 2 at Beechmont / US 50

Tier 1 Final Environmental Impact Statement
Eastern Corridor Multi-Modal Projects
Hamilton and Clermont Counties, Ohio

North

Scale:

Transition to 5-Lane Section this Area (Center Reversible Lane)

125

32

Otto Armleder Memorial Park

New Bridge Required this Area for Rail Transit

Turpin Site

BATAVIA RD

32

CLOUGH RD

Airport Playfield

Little Miami River Access (Parking and Fishing)

New Bridge Required this Area for Directional Ramps

Widening of Existing Bridge to Downstream Side Required (In-stream Pier Work)

Popular Bank-fishing Area (green dashed line)

Clough Creek and Sand Ridge Archaeological District

CRC-LMR Elstun Road Recreation Site

Rework of Geometric and Capacity Deficiencies Required this Area

Rework of Geometric and Capacity Deficiencies Required this Area

CPB-LMR Elstun Easement

Little Miami River

Stern Preserve

Mount Washington

Legend

- Corridor Impact Footprint Area (Option-2)
- National Register Districts
- National Register Properties
- Public Parks
- Private Parks
- Cincinnati Neighborhoods

Figure 5: MIS Option 2 at Beechmont / SR 32

Tier 1 Final Environmental Impact Statement
Eastern Corridor Multi-Modal Projects
Hamilton and Clermont Counties, Ohio

North

Scale: 0 75 150 300 Feet

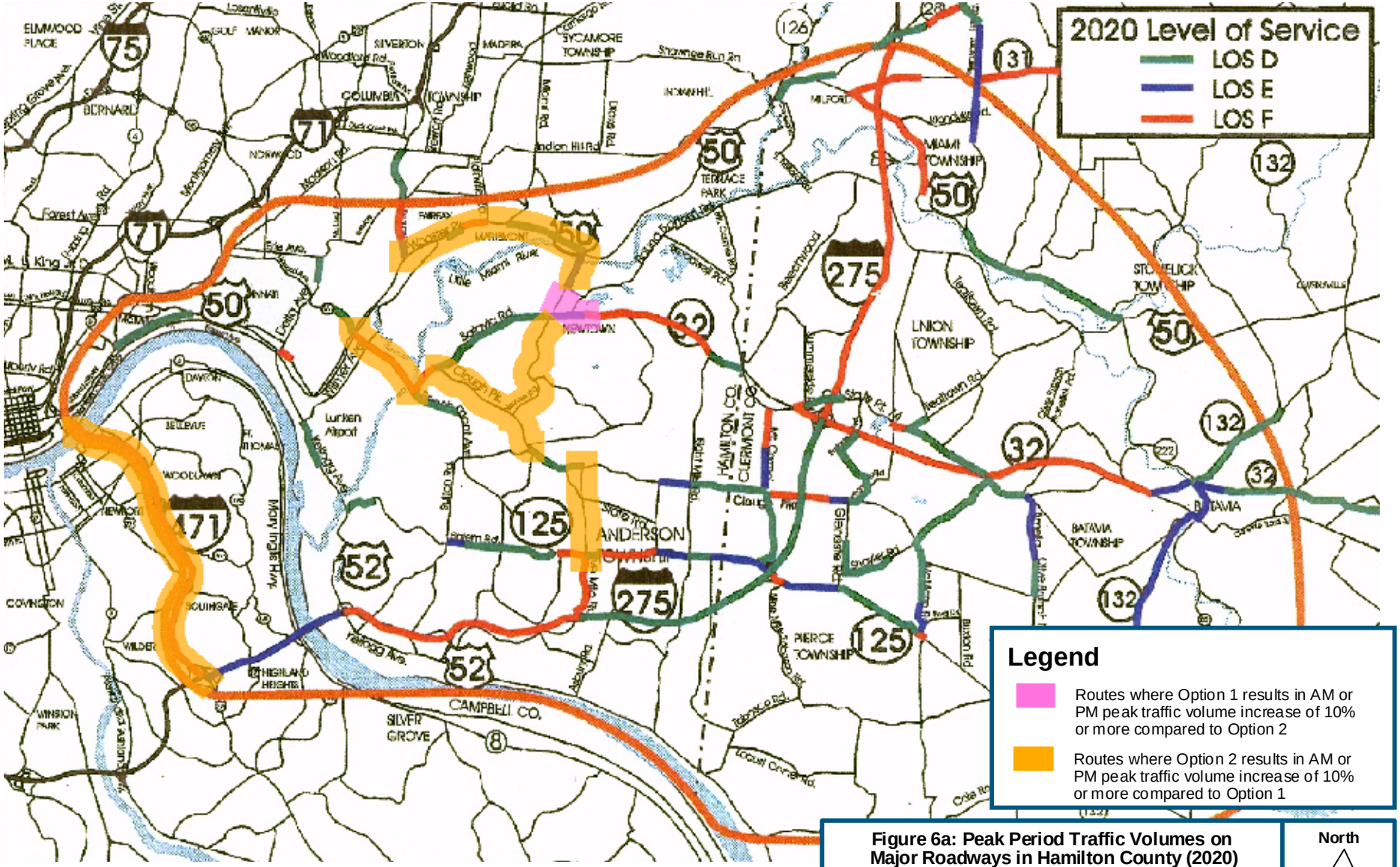


Figure 6a: Peak Period Traffic Volumes on Major Roadways in Hamilton County (2020)

Tier 1 Final Environmental Impact Statement
Eastern Corridor Multi-Modal Projects
Hamilton and Clermont Counties, Ohio

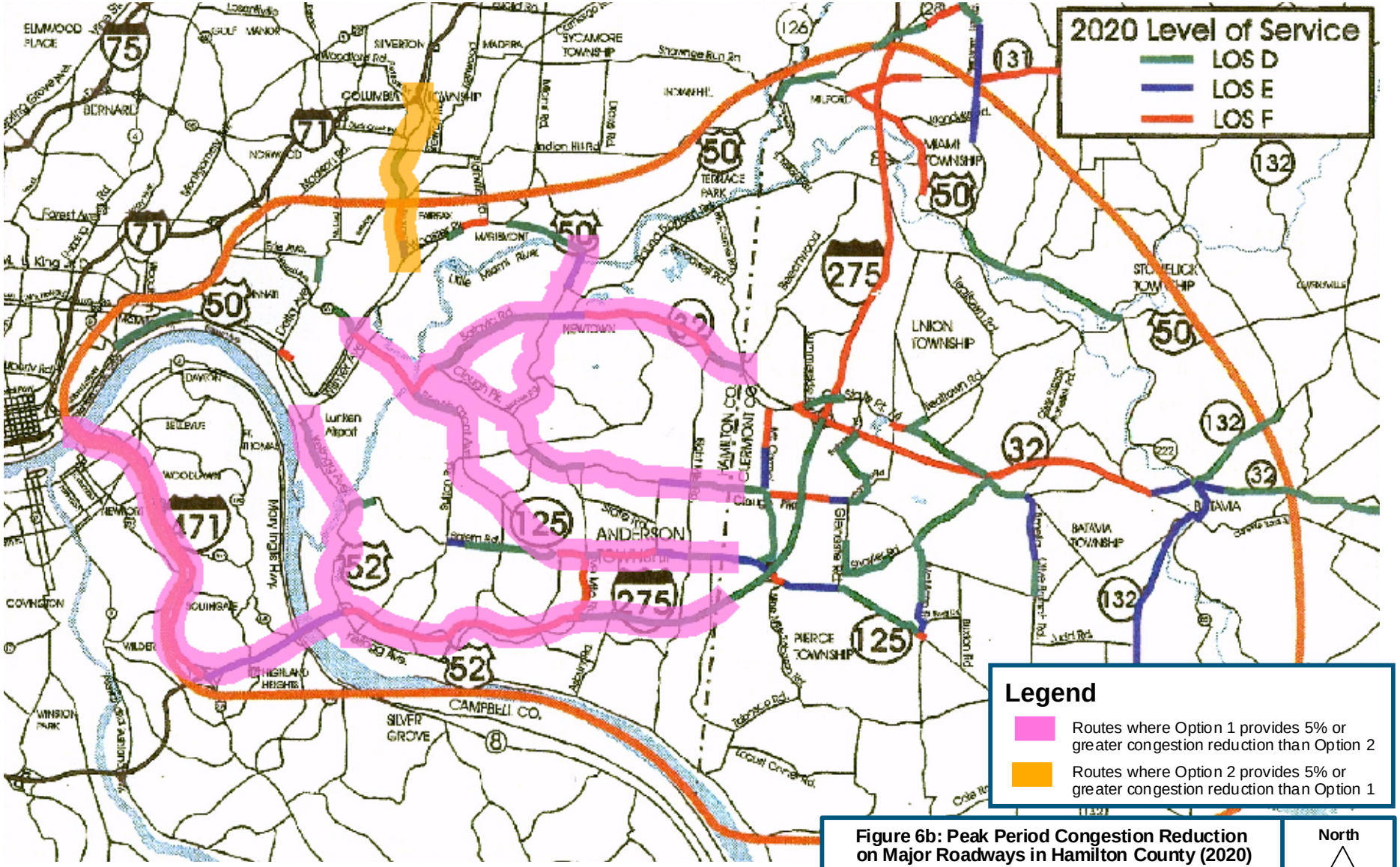


Figure 6b: Peak Period Congestion Reduction on Major Roadways in Hamilton County (2020)

Tier 1 Final Environmental Impact Statement
Eastern Corridor Multi-Modal Projects
Hamilton and Clermont Counties, Ohio

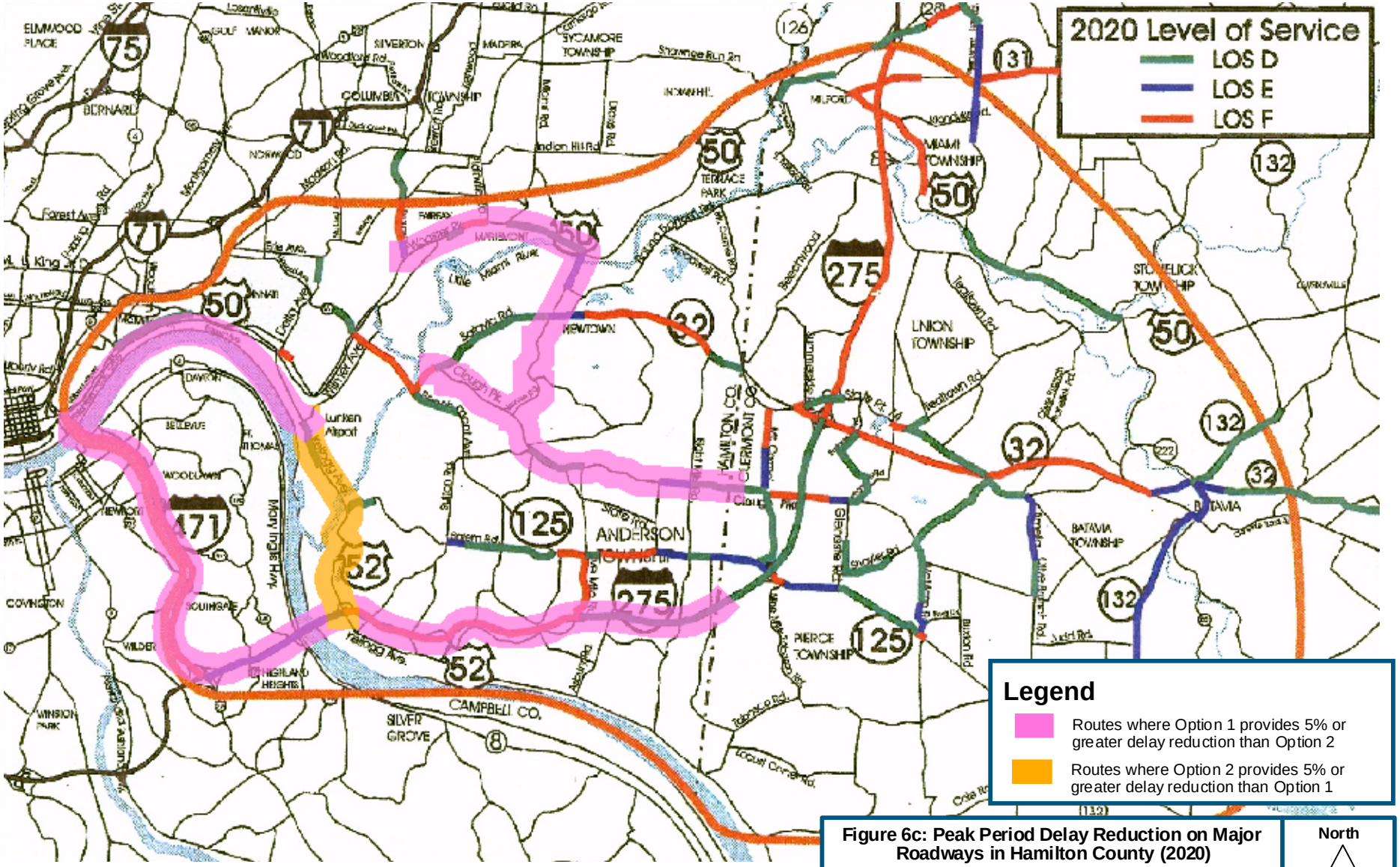


Figure 6c: Peak Period Delay Reduction on Major Roadways in Hamilton County (2020)

Tier 1 Final Environmental Impact Statement
Eastern Corridor Multi-Modal Projects
Hamilton and Clermont Counties, Ohio

3. UPDATES TO THE PRELIMINARY ENVIRONMENTAL MITIGATION STRATEGY AND ENVIRONMENTAL COMMITMENTS

3. UPDATES TO THE PRELIMINARY ENVIRONMENTAL MITIGATON STRATEGY AND ENVIRONMENTAL COMMITMENTS

The preliminary environmental mitigation strategy and preliminary environmental commitments for the project were described in Chapter 8 of the Draft EIS, and are summarized below. *Updates based on new information received and comments obtained during the Draft EIS review period are depicted in italics.*

3.1. PRELIMINARY ENVIRONMENTAL MITIGATION STRATEGY

Chapter 8 of the Draft EIS describes how river crossing and greenspace and corridor preservation in the Eastern Corridor were recognized as important issues by the public and resource agencies during the MIS phase of the project, through the land use vision process, and into the Tier 1 work program. Since the beginning of project development, it has been noted that emphasis be placed on avoidance, minimization and mitigation of impacts to environmentally sensitive resources in the area, and there is expectation by the project stakeholders, local communities, and resource agencies that this commitment for mitigation be carried forward into more detailed development in Tier 2. As such, commitment is made to develop an environmental mitigation plan for the project during the Tier 2 work program in conjunction with more detailed alignment development, preferred alternative selection, permit preparation, agency coordination, and stakeholder and public input efforts. The project mitigation plan will be consistent with state and federal requirements, and may be in part administered at the local level in conjunction with other local preservation, mitigation or enhancement plans, with a combination of local, state and/or federal funding, as applicable.

Key components of the Eastern Corridor environmental mitigation plan, described in Chapter 8 of the Draft EIS, include six components: address project impacts; integrate mitigation with local programs; establish multi-jurisdictional and multi-agency participation; provide opportunity for a diverse funding source, using locally available resources as well as traditional transportation funding; and exemplify proactive environmental stewardship.

These six components are being incorporated in the project implementation framework currently being developed, as described in Section 4 of this Final EIS, and will be carried forward into the Tier 2 work for further refinement. Current work has focused on the development of a green infrastructure plan for the area, as described below.

Green Infrastructure Concept Master Plan

A green infrastructure joint planning effort is currently underway in the Eastern Corridor, administered under local jurisdiction. This work is as a continuation of land use efforts established by the Eastern Corridor Major Investment Study and Eastern Corridor Land Use Vision Plan, and is being coordinated with the Eastern Corridor Tier 1 program. The local green infrastructure plan will dovetail with and provide opportunity to expand upon project-level compensatory mitigation efforts specific to transportation actions outlined in this FEIS. Recent work has included the establishment of a Green Infrastructure Planning Committee, through resolution of the Hamilton County Transportation Improvement District, for the purpose of developing a consensus green infrastructure plan for the Little Miami River Plains Focus Area. This joint planning effort builds on recommendations for this focus area from the Eastern Corridor Land Use Vision Plan, and provides a tool for the continued coordination of land use, green infrastructure and transportation planning elements within the Eastern Corridor. The Green Infrastructure Concept Master Plan,

completed by the Committee in February 2005, will be used by local communities in guiding future land use planning and community development, and will provide context for the refinement of alternatives and mitigation planning in the Eastern Corridor transportation investment area during Tier 2.

Key components of the Green Infrastructure Concept Master Plan (February 2005) include the following:

- *A Green Infrastructure Concept map depicting priority economic and community development, environmental protection and preservation, and transportation improvement needs identified for the area by the Committee;*
- *Identification of natural resource, community and cultural resource priorities for the Little Miami River Plains Focus Area and associated values;*
- *Identification of preliminary mitigation opportunities within the Eastern Corridor transportation investment area for riparian corridors, wetlands, cultural resources, and link with local projects;*
- *Description of preliminary measures for protecting values identified for the area, including protection measures and net benefit for: agriculture; communities and neighborhoods; geology; cultural resources; parklands, greenspace and recreation; scenic quality; water quality; and wildlife, fish and habitat - for use by local communities and in further Eastern Corridor project development;*
- *An implementation and funding strategy outline jointly developed by agencies with local jurisdiction; and*
- *Identification of key next steps for coordination and implementation of the Green Infrastructure Concept Master Plan within the Eastern Corridor.*

Overall, the green infrastructure plan is a continuation of environmental stewardship and context sensitive planning efforts being developed for the Eastern Corridor. This effort began with the MIS recommendation for development of a land use vision plan, continued into the Tier 1 work program through consideration and support of land use in alternatives development, and will continue in future planning as recommendations from the Master Plan guide protection and enhancement activities in the Little Miami River Plains of the Eastern Corridor and the planning efforts of local jurisdictions.

3.2. UPDATED ENVIRONMENTAL COMMITMENTS

The Tier 1 Draft EIS included a preliminary summary of environmental commitments for the project for further development in Tier 2. Commitments were updated based on public and agency input and new information obtained during the Draft EIS comment period, and are presented in Table 7 below. Environmental commitments will continue to be developed and updated as the project progresses through Tier 2, detailed design, agency review, and permit application. *Updates to information presented in the draft document are shown in italics.*

Table 7. Updated Environmental Commitments

Environmental Feature/Category	Commitment(s) for Further Development in Tier 2
Little Miami River	Minimization of adverse impacts to the Little Miami River are of special concern for the Eastern Corridor project, and development of specific mitigation measures, and agency coordination and approval, will be required due to its Exceptional Warmwater Habitat and state and national scenic river designations. The Eastern Corridor project involvement with the Little Miami River may require resource agency coordination in accordance with the following: Section 404 and Section 401 of the 1972 Federal Clean Water Act (as amended in 1977); Section 7 of the National Wild and Scenic Rivers Act; Section 1517.16 of the Ohio Revised Code (ODNR scenic rivers approval); and/or Section 4(f) involvement under the 1966 U.S. Department of Transportation Act (coordination with U.S. Coast Guard determined that Section 9 bridge permit [Rivers and Harbor Act] is not needed; see Draft EIS). Commitment is made in this Tier 1 environmental document to complete all required coordination, evaluation and permit application applicable to the Little Miami River during Tier 2. Commitment is also made to clear span the Little Miami River crossing area for shared roadway/transit use. In addition, commitment is made to further evaluate and develop (in Tier 2) mitigation measures for the Little Miami River. It is expected that a mitigation strategy will be consistent with state and federal requirements, and may be in part administered at the local level in conjunction with other local preservation, mitigation or enhancement plans, with a combination of local, state and/or federal funding, as applicable. Strategies under consideration at this time (based on Tier 1 resource agency coordination and stakeholder and public input), including the following: • Stream mitigation such as restoration, preservation or other measures within the Little Miami River watershed, which may include land acquisition, placement of conservation easements or other measures (to be determined during the 404/401 permit process). • Controlled access throughout this section of relocated SR 32, with no new access points through the Little Miami River crossing area (except for recreational purposes). • *Further project development conducted in Tier 2 will include evaluation of reasonable measures to avoid/minimize impacts to the 100-year flood event, in coordination with ODNR, NPS and/or other appropriate agencies.* • Develop stringent Best Management Practices for implementation during bridge construction (such as sediment and erosion control practices, project phasing, minimization of vegetation clearing, etc*.) and coordinate/comply with appropriate state, federal and local agency requirements (including ODNR Scenic Rivers) and local planning/zoning ordinances.* Include application of ODOT's Construction and Materials Specifications for temporary sediment and erosion controls (Item 207; ODOT, 2002) and adherence to the project Stormwater Pollution Prevention Plan (SWPP), *with particular attention given to drainage ways that could convey sediment-laden waters to the Little Miami River.* NPDES storm water permit application and coordination with OEPA will be conducted for the project for compliance with the Clean Water Act and current provisions of the Ohio Water Pollution Control Act (ORC Chapter 6111) per ODOT's Construction and Materials Specifications for environmental protection (Item 107.19; ODOT, 2002). • *Minimize removal of riparian vegetation within 120 feet of the Little Miami River OHW or within 50 feet of tributaries to extent practicable, and reforest disturbed areas with native vegetation.*

Table 7. Updated Environmental Commitments

Environmental Feature/Category	Commitment(s) for Further Development in Tier 2
	• *Cross tributaries of the Little Miami River with clear span structures whenever possible.* • *Place navigational markings or other appropriate measures along the river during construction to alert canoeists and other users that construction activities are occurring in the area.* • *Continue coordination with ODNR and NPS regarding threshold criteria for protection of water quality and values for which the river was designated, for use in Tier 2 to evaluate avoidance of impacts.* • *Conduct studies in Tier 2 following ODOT's Specifications for Subsurface Investigations, ODOT's Geotechnical Engineering Design Checklists and/or other appropriate analyses, to identify underlying conditions in the Little Miami River valley to be used in bridge location and design, and use this information to develop appropriate measures for accounting for channel activity and potential impacts.* • *Identify environmentally sensitive features in and along the Little Miami River (such a wetlands, special aquatic features, important geologic features, cultural resources, high quality riparian and riverbank areas, etc) as areas to be avoided during construction, including borrow and waste site selection and construction staging.* • *Evaluate using a watershed-level mitigation strategy that addresses impervious surface as it relates to stream degradation, incorporates greenspace and habitat preservation, restores disturbed areas such as brownfields, links with the planning efforts of local watershed and conservation groups, and uses watershed techniques and land suitability analyses for developing the various components of the mitigation plan.*
Other Streams	Site-specific stream impacts *and water quality impacts* will be determined on a project-by-project basis during Tier 2 of the Eastern Corridor study, and site-specific stream avoidance, minimization and mitigation measures *and surface water quality protection measures* will be evaluated as the project progresses through the NEPA process and detailed design in Tier 2. A final stream mitigation plan (as necessary for a Tier 2 project) will be developed as part of the 404/401-permit application process.
Floodplains	For Tier 2 projects involving floodplain encroachment, coordination with the appropriate local floodplain coordinator will be conducted during detailed design to assure that proposed structures meet local floodplain requirements for design and minimization/mitigation. Mitigation of floodplain impacts (as necessary) will be incorporated into project plans during detailed design based on this coordination and other agency review. All floodplain permits will be obtained prior to project construction. *Project plans will include notes to avoid storage of fuels and other potentially hazardous materials in the Little Miami River floodplain during construction, and disposal of excavated materials above the 100-year floodplain.*
Sole Source Aquifer (BVAS) and Public Water Supplies	Requirements of the federal Safe Water Drinking Act pertaining to sole source aquifers will continue to be satisfied throughout the project. During Tier 2 of the Eastern Corridor study, a Preliminary Screening Report will be prepared on a project-by-project basis, where warranted, and submitted to USEPA, and specific measures for protecting aquifer resources and public water supplies will be identified. Commitment is made to evaluate and develop the utmost protection measures during all remaining phases of a project, including detailed design, construction and operation and maintenance.
Wetlands	Detailed wetland delineations and site specific wetland impacts (including isolated wetland determinations) will be conducted on a project-by-project basis during Tier 2 of the Eastern Corridor study, and site specific wetland avoidance, minimization and mitigation measures will be evaluated as the project progresses through the NEPA process and detailed design in Tier 2. A final wetland mitigation plan (as necessary for a Tier 2 project) will be developed as part of the 404/401-permit application process.
Threatened and Endangered Species	Field surveys to determine the occurrence of populations or potential habitat for federal and state listed species will be conducted in Tier 2 on a project-by-project basis,

Table 7. Updated Environmental Commitments

Environmental Feature/Category	Commitment(s) for Further Development in Tier 2
	specifically for Indiana bat, running buffalo clover and bald eagle. All required coordination and mitigation will be conducted as necessary for compliance with provisions of the Fish and Wildlife Coordination Act (48 stat. 401, as amended; 16 USC 661 et seq.), Section 7 of the Endangered Species Act of 1973, as amended, and the U.S Fish and Wildlife Service's Mitigation Policy. Specific avoidance and minimization measures will be developed following agency coordination, and incorporated into final project plans, as necessary. *Coordination with ODNR regarding occurrence of bald eagle nests in the project vicinity will continue to be conducted through Tier 2 work.*
Fish and Wildlife	*Measures will be developed to avoid/minimize impacts to wildlife habitat, especially along the Little Miami River, and to avoid/minimize habitat fragmentation. Consideration will be given to avoid in-stream work (if it is needed) between April 15 to June 15 to reduce impacts to fish reproduction. Appropriate studies will be conducted, as necessary, to determine occurrence of mussels, and appropriate measures will be developed to avoid and minimize impacts on populations and habitat. Tier 2 work will also include evaluation of appropriate strategies for protecting wildlife following FHWA guidelines and agency input, such as evaluation of wildlife crossings, creation of transition habitat, fencing strategies, controlling invasive species, vegetation plantings and/or other appropriate measures.*
Parkland	Avoidance and minimization of encroachment on public parks and Section 4(f) and Section 6(f) evaluations will be further developed in Tier 2 on a project-by-project basis. Appropriate mitigation will be developed, as necessary, based on resource agency and local park district coordination during the Section 4(f) and 6(f) processes.
Hazardous Material Concern Sites	Environmental site assessment screenings (and any other required assessments) will be conducted in Tier 2 on a project-by-project basis. Unavoidable encroachment on an identified hazardous site will be mitigated according to all applicable federal, state and local requirements and agency coordination.
Land Use	Commitment is made through all remaining phases of projects carried forward into Tier 2 to consider, to the extent practicable, the goals and priority items identified through the Eastern Corridor Land Use Visioning process *and recommendations from the Eastern Corridor Green Infrastructure Concept Master Plan*, and to coordinate with the appropriate local jurisdictions for fit with local plans and requirements.
Farmland	*Measures will be developed during Tier 2 work to minimize loss of existing agricultural land and impacts to existing infrastructure (irrigation systems, wells, etc.) to the extent practicable, such as: follow existing property lines as much as possible; minimize construction limits through agricultural areas; provide sufficient access to agricultural remnants (avoid creating landlocked parcels); and take measures to avoid, to the extent possible, impacting existing irrigation system and private wells. Existing agricultural landforms (such as fence lines, tree lines, drainage features) will be incorporated into the project landscaping to the extent practicable.*
National Register Properties (Individual or District)	Commitment is made for Tier 2, on a project-by-project basis, to avoid impacts to known National Register properties to the extent practicable, and as necessary, additional field study will be conducted (such as for the Hahn Archaeological District), a Section 4(f) evaluation will be prepared and appropriate mitigation will be developed following coordination with resource agencies during the Section 4(f) process.
Other Historic or Archaeological Resources	Phase I field studies (and any other required assessments) will be conducted in Tier 2 on a project-by-project basis for compliance with Section 106 requirements, and Section 4(f) evaluation (avoidance, minimization and mitigation) will be conducted, as necessary; temporary structures or staging areas used during the construction period will avoid known cultural resource sites.
Potential Displacements (residential and/or commercial)	Projects carried forward into Tier 2 will be further developed to the extent practicable to minimize displacement of residences and businesses. Acquisition and relocation for all parties displaced by a project will be conducted in accordance with all applicable state and federal laws.

Table 7. Updated Environmental Commitments

Environmental Feature/Category	Commitment(s) for Further Development in Tier 2
Community Cohesion and Services	*Measures will be developed during Tier 2 work to locate transportation corridors and transit hubs to optimize community cohesion to the extent practicable. Design strategies to reinforce sense of place will be considered, such as: gateways into historic communities and/or the Little Miami River area; roadway landscaping and aesthetics such as placement of special lighting, signage and/or sidewalk design through communities; and aesthetic noise wall design. Public input will be obtained through the design phase to assure transportation plans are consistent with community needs and expectations to the extent possible. During project construction, noise control measures will be developed according to FHWA's Procedures for Abatement of Highway Traffic Noise and Construction Noise, and air quality impacts will be minimized during construction by strictly adhering to ODOT's specifications for Environmental Protection* and *Dust Control. A maintenance of traffic plan will be developed and implemented following: ODOT's Location and Design Manual and ODOT's Construction and Materials Specifications Manual, with particular attention regarding: maintaining fire protection/police emergency routing; proper signage and adequate safety measures for bike/pedestrian paths adjacent to or crossed by the construction corridor; and proper signage and adequate safety/traffic flow for vehicular traffic through the construction corridor.*
Environmental Justice	As in Tier 1 of the Eastern Corridor study, identified environmental justice populations/communities in the project area will continue to be addressed through the public involvement and impact assessment process for all projects carried forward into Tier 2 in accordance with Executive Order 12898 and the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) Policy for Environmental Justice (OKI 2001).
Air Quality	The project is located in the Cincinnati Air Quality Control Region under local metropolitan planning organization jurisdiction (OKI), and is in OKI's recently adopted FY 2004-2007 Transportation Improvement Plan (TIP). The TIP is consistent with the currently adopted regional long-range transportation plan (2030 Regional Transportation Plan), which is in conformity regarding air quality. Based on this, no individual air quality analysis is expected to be required for the proposed project alternatives carried forward into Tier 2.
Noise Associated with Roadway Improvements	For projects carried forward into Tier 2 that contain highway components, detailed noise analyses will be conducted in accordance with the Federal Highway Administration (FHWA) Title 23 Code of Federal Regulations Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise", FHWA guidance entitled "Highway Traffic Noise Guidance Policies and Written Noise Policies" (June 12, 1995), and the Ohio Department of Transportation Policy No. 21-001 (P) (October 22, 2001) and Standard Procedures No. 417-001 (SP) (September 17, 2001). Highway noise abatement measures, if required, will be developed during the detailed design phase of a project and included in the final project plans.
Noise and Vibration Associated with Rail Transit	For projects carried forward into Tier 2 that contain rail and bus transit components, detailed noise and vibration analyses will be conducted in accordance with Federal Transit Administration guidelines and methodologies (Transit Noise and Vibration Impact Assessment, April 1995). Noise and/or vibration abatement measures, if required, will be developed during the detailed design phase of a project and included in the final project plans.
Visually Sensitive Resources	For projects carried forward into Tier 2 that contain visually sensitive resources (as identified in Chapters 4 and 5 of the Draft EIS), visual impact assessment will be conducted following FHWA guidelines (Visual Impact Assessment for Highway Projects, Office of Environmental Policy, undated; Publication No. FHWA-HI-88-054), and mitigation will be developed, as necessary based on assessment findings and agency coordination. Visual mitigation measures, if required, will be developed during detailed design *following ODOT's Aesthetic Design Guidelines and public and agency input,* and included in the final project plans.

4. RECOMMENDATIONS FOR THE TIER 2 WORK PROGRAM

4. RECOMMENDATIONS FOR THE TIER 2 WORK PROGRAM

The goal of the Eastern Corridor Tier 1 work and this Tier 1 Final EIS is to identify feasible alternatives, across multiple modes, that meet the project purpose and need and that are to be carried forward into Tier 2 evaluation and further development. The Tier 1 work and this Tier 1 environmental document do not identify preferred alternatives or final actions for the different parts of the multi-modal plan.

This section of the Final EIS presents recommendations for actions to be included in the Tier 2 scope of work. Included are the following:

- a summary of the implementation strategy for the overall multi-modal program;
- a description of the feasible transportation alternatives, in various improvement categories or mode groups, to be carried through into Tier 2 for the next phase of evaluation; and
- a summary of the preliminary project financial strategy.

4.1. IMPLEMENTATION STRATEGY

The implementation strategy for the project is structured as a comprehensive long-term development framework for public and private investment in the Eastern Corridor. Regarding the multi-modal transportation improvements identified in this Tier 1 EIS, this framework is based on a "program-level" approach, where major new capacity improvements in highway and transit are coordinated with and benefited by a variety of local network improvements. Further, the implementation strategy anticipates bringing improvements on-line in segmented Tier 2 NEPA actions "by mode and project" in concert with resources, opportunities and priorities, but all consistent with the framework established in Tier 1. Planned implementation segments for the coordinated multi-modal plan for the Eastern Corridor are identified in this Tier 1 FEIS.

The Tier 1 work, which is the subject of this Tier 1 Final EIS, identifies corridor-wide transportation improvements, focusing on broad issues such as feasible alternatives within general modal corridors, performance, and preliminary environmental impacts and costs. The Tier 1 work also identifies actions of independent significance that, consistent with the Tier 1 multi-modal plan and alternatives framework, provide a framework for evaluating and implementing the required actions in smaller and more manageable, but fully coordinated, segments that account for land use, multi-modal transportation and environmental perspectives, as described in Section 4.2. below.

With the issuance of a Tier 1 Record of Decision (ROD), the Eastern Corridor will proceed with a series of separate Tier 2 environmental and design studies for each of the identified implementation segments ("by mode and project") with appropriate NEPA evaluations.

In this approach, as each Tier 2 environmental document is completed and approved within the coordinated multi-modal framework established in Tier1, final design and construction may begin for that project segment. The implementation strategy for the Eastern Corridor anticipates that the various parts of the multi-modal transportation program will be constructed in prioritized segments incrementally over time until all parts of the multi-modal plan are in place.

Based on this implementation strategy, Section 4.2 below identifies how individual but coordinated actions are scheduled to be carried forward into the Tier 2 work phase.

4.2. RECOMMENDATIONS FOR TIER 2

The Tier 1 action is a commitment to construct and implement the entire multi-modal plan over a period of time in logical, constructable segments as resources and opportunities permit. The Tier 1 EIS has identified ranges of costs and impacts for the different parts of the plan in development of feasible alternatives to be further refined in Tier 2 work. Final location and configuration for all parts of the plan (highway, rail, bus, local TSM projects) will be identified in Tier 2, along with final impact summaries and minimization/mitigation strategies. The focus of the Tier 2 work, "by mode and project", will be on impact minimization in the process of identification of a preferred alternative within the framework established in Tier 1. All of the segments implemented in Tier 2 will be: 1) fully reconciled with the Tier 1 decision for the multi-modal plan and 2) of independent significance.

Evaluation and implementation actions "by mode and project" in Tier 2 will be configured, by the general framework provided below and in the scoping process, so that a decision in one segment will not preclude options or alternatives related to impact minimization and other considerations in an adjacent segment. The Tier 2 work will be configured and conducted so that opportunities to minimize impacts are not precluded.

Summary of Recommendations By Mode

General recommendations, by mode, regarding the next phase of evaluation for feasible alternatives developed in Tier 1 include the following:

- Recommendation for New Highway Capacity: The recommendation is for all of the alternatives evaluated during the Tier 1 work phase for each of the Eastern Corridor new highway capacity segments to be carried forward into Tier 2 for further development and evaluation.

- Recommendation for Rail Transit: The Oasis Line is recommended as the primary corridor and near-term action for rail transit in the Eastern Corridor to be included in the core Tier 2 evaluation. The current recommendation for the Wasson Line is that this alternative, as recommended in the Eastern Corridor MIS, be part of the long-term project framework, with no immediate action in Tier 2 other than preservation of existing rail right-of-way for future transportation purposes .

- Recommendation for Expanded Bus: The expanded bus actions (primary routes) will continue forward in Tier 2 development under appropriate environmental evaluation and documentation administered at the local level. Hub development and related actions, including local circulator bus and related community issues, are recommended to be part of the core Tier 2 analysis framework.

- Recommendation for TSM: In the early part of Tier 2, it is recommended to update the TSM list as the project financial strategy is finalized and priorities for TSM are refined. TSM actions that are not of independent utility and that have minor localized impacts will be included in the core Tier 2 environmental evaluation for the Eastern Corridor. Other TSM actions will continue forward in Tier 2 project development under appropriate environmental evaluation and documentation administered at the local level.

- Recommendation for Bikeway: Bikeway actions will continue forward in Tier 2 development under appropriate environmental evaluation and documentation administered at the local level.

Summary of Actions for Tier 2 Evaluation

Table 8 describes the actions targeted for implementation and recommended for detailed evaluation in Tier 2 based on the strategy described in Section 4.1 and the summary of modal recommendations above. Included for each implementation action "by mode and project" are a description of the general limits, issues of utility and significance, and major features and components.

Table 8. Implementation and Tier 2 Evaluation Framework

NEW HIGHWAY CAPACITY

Recommendation: The feasible alternatives developed in Tier 1 will be carried forward into Tier 2 evaluation for impact minimization and identification of a preferred alternative, according to the project implementation segments described below:

Segment I: Red Bank Road, I-71 to US 50	**General Limits:** I-71/Red Bank Road interchange to the north and northerly tie-in to a new US 50/Red Bank road interchange to the south (this new interchange will be developed as part of Segment II – see below). **Utility and Significance:** Proposed improvements on Red Bank Road from I-71 to US 50, independent of other corridor investments, will provide increased capacity, improved access management, and improved safety on Red Bank Road within this portion of the Eastern Corridor consistent with regional and state transportation plans, transportation need, and project funding and construction considerations. **Description of the improvement:** Consolidate and manage access points along existing Red Bank Road and Red Bank Expressway to establish a controlled access arterial roadway from existing I-71/Red Bank interchange to US 50; total length is about 2.5 miles. Feasible alternatives to be further developed in Tier 2 are described in Chapter 3 of the Draft EIS, and include two basic highway mainline alternatives and two options for improvements to the local access roadway network.
Segments II / III: relocated SR 32, US 50 east to Bells Lane, with a new US 50/Red Bank/SR 32 interchange and planning for shared Oasis rail transit, transit hubs, and bikeway	**General Limits:** A new US 50/Red Bank Road interchange to the west (with tie-in into planned improvements in Segment 1, Red Bank Road) and SR 32 at Bells Lane to the east (with tie-in into planned improvements in Segment IV(a), I-275/SR 32 interchange). **Utility and Significance:** Relocated SR 32 between US 50 and I-275 in Eastgate, independent of other corridor investments, will provide increased capacity, improved access, improved safety, and improved connectivity within this portion of the Eastern Corridor consistent with regional and state transportation plans, transportation need, and project funding and construction considerations. **Description of the improvement:** Consolidate and manage access points to establish relocated SR 32 as a controlled access arterial roadway west of I-275; includes a new interchange at US 50/Red Bank Road/SR 32 in Fairfax and planning for multi-modal improvements, consisting of a parallel Oasis rail transit corridor, a new bikeway corridor, and a multi-modal clear span crossing of Little Miami River, and associated multi-modal transit hubs (at US 50 and at Newtown Rd); total length for roadway is about 6 miles. Feasible alternatives to be further developed in Tier 2 are described in Chapter 3 of the Draft EIS, and include three interchange configurations options (for US 50/Red Bank Road/SR32) and several alternatives (and combinations of alternatives) through the Little Miami River floodplain and Newtown.

Table 8. Implementation and Tier 2 Evaluation Framework

Segment IV: I-275/SR 32 interchange improvements	**General Limits:** SR 32 at Bells Lane to the west and SR 32 at Gleneste-Withamsville Road to the east, with an upgraded I-275/SR 32 interchange. **Utility and Significance:** Upgrade of the existing I-275/SR 32 interchange and associated improvements along SR 32, Aicholtz Road and Old SR 74, independent of other corridor investments, will provide increased capacity, better access to surrounding retail, and improved safety in this portion of the Eastern Corridor consistent with local, regional and state transportation plans, transportation need, and project funding and construction considerations. **Description of the improvement:** Includes upgrading the existing I-275/SR 32 and SR 32/Eastgate Blvd interchanges; improving capacity/access on SR 32 from Bells Lane to Gleneste-Withamsville Rd with improved intersections at these termini; improvements to Aicholtz Road, including widening east of I-275 and new connection to the west of I-275; removal of access at Old SR 74/SR 32 with creation of an over or underpass; and design/ROW considerations for future transit and collector-distributors; total length is about 3 miles.
Segment IV(a): SR 32, Gleneste-Withamsville Rd to Olive Branch-Stonelick Rd	**General Limits:** SR 32 at Gleneste-Withamsville Road (with tie-in to planned improvements in Segment IV, I-275/SR 32 interchange improvements) to the west and SR 32 at existing Olive Branch-Stonelick Road interchange to the east. **Utility and Significance:** Proposed improvements along this section of SR 32, independent of other corridor investments, will provide increased capacity, improved access management, and improved safety within this portion of the Eastern Corridor consistent with local, regional and state transportation plans, transportation need, and project funding and construction considerations. **Description of the improvement:** Consolidate and manage access points to establish improved SR 32 as a limited access arterial roadway west of I-275 to the existing interchange at Olive Branch-Stonelick Road; includes elimination of access at SR 32/Gleneste-Withamsville road, replaced by the extension of and new interchange at SR 32/Bach-Buxton Rd; local road improvements will be conducted separately in support of this improvement; total length is about 1 mile. Concept level improvements for this area are described in Chapter 3 of the Draft EIS.
Segment IV(b): collector-distributor system and new I-275 interchange	**General Limits:** I-275 at planned (local) Bach-Buxton Connector to the south and I-275/SR 32 interchange to the north. **Utility and Significance:** Improvements along this section of I-275 including a new interchange at I-275/planned Bach-Buxton connector (a local project), independent of other corridor investments, will increase capacity, improve traffic flow and provide better access to planned commercial and industrial development in this area of Union Township consistent with local, regional and state transportation plans, transportation need, and project funding and construction considerations. **Description of the improvement:** Construct a new interchange at I-275/new Bach-Buxton Connector (this connector to be constructed separately as a local project), and establish a collector-distributor system along I-275 from the new interchange to the I-275/SR 32 interchange; includes consideration of local road improvements (to be conducted separately). Concept level improvements for this area are described in Chapter 3 of the Draft EIS.

Table 8. Implementation and Tier 2 Evaluation Framework

NEW RAIL TRANSIT CAPACITY

Recommendation: The Oasis Line is recommended as the primary corridor and near-term action for rail transit in the Eastern Corridor to be carried forward into Tier 2 evaluation for impact minimization and identification of a preferred alternative, according to the project implementation segments described below. The Wasson Line is recommended to be part of the long-term project framework, with no immediate action in Tier 2 other than preservation of existing rail right-of-way.

Oasis Segment 1: Riverfront to Boathouse	**General Limits:** Cincinnati Riverfront Transit Center to the west and Boathouse to the east. **Utility and Significance:** This link of the Oasis line will provide new mode choice, improved access and connectivity, and improved safety to special events in and around the downtown riverfront, including Sawyer Point Park, Great American Ball Park, Paul Brown Stadium, the Riverfront street grid, Riverfront parking, the National Underground Rail Freedom Center, the Banks development, and Adams Landing development, consistent with local, state and regional transportation plans, transportation need, and project funding and construction considerations. **Description of the improvement:** Rail on new alignment or following existing trackage (2 options under consideration), from the existing Riverfront Transit Center to the Boathouse; includes 3 to 5 rail stations for connection to riverfront destinations; total length is about 1 mile.
Oasis Segment 2: Boathouse to US 50 in Fairfax	**General Limits:** Oasis Segment 1 at Boathouse to the west and planned multi-modal transit station at US 50/Red Bank Road to the east. **Utility and Significance:** This segment of the Oasis line will provide new mode choice, and improved access and connectivity for neighborhoods along the river, and to existing and planned development in the Lunken Airport vicinity, and will provide a rail transit link from Fairfax to downtown, consistent with local, state and regional transportation plans, transportation need, and project funding and construction considerations. **Description of the improvement:** Consists of new rail transit on SORTA controlled ROW; uses existing rail corridor (double track); requires upgrade of existing structures; includes 4 rail stations for connection to traditional and redeveloping riverfront neighborhoods and Lunken Airport/Linwood economic opportunities; total length is about 7 miles; includes planning for parallel bikeway.
Oasis Segment 3: Shared ROW with relocated SR 32	**General Limits:** Oasis Segment 2 at the planned multi-modal station at US 50/Red Bank Road to the west and planned transit hub in Newtown to the east, following a shared right-of-way corridor with relocated SR 32. **Utility and Significance:** This segment of the Oasis line will provide a new mode choice and rail transit link from Newtown to the Red Bank area and ultimately to downtown Cincinnati, consistent with local, state and regional transportation plans, transportation need, and project funding and construction considerations. **Description of the improvement:** Consists of rail transit on new alignment, paralleling relocated SR 32 and sharing a new multi-modal crossing of the Little Miami River; includes planning for parallel roadway (relocated SR 32), bikeway and two multi-modal transit hubs (at US 50 and at Newtown Rd); total length is about 4 miles.

Table 8. Implementation and Tier 2 Evaluation Framework

Oasis Segment 4: N-S ROW from Segment 3 to Milford

General Limits: Oasis Segment 3 at the planned transit hub in Newtown to the west and planned transit hub at I-275/US 50 in Milford to the east.

Utility and Significance: This segment of the Oasis line will provide a new mode choice and rail transit link from Milford to Newtown and ultimately to downtown Cincinnati, consistent with local, state and regional transportation plans, transportation need, and project funding and construction considerations.

Description of the improvement: Service on or along existing N-S trackage/ROW; mostly single track; includes rail station in Ancor area and multi-modal station in Milford; total length is about 5 miles.

EXPANDED BUS

Recommendation: The expanded bus transit component of the Eastern Corridor includes new or extended routes, new bus or multi-modal hubs, and other service components. Most of the expanded bus components are operational in nature (such as extending existing routes) and have no specific Tier 2 study implications or requirements beyond general coordination and integration in the overall Eastern Corridor implementation program; these expanded bus components will be developed in Tier 2 under appropriate environmental evaluation analyses conducted at the local level.

New or improved bus or multi-modal hubs, however, are constructed facilities and will require specific Tier 2 work. Included are new or expanded hubs, enhanced shelters or ancillary improvements at seven locations.

General Limits: Seven community-based bus hubs (see Chapter 3 of the Tier 1 DEIS)

Utility and Significance: Each hub will provide new service, travel options and connectivity for key parts of the Eastern Corridor and regional transit network consistent with local, state and regional transportation plans, transportation need, and project funding and construction considerations

Description of the improvement: Development and evaluation of new bus hubs at seven locations, including: Anderson, Eastgate, Madisonville, Milford, Oakley, Walnut Hills/Peebles Corner and Xavier/Evanston (description of these hubs are presented in Chapter 3 of the Draft EIS).

TRANSPORTATION SYSTEM MANAGEMENT

Recommendation: Recommendation is for the TSM list described in the Draft EIS to be updated at the beginning of Tier 2 as the project financial strategy is finalized and priorities for TSM are refined. It is expected that most TSM actions will continue forward in Tier 2 development under appropriate environmental analyses administered at the local level. TSM actions that are not of independent utility and that have minor localized impacts will be included in the core Tier 2 analysis.

BIKEWAY

Recommendation: Bikeway actions will continue forward in Tier 2 development under appropriate environmental analyses administered at the local level.

4.3. FINANCIAL STRATEGY

Preliminary cost estimates, funding requirements and phasing of the proposed multi-modal components of the Eastern Corridor are described in Chapter 7 of the Tier 1 Draft EIS.

The financial strategy for implementing this multi-modal plan at a program-level will incorporate innovative tools for coordinating, phasing and managing financial investments, community priorities, and land use and development activities across jurisdictional boundaries. Funds for the entire project will not be secured from a single source, but rather will be assembled by combining traditional transportation financing sources with community development, economic development, and brownfield redevelopment resources. Policy decisions and program actions involving greenspace and stormwater management will be coordinated with the transportation corridor development plan, providing additional resources. Where practicable, jurisdictions that contribute to the local match portion of projects will share in the direct local jurisdictional benefit generated as a result of the project improvements.

Key components currently under consideration for development of the financial strategy include:

- Program-level, corridor-wide implementation;
- Cross-modal and cross-jurisdictional investment match;
- Flexible, tapered funding approach to cross-modal investments;
- Cross-jurisdictional partnerships;
- Coordination of all potential funding sources (federal and non-federal), including innovative and non-traditional sources;
- Combination of multiple local funding mechanisms;
- Selection of local projects that contribute to the corridor development, and attract other investment;
- Pooled project funding portfolio;
- Effective matching of projects with funding sources, considering the nature of the project and the purpose and goal of the funding source (use of least flexible funding first);
- Creation of public-private partnerships;
- Advanced mitigation banking;
- Phased development approach; and
- Definition of jurisdictional benefits.

Economic Feasibility

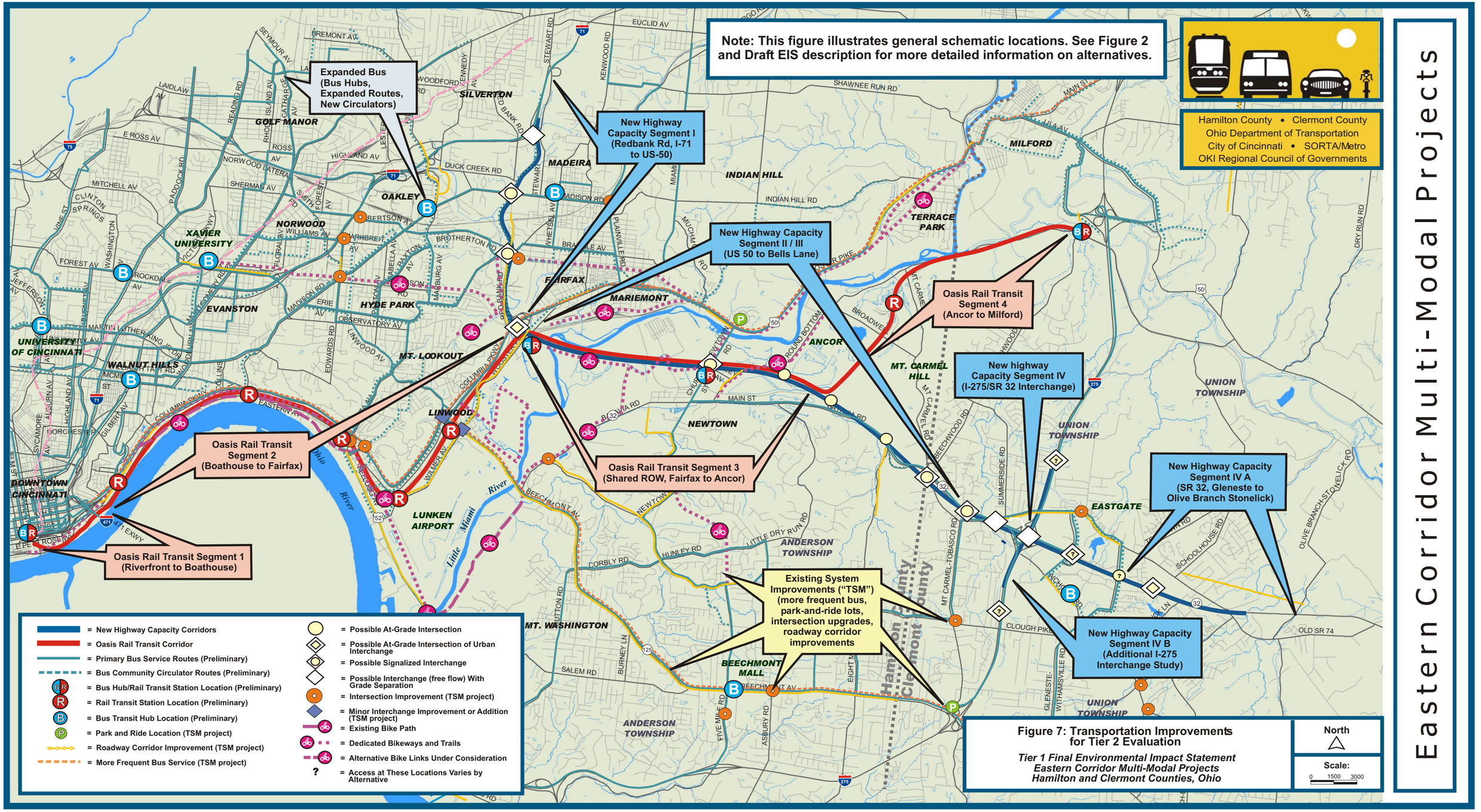
The economic analysis for the Eastern Corridor Multi-Modal Projects, conducted under separate cover, established the economic feasibility of the multi-modal investment, having a favorable benefit/cost ratio of greater than 2:1, and established the methodology for identification and refinement of jurisdictional benefits from the program-level investment.

Since funding will be derived from a combination of local, state, and federal sources, the Tier 2 effort will refine economic feasibility from a sub-regional perspective. In this way, decision-makers at each level can see how their area of interest benefits from the program-level investment. These sub-regions include the City of Cincinnati, rest of Hamilton County, Clermont County, Butler/Warren Counties, Boone/Kenton/Campbell Counties (KY), and rest of State of Ohio.

4.4. FURTHER DEVELOPMENT OF THE IMPEMENTATION PLAN

Several steps for the implementation and funding of the proposed Eastern Corridor transportation improvements are currently in the early stages of development. These steps, summarized below, will be further developed through Tier 2 as specific implementation and funding details are identified, described and coordinated among the implementation partners, and in conjunction with Tier 2 design and environmental studies:

- Complete the corridor financial plan, identify processes and procedures to manage the pooled funding and tapered match arrangements, identify locally available funding and propose allocation of local contributions (Financial Implementation Committee);
- Confirm Tier 2 Priorities and establish local match eligible projects (Implementation Group and TID);
- Push forward with the Part B (Tier 2 EIS) preliminary engineering and environmental work and refine operational and capital cost components;
- Develop an inventory of mitigation opportunities, explore mitigation banking, and provide context for preferred alternative selection (Green Infrastructure Planning Committee);
- Coordinate development efforts with community needs as expressed by local jurisdictions and as recommended in the Eastern Corridor Land Use Vision Plan;
- Engage USDOT and partner agencies support for this scope and intent of implementation; pursue recognition of the Eastern Corridor as a national priority corridor, and designation as a model of exemplary environmental stewardship and streamlining;
- Develop terms and conditions for intergovernmental agreements for project development and joint funding strategies, mitigation banking and local match credit banking, which needs to include the recognition of donated right of way.
- Complete sub-regional economic analysis, including impacts on local jurisdiction revenues; establish local contribution percentage and sources and availability.


Eastern Corridor Multi-Modal Projects
Note: This figure illustrates general schematic locations. See Figure 2 and Draft EIS description for more detailed information on alternatives.
Hamilton County • Clermont County
Ohio Department of Transportation
City of Cincinnati • SORTA/Metro
OKI Regional Council of Governments
Expanded Bus (Bus Hubs, Expanded Routes, New Circulators)
New Highway Capacity Segment I (Redbank Rd, I-71 to US-50)
New Highway Capacity Segment II / III (US 50 to Bells Lane)
Oasis Rail Transit Segment 4 (Ancor to Milford)
New highway Capacity Segment IV (I-275/SR 32 Interchange)
New Highway Capacity Segment IV A (SR 32, Gleneste to Olive Branch Stonelick)
New Highway Capacity Segment IV B (Additional I-275 Interchange Study)
Oasis Rail Transit Segment 2 (Boathouse to Fairfax)
Oasis Rail Transit Segment 3 (Shared ROW, Fairfax to Ancor)
Oasis Rail Transit Segment 1 (Riverfront to Boathouse)
Existing System Improvements ("TSM") (more frequent bus, park-and-ride lots, intersection upgrades, roadway corridor improvements
SILVERTON
GOLF MANOR
OAKLEY
NORWOOD
XAVIER UNIVERSITY
EVANSTON
UNIVERSITY OF CINCINNATI
WALNUT HILLS
HYDE PARK
MARIEMONT
FAIRFAX
MADEIRA
INDIAN HILL
MILFORD
TERRACE PARK
ANCOR
MT. CARMEL
MT. LOOKOUT
LINWOOD
NEWTOWN
UNION TOWNSHIP
EASTGATE
DOWNTOWN CINCINNATI
LUNKEN AIRPORT
ANDERSON TOWNSHIP
MT. WASHINGTON
BEECHMONT MALL
= New Highway Capacity Corridors
= Oasis Rail Transit Corridor
= Primary Bus Service Routes (Preliminary)
= Bus Community Circulator Routes (Preliminary)
= Bus Hub/Rail Transit Station Location (Preliminary)
= Rail Transit Station Location (Preliminary)
= Bus Transit Hub Location (Preliminary)
= Park and Ride Location (TSM project)
= Roadway Corridor Improvement (TSM project)
= More Frequent Bus Service (TSM project)
= Possible At-Grade Intersection
= Possible At-Grade Intersection of Urban Interchange
= Possible Signalized Interchange
= Possible Interchange (free flow) With Grade Separation
= Intersection Improvement (TSM project)
= Minor Interchange Improvement or Addition (TSM project)
= Existing Bike Path
= Dedicated Bikeways and Trails
= Alternative Bike Links Under Consideration
= Access at These Locations Varies by Alternative
Figure 7: Transportation Improvements for Tier 2 Evaluation
Tier 1 Final Environmental Impact Statement
Eastern Corridor Multi-Modal Projects
Hamilton and Clermont Counties, Ohio
North
Scale:
0 1500 3000

TABLES

TABLE 3. INDIVIDUAL PUBLIC COMMENTS RECEIVED

No.	Name	Address	Format
1	Clark Carmichael	Cincinnati, OH	comment sheet
2	Doug Young	Cincinnati, OH	comment sheet
3	Bob Newton	Cincinnati, OH	comment sheet
4	Bob Repasley	Cincinnati, OH	comment sheet
5	David Engel	Batavia, OH	comment sheet
6	Mary Alice Maze	Cincinnati, OH	comment sheet
7	B. Rhoades	Cincinnati, OH	comment sheet
8	Marty Bartlett	Mariemont, OH	comment sheet
9	Robert Bartlett	Mariemont, OH	comment sheet
10	Steve Sievers	Anderson Twp.	comment sheet
11	Unnamed	No address	comment sheet
12	Roger J. Maham	Williamsburg, OH	comment sheet
13	AD Goldstein	Cincinnati, OH	comment sheet
14	Susan Olson	Cincinnati, Ohio	comment sheet
15	Michael Barnes	Milford, OH	comment sheet
16	Ellie Johnson	Cincinnati, OH	comment sheet
17	Mary Jo Johnson	Cincinnati, OH	comment sheet
18	Henry Dolive	Anderson Twp.	comment sheet
19	Tom Brinkman	Cincinnati, OH	comment sheet
20	David Haldeman	Cincinnati, OH	comment sheet
21	Rodney & Susan Cober	Cincinnati, OH	comment sheet
22	Don Hopkins	Mariemont, OH	comment sheet
23	Sierra Club Miami Group	Cincinnati, OH	letter
24	Gordon Miller	Cincinnati, OH	comment sheet
25	Steve Schwartz	Cincinnati, OH	comment sheet
26	Michael Lemon, Columbia Twp Administrator	Cincinnati, OH	comment sheet
27	Mel Martin	Cincinnati, OH	comment sheet
28	Wes Gimbert	Cincinnati, OH	comment sheet
29	Ted Light	Cincinnati, OH	comment sheet
30	Eric Partee, LMI	Milford, OH	letter
31	W. Mike Weber	Cincinnati, OH	comment sheet
32	Robert Witherby	Cincinnati, OH	transcript
33	Norm Wright	Cincinnati, OH	transcript – *3 entries*
34	Carol Biehle	Goshen Twp.	transcript
35	Rick Naberhaus	Cincinnati, OH	transcript
36	Douglas Kent	Cincinnati, OH	transcript
37	Janet Kravitz	Cincinnati, OH	transcript
38	Dave Kent	Cincinnati, OH	transcript
39	Dave Spinney, Clermont Co. Administrator	Clermont Co.	transcript
40	Helen Black	Lebanon, OH	transcript (also #48)
41	Jane Earls	Cincinnati, OH	transcript
42	Jim Hulefeld	Cincinnati, OH	transcript
43	Edmond Motz	Newtown, OH	transcript
44	Paul Naberhaus	Hyde Park, OH	transcript
45	Carol Biehle	Cincinnati, OH	transcript
46	Gina Boltz	Toledo, OH	email
47	Scott Nass	Cincinnati, OH	email

TABLE 3. INDIVIDUAL PUBLIC COMMENTS RECEIVED

48	Theresa Halter	Bloomington, IN	email
49	Peter Reilly	Berea, KY	email
50	Kathleen Morris	Columbus, OH	email
51	Elizabeth Motter	Cincinnati, OH	email
52	Tracy Lutman	Toledo, OH	email
53	Phillip Mohorich	Lakewood, OH	email
54	Robert Jarvis	Akron, OH	email
55	Sandy Kennedy	Franklin, OH	email
56	Dan Jarosz	Cleveland, OH	email
57	Aimee Ursic	Mayfield Heights, OH	email
58	Mark Burwinkel	Cincinnati, OH	email
59	Regina Benge	Brodhead, KY	email
60	Richard Lee	Batavia, OH	email
61	Robert Zai III	Highland Heights, KY	email
62	Beverly Flores	Toledo, OH	email
63	Ray Heithaus	Gambier, OH	email
64	Tamera Bryant	Columbus, OH	email
65	Barbara Warner	Lebanon, KY	email
66	George Marzluf	Columbus, OH	email
67	Roberta Codner	Indianapolis, IN	email
68	Adrienne Chinni	Cleveland Heights, OH	email
69	Patty Koteles	Broadview Heights, OH	email
70	Jack Higgins	Kokomo, IN	email
71	Patricia Mackura	South Euclid, OH	email
72	Nancy Shrewsbury	Beckley, WV	email
73	Dottie Eddis	Augusta, WV	email
74	Garry Walczewski	Roddford, OH	email
75	Ann Bowe	Lexington, KY	email
76	Carl H. Moore	Maineville, OH	email
77	Robert Burrows	Ingalls, IN	email
78	Harold Highland	Westerville, OH	email
79	Saundra Stehlin	Cincinnati, OH	email
80	Daniel L. Cottle	Nicholasville, KY	email
81	Wanda Henry	Martinsburg, WV	email
82	Diane Kinney	Cincinnati, OH	email
83	Linda Hess	Cleveland, OH	email
84	David Bryson	Lexington, KY	email
85	Jillian Flippen	Cleveland, OH	email
86	Emily Carr	Crestwood, KY	email
87	William Sheppell, Jr.	Fayetteville, WV	email
88	Sandra Wagner	Bryon, OH	email
89	William Taylor	Columbus, OH	email
90	Kimberly Lowe	Gahanna, OH	email
91	Timothy Wampler	Indianapolis, IN	email
92	Natalie Fox	Olmstead Twp., OH	email
93	Pat Rathmann	Cincinnati, OH	email
94	Kathryn Madison	Morgantown, WV	email
95	Jeffri Frontz	Columbus, OH	email
96	John Paul Markham	Princeton, KY	email
97	Virginia Johnson	Morning View, KY	email

TABLE 3. INDIVIDUAL PUBLIC COMMENTS RECEIVED

98	David Modarelli	Richfield, OH	email
99	Nathan Joseph	Columbus, OH	email
100	Marian Cooley	Muncie, IN	email
101	Penny Scott	Madison, OH	email
102	Bart Johnson	Cincinnati, OH	email
103	Denise Burnison	Cleveland, OH	email
104	Marianne Corriere	Branford, FL	email
105	Darrell Davis	Linton, IN	email
106	Ann C. Mcgill	Brunswick, OH	email
107	Tash Hodges	Fayetteville, OH	email
108	Natasha & Noah Brenner	Jericho, NY	email
109	Joyel Spoden	Janesville, WI	email
110	Tina Rose Marie Namey	Charleston, WV	email
111	Jim Grimes	North Ridgeville, OH	email
112	Lucy Miller	No address	email
113	Cheryl Hill	Spring, TX	email
114	Jack Tapp	Paragon, IN	email
115	Mark Leeson	Orwigsburg, PA	email
116	James Fronk	Upper Arlington, OH	email
117	Darryl Carmack	Saint Paris, OH	email
118	Evelyn Vantil	Columbus, OH	email
119	Lisa Copeland	Fall River, MA	email
120	Sandra Sobanski	Hoboken, NJ	email
121	Jeanette Ammon	Albany, OH	email
122	Christine Linnemeier	Bloomington, IN	email
123	Dave Hudak	Bloomington, IN	email
124	Pamela Unger	Columbus, OH	email
125	Richard A. Dilley	West Lafayette, IN	email
126	Karen Salzgeber	Cleveland, OH	email
127	Judy Peterson	Worthington, OH	email
128	Tom Hubbard	Westerville, OH	email
129	Brian Bodah	Columbus, OH	letter & email
130	Melissa Teppo	Tacoma, WA	email
131	Lauri Peacock	Hobbs, NM	email
132	Eric Partee	Maineville, OH	email
133	Carol Cassetti	Lexington, SC	email
134	Veronica Frost	Enon, OH	email
135	Kathy Burgstaller	Springfield, OH	email
136	Karen Grubb	Fairmont, WV	email
137	Jeremy Schneider	New City, NY	email
138	Mary McClung	Massillon, OH	email
139	Jeffrey Weist	Port Orchard, WA	email
140	Gregory A. Reece	Louisville, KY	email
141	Jeff Johnson	Akron, OH	email
142	Wanda Ballentine	Cleveland Heights, OH	email
143	G. Burton	Delaware, OH	email
144	Paul McPherson	Galloway, OH	email
145	Molly Helt	Powell, OH	email
146	Sheila Peebles	Berea, OH	email
147	Beth Farris	Indianapolis, IN	email

TABLE 3. INDIVIDUAL PUBLIC COMMENTS RECEIVED

148	Sarah Piechuta	Brunswick, OH	email
149	D.L. Campbell	Newark, OH	email
150	Lindsay McLean	No address	email
151	Martha Marcom	Bexley, OH	email
152	Julia Haley	Washington, DC	email
153	Quinn NcKew, American Rivers	Washington, DC	letter
154	Robin K. Craig	Indianapolis, IN	email
155	Sherrie Hayes	Cincinnati, OH	email
156	Sue Stuckman	Elkhart, IN	email
157	Ellen Burnside	Cleveland, OH	email
158	Ellen Popodi	Bloomington, IN	email
159	Holly Johnson	Denham Springs, LA	email
160	Joyce Cotton	Shepherdsville, KY	email
161	Carlene Petty	Louisville, KY	email
162	Deidre East	Delaware, OH	email
163	Eric Tatum	Lewis Center, OH	email
164	George Cleary	Columbus, OH	email
165	Doug Sudomir	Barberton, OH	email
166	Jeff Balzer	Milford, OH	email
167	Marion Thomas	Elyria, OH	email
168	Robert Sanders	Temple, GA	email
169	Maxine Priest	Estero, FL	email
170	Bob Thomas	Roseburg, OH	email
171	Treon M. Christine	Cincinnati, OH	email
172	Gene & Doris Peters	Livingston, TX	email
173	Bitsa Burger	Guerneville, CA	email
174	Gary Boyce	No address	email
175	Myra Vick	Chillicothe, OH	email
176	Mary Jo Sage	No address	email
177	John & Karen McMullen	Loveland, OH	email
178	Carol F. Scallan	Cincinnati, OH	email
179	Randall E. Smith	Newtown, Ohio	email
180	Catharine W. Chapman	Cincinnati, OH	email
181	Burnis Tuck	Fresno, CA	email
182	Bill & Judith Lipsky	No address	email
183	Karen Hardin	Sevierville, TN	email
184	Robin Gustus	Jacksonville, FL	email
185	Gates & Barbara Moss	No address	email
186	Lola Irvin	No address	email
187	Christie Smith	Cincinnati, OH	email
188	Michael Kelly & Beverly Bross-Kelly	Cincinnati, OH	email
189	Thane Maynard, Cinc. Zoo	Cincinnati, OH	email
190	Joan Turner	Cincinnati, OH	letter
191	Suzanne Vosmer Skidmore	Cincinnati, OH	letter
192	Susan Theiss	Loveland, OH	letter
193	Alan Oestreich	Cincinnati, OH	letter & email
194	W. Parker Cowgill, Jr.	Milford, OH	letter
195	John B. Wood	Cincinnati, OH	letter & email

TABLE 3. INDIVIDUAL PUBLIC COMMENTS RECEIVED

196	Robert Schmuelling	Cincinnati, OH	letter
197	Andrew Gordon	Cincinnati, OH	letter
198	Snowden Rowe	Cincinnati, OH	letter
199	Martha Metz	Cincinnati, OH	letter & email
200	Betty V. Rhoades	Cincinnati, OH	letter
201	Betty V. Rhoades	Cincinnati, OH	letter
202	Timothy M. Burke	Cincinnati, OH	letter
203	Dan Policastro, Mayor Mariemont	Mariemont, OH	letter
204	Harry W. Herrlinger	Cincinnati, OH	letter
205	Susan Ulrich	Cincinnati, OH	letter
206	Jerome R. Berman	Cincinnati, OH	letter
207	E. Rowley Elliston	Milford, OH	letter
208	Nancy Duran	Cincinnati, OH	letter
209	Peter Whits (?)	Cincinnati, OH	letter
210	Don K. Hopkins	Mariemont, OH	letter
211	Helen Black	Lebanon, OH	letter
212	Erna Dennis and Rev. Robert Obermeyer	Oregonia, OH	letter
213	Jim Farfsing	Cincinnati, OH	letter
214	Chadwick W. Christine	Cincinnati, OH	letter
215	Eric Partee, LMI	Milford, OH	letter
216	Marilyn Wall, Sierra Club	Cincinnati, OH	letter
217	Carter F. Randolph	Cincinnati, OH	letter
218	Viktor G. Theiss	Loveland, OH	letter
219	Mark Parr	Loveland, OH	letter
220	Ruth Ann Busald	Cincinnati, OH	letter
221	Christina Conrad	Mariemont, OH	letter
222	Kathy Conrad	Cincinnati, OH	letter
223	Janet Conrad	Cincinnati, OH	letter
224	Carole W. Bowman	Cincinnati, OH	letter
225	George F. Carr	Cincinnati, OH	letter
226	Allen E. Heyson	Cincinnati, OH	letter & email
227	Cortney Scheeser	Hyde Park, OH	comment sheet (by mail)
228	Andrea Drannenberg	Cincinnati, Ohio	comment sheet (by mail)
229	Robin Hendley	Cincinnati, OH	comment sheet (by mail)
230	Audrey L. Sharn	Cincinnati, OH	letter
231	Fred J. Sharn	Cincinnati, OH	letter
232	Kathy Martin	Lebanon, OH	letter
233	Wes Wiemann	Cincinnati, OH	letter
234	Daniel T. Dougherty	Lebanon, OH	letter
235	Paul & Molly Elliot	Loveland, OH	letter
236	Karen Zanger	Cincinnati, OH	letter
237	Miriam Lukens	No address	letter
238	William H. Hopple, Jr.	Cincinnati, OH	letter
239	Stephanie Hines, Little Miami River Partnership	Lebanon, OH	letter
240	A. V. Spencer	Cincinnati, OH	letter
241	Paul Zepf	Cincinnati, OH	letter
242	Marjie Becus	Loveland, OH	letter & email

TABLE 3. INDIVIDUAL PUBLIC COMMENTS RECEIVED

243	Beverly Fennel	Indian Hill, OH	letter
244	Linda & Mike Wesseler	Loveland, OH	letter
245	Mike Shelton	Columbus, OH	email
246	Bob Jurick, B-W Greenway Community Land Trust	Fairborn, OH	email
247	George Marketos	Cincinnati, OH	email
248	J. Dwight Poffenberger, Jr.	Anderson Twp.	email
249	Dave & Karen Morehead	Newtown, OH	email
250	Victoria Parlin	No address	email
251	Noah Fleischmann	Cincinnati, OH	email
252	Mr. & Mrs. Kenneth B. Bassett	Terrace Park, OH	email
253	Dale & Jody Hutchinson	No address	email
254	George & Ellen Laycock	No address	email
255	Elizabeth Secora McCloskey	LaPorte, IN	email
256	James Fitch	Pittsburg, PA	email
257	Tina Rose Marie Namay	Charleston, WV	email
258	Nancy Ruchhoft	No address	email
259	Barbara Peterson	Cincinnati, OH	email
260	Anne E. Lyon	Amelia, OH	letter
261	L.L. Kauffman, Esq.	Lexington, KY	letter
262	Jean Schwartz	Cincinnati, OH	letter
263	Robert G. Willard	Cincinnati, OH	letter
264	L. Clark	Anderson Twp.	letter
265	James A. Swaney	Dayton, OH	letter
266	Anne Vermillion Gleason	Cincinnati, OH	letter
267	Mike Fremont, Rivers Unlimited	Cincinnati, OH	letter
268	Paul Sittenfeld	Cincinnati, OH	letter

TABLE 4. PUBLIC COMMENTS BY TOPIC AND RESPONSES

Primary Emphasis And Supporting Individual Comments	Summary of Comments and *Response or Decision (in bolded italics)*
Opposes Little Miami River bridge - Form Letter • Supporting Individual Comments (see Table 3): #46-92, 94-101, 103- 111, 113-144, 146-149, 151, 152, 154, 156-173, 175, 181, 183, 184, 199, 212, 214, 231, 238, 240, 242, 256, 257 (134 total)	Summary of Comments: These public comments oppose a new bridge over the Little Miami River without considering other alternatives. Areas of concern include: Jeopardizing manpower and money spent restoring the lower reach of the river. ***The preliminary mitigation strategy for the Eastern Corridor, discussed in Chapters 5.6.4 and 8.3.2 of the Draft EIS, and the preliminary environmental commitments listed in this Final EIS, provide opportunity for restoring and protecting stream and riparian conditions along this urban stretch of the Little Miami River; mitigation details will be further developed in Tier 2, and fully evaluated and coordinated through state and federal agencies, as applicable.*** Noise and visual impacts. ***These detailed analyses will be appropriately evaluated in Tier 2 when more specific alignment details are developed; commitment to conduct these studies is outlined in Draft EIS Table 8.3, and included in this Final EIS.*** Runoff and sedimentation. ***Vehicular pollutants from highway runoff will be addressed as part of the 401 water quality assessment and MS4 stormwater analyses conducted in Tier 2.*** Reducing outstanding river values. ***Appropriate context sensitive design solutions at the proposed river crossing for protecting river values will be developed in Tier 2 based on consideration of environmental, community and engineering issues, and input from the public and other resource agencies. Mitigation will be developed n Tier 2, as necessary based on assessment of findings and public input and agency coordination, and included in the final project plans. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.*** A new bridge contradicts the State's management plan for protecting the river. ***A new river crossing does not contradict ODNR's plan for protecting the Little Miami River. The Little Miami Scenic Rivers Assistance Manual (February 1977) was developed as part of the application process under Section 2(a) (ii), of the Wild and Scenic Rivers Act, P.L. 90-542. The manual outlined goals and provided recommended standards as a means of coordinating efforts to protect the river, and provided an inventory of known, proposed and authorized projects in the proposed designated area. The relocation of U.S. 50/32 was identified as a proposed project. The proposed crossing of the Little Miami in 1977 was located in approximately the location as is proposed for the current project. The possibility of a new crossing did not impact the decision to designate the lower reach of the Little Miami as a component of the National Wild and Scenic Rivers System. The Assistance Manual does not preclude a new bridge crossing among its goals and recommended standards.*** ***In addition to the Assistance Manual, the 1985 "Little Miami State Scenic River Management Plan" identifies, among its proposed implementation tasks, an expectation that ONDR be involved with agencies in early coordination and environmental mitigation on public projects impacting the Little Miami River (as has occurred in the Eastern Corridor project since the beginning of the MIS planning process and through the Tier 1 NEPA process). The 1985 "Little Miami State Scenic River Management Plan" does not prohibit new river crossings. Further, the Ohio Revised Code Section 1517.14 through 18 does not prohibit new crossings, but gives approval authority to ODNR for projects within 1,000 feet of the normal water line of a state designated component of the state scenic river system (ORC 1517.14) and for projects by state agencies or political subdivisions that cause channel modifications to any watercourse within a wild, scenic or recreational river outside the limits of a municipal corporation; such agencies or subdivisions must first obtain approval of the structure or channel modification from the ODNR director (ORC 1517.16). Coordination with ODNR has been conducted for the Eastern***

TABLE 4. PUBLIC COMMENTS BY TOPIC AND RESPONSES

Primary Emphasis And Supporting Individual Comments	Summary of Comments and *Response or Decision (in bolded italics)*
	Corridor throughout project development, from the MIS through Tier 1 work. During the MIS, ODNR was represented on the project Task Force, and, although they did not vote to include a new bridge in the recommended plan, recognized local support for the project, and stated that they would consider support of a new bridge, but not without substantial mitigation for protecting the river, as summarized in a letter dated June 7, 2002 (see Draft EIS, Appendix C) and in recent correspondence dated January 4, 2005. During Tier 1 work, ODNR attended four agency coordination meetings, and was provided opportunity to review the preliminary Draft EIS and Draft EIS documents. Measures for protecting the Little Miami River, including those outlined by ODNR, will be further evaluated and developed in Tier 2, and all required coordination, evaluation and approvals applicable to the Little Miami River will be conducted during Tier 2, including continued coordination with ODNR Scenic Rivers. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.
Opposes Little Miami River bridge - Form Letter • Supporting Individual Comments (see Table 3): #192, 196, 197, 209, 223, 244 (6 total)	Summary of Comments: These public comments emphasize that the Little Miami River should be protected by pursuing alternatives to a new bridge, and that the National Park Service, U.S. Fish and Wildlife Service and Ohio Department of Natural Resources have said that existing roads and bridges could be expanded to handle increased traffic. ***As described in the Draft EIS, river crossing options were developed and evaluated in the MIS planning phase of work for ability to meet long-range regional transportation need. Like many other specific options evaluated and dismissed in the MIS phase (including, for example, high-speed ferry boat commuter service on the Ohio River between Coney Island and downtown Cincinnati, or exclusive busway between downtown Cincinnati and Fairfax, or extensive HOV lanes on I-275 and I-471), a no new river crossing option was found not to adequately address the long-range transportation needs of the region and, in consideration of technical analyses appropriate to the MIS planning work as well as stakeholder and public input, was not recommended as part of the long-range plan for the region (and therefore was not included as part of the reasonable alternative array for the Draft EIS). The planning process history and context of the project, including this particular option as well as others eliminated in planning, was part of the information presented to the public at the beginning of the NEPA process, and was also part of the information provided to cooperating state and federal agencies in the scoping process. Please see Section 2.5.1 of this Final EIS for further explanation regarding river crossing alternatives.***
Opposes Little Miami River bridge - Various concerns • Supporting Individual Comments (see Table 3): #22, 40, 41, 93, 112, 145, 150, 155, 174, 176, 177, 178, 180, 182, 185, 186, 187, 189, 190, 191, 193, 195, 198, 200, 202, 205, 206, 207, 208, 210, 211, 213, 217, 218, 219, 220, 221, 222, 224, 225, 226, 230, 232, 233, 234, 235, 236, 237, 241, 243, 245, 246, 248, 250,	Summary of Comments: These public comments oppose building a new bridge over the Little Miami Rivers, citing various concerns including: 1) Twenty-two individuals cited pollution and impact concerns from a new bridge such as noise, sedimentation, runoff, air quality, litter, vehicle pollution (oil, gas, rubber), visual impacts, sewage runoff, aquifer impacts, flooding, impacts to hillsides and decrease in property values. ***These concerns will be addressed in Tier 2 studies, as more specific alignment details are developed; commitment to conduct these studies is outlined in Draft EIS Table 8.3, and included in this Final EIS. Vehicular pollutants from highway runoff will be addressed as part of the 401 water quality assessment and MS4 stormwater analysis conducted in Tier 2. Regarding air quality, OKI's regional air quality analysis meets USEPA's requirements for demonstrating conformity with air quality standards and goals established by the Clean Air Act Amendments of 1990, and no individual air quality assessment is required by federal or other statutes.*** 2) Eleven individuals stated that a new bridge would jeopardize clean-up and protection efforts that have occurred over the years. ***The preliminary mitigation strategy for the Eastern Corridor, discussed in Chapters 5.6.4 and 8.3.2 of the Draft EIS, and the preliminary environmental commitments listed in this Final EIS, provide opportunity for restoring and protecting stream and riparian conditions along this urban stretch***

TABLE 4. PUBLIC COMMENTS BY TOPIC AND RESPONSES

Primary Emphasis And Supporting Individual Comments	Summary of Comments and *Response or Decision (in bolded italics)*
251, 252, 253, 254, 258, 259, 261, 265, 266, 268 (64 total)	***of the Little Miami River; mitigation details will be further developed in Tier 2, and fully evaluated and coordinated through state and federal agencies, as applicable.*** 3) Thirty-one individuals cited various alternatives to a new bridge such as using transit, existing bridges and roads (Newtown Road, Beechmont Levee, Wilmer Avenue), public transportation, telecommuting, time shifting/car pooling, and regional transportation planning. ***The Eastern Corridor MIS, which provided the basis for Tier 1 work, concluded that a multi-modal strategy is needed to effectively address transportation problems in the area, and the project is a comprehensive regional plan that does include public transportation modes (bus and rail transit), as well as new highway capacity (transportation need cannot be addressed by public transportation alone). Draft EIS Chapter 7.1 addresses benefits to local traffic and regional issues for this multi-modal plan. Transportation demand management strategies (such as telecommuting and time shifting) were evaluated and eliminated from consideration during the MIS phase.*** 4) Seventeen individuals stated that the a new crossing of the Little Miami contradicts the State of Ohio's management plan for protecting the scenic river and/or that the NPS, USFWS and ODNR support an alternative to a new bridge: ***Please see response to a similar comment on page 1 of this table (last comment on page 1).*** 5) Twenty-three individuals stated that a new bridge would jeopardize the river's unique heritage and/or outstanding values such as scenic, biological diversity, recreational opportunities, threatened and endangered species and flow: ***Appropriate context sensitive design solutions at the proposed river crossing for protecting the river's outstanding values will be developed in Tier 2 based on consideration of environmental, community and engineering issues, and input from the public and other resource agencies. Mitigation will be developed in Tier 2, as necessary, based on assessment of findings and public input and agency coordination, and included in the final project plans. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.*** 6) Eight individuals stated that a new bridge would result in urban sprawl, increased traffic, increased development, and/or was not cost effective: ***Draft EIS Chapter 5.6.2, pages 5-72 to 5-75, describes expected future development in the Eastern Corridor, summarizing findings from the Eastern Corridor Economic Analysis and Eastern Corridor Land Use Vision Plan, and provides information regarding expected job and residential increases and expected land use changes that support the conclusion that secondary development is not expected to occur as inadvertent, uncontrolled sprawl, but as planned, desirable development, primarily infill by nature, consistent with local and regional planning, and supported by the transportation network.*** 7) Three comments opposed a new bridge with no reason stated. ***No response needed.***
Other environmental and personal property concerns • Supporting Individual Comments (see Table 3): #3, 5, 13, 28, 38, 43 (6 total)	Summary of Comments: These public comments consist of miscellaneous environmental and safety concerns and personal property concerns, including: 1) Three comments were from individuals with property within or near the alternative corridors, including a two residences and a sod farm business; two requested more information on alignment details and when construction would occur; the business owner also emphasized minimizing bisection of his farm and minimization of impacts to irrigation lines; and one individual was concerned about property value decreasing because of close proximity to proposed transportation improvements in the Newtown area. ***The alternatives developed in Tier 1 are general location corridors that will be used during Tier 2 for more detailed alternatives development and preferred alternative selection, and impacts to farmland, agriculture infrastructure, as well as social***

TABLE 4. PUBLIC COMMENTS BY TOPIC AND RESPONSES

Primary Emphasis And Supporting Individual Comments	Summary of Comments and *Response or Decision (in bolded italics)*
	impacts (property values) will be fully considered, and avoided and minimized to the extent practicable. 2) One individual questioned how safety would be assured on Gladstone Avenue where existing rail for the proposed Oasis Line is immediately adjacent to residences and the area is in a landslide susceptible zone. ***Impacts and safety issues along Gladstone Avenue will be fully evaluated in Tier 2 during detailed rail alignment development.*** 3) One individual was concerned about minimizing impacts to floodplain areas in the Round Bottom Road – Newtown area. ***Commitment to conduct all required floodplain coordination, permit application and minimization/mitigation in Tier 2 is noted in Chapter 8.4 of the Draft EIS, and is included in this Final EIS.*** 4) One individual was concerned about safety along proposed bike paths from Lunken Airport to downtown, suggesting that the paths be grade separated from the Oasis Line in this area, and coordinated with the City of Cincinnati bike plan. ***Bikeways described in the Draft EIS have been and will continue to be coordinated with the City of Cincinnati and other jurisdictions through Tier 2, and safety will be fully considered during detailed design.***
Supports proposed transportation improvements – Various reasons • Supporting Individual Comments (see Table 3): #2, 8, 9, 11, 12, 14, 15, 16, 17, 19, 20, 21, 26, 27, 32, 35, 39, 42, 44, 102, 179, 194, 229, 262, 263, 264 (26 total)	Summary of Comments: These public comments support the Eastern Corridor multi-modal plan, citing various benefits including: 1) ten individuals said the project would improve traffic in Hyde Park, Mt. Lookout, Oakley, Fairfax, Mariemont, Newtown, Columbia Township, and along various roads including Wooster Pike; 2) five individuals said the project would improve economic development opportunities, city growth and/or create new jobs; 3) five individuals said the project would improve connectivity between Hamilton and Clermont Counties; 4) three individuals said the project would benefit local communities, and supports community and jurisdictional plans of the city of Cincinnati, Hamilton and Clermont Counties, and Columbia Township; 5) eleven individuals questioned anti-bridge supporters and/or cited various benefits from improved traffic such as reduced vehicle miles traveled, reduced costs, improved auto life, saved time and energy, and/or reduced air pollution; 6) seven individuals said the project consisted of forward thinking and should move ahead, and 7) one individual questioned reality of rail due to costs, and suggested that Old Wooster Pike be widened to four lanes, and 8) four individuals supported proposed improvements provided sufficient mitigation/resource protection was developed. Six of the comments were from individuals involved with the project through the Task Force. ***These comments in support of the project are noted and no response needed.***
Supports public transportation and TSM only • Supporting Individual Comments (see Table 3): #4, 25, 29, 37, 201, 227, 228 (7 total)	Summary of Comments: These public comments emphasize support of public transportation over roadway construction. Key points include: 1) Three individuals stated that new roadways add pollution, increase traffic and/or encourage urban sprawl; 2) four individuals included opposition to construction of a new Little Miami River bridge and/or relocated SR 32; 3) three individuals specifically supported light rail, improved bus service and/or new bike lanes; 4) one individual specifically mentioned support of TSM improvements. ***The Eastern Corridor MIS, which provided the basis for Tier 1 work, concluded that a multi-modal strategy is needed to effectively address transportation problems in the area, and that travel demand cannot be addressed by public transportation alone. The project is a regional plan that does include public transportation modes (bus and rail transit), as well as new highway capacity. Draft EIS Chapter 7.1 addresses benefits to local traffic and regional issues for this multi-modal plan.*** One individual requested specific answers to the following questions: a) why are Wasson Line impacts included in DEIS when no immediate action is recommended? ***The recommendation described in the Draft EIS is that the Wasson Line be part of the long-term regional rail framework with no immediate action in project development other than preservation of existing rail right-of-way for future transportation***

TABLE 4. PUBLIC COMMENTS BY TOPIC AND RESPONSES

Primary Emphasis And Supporting Individual Comments	Summary of Comments and *Response or Decision (in bolded italics)*
	purposes, due to the uncertainty in funding of the I-71 LRT corridor. b) how does the Land Use Vision Plan reflect a new highway through communities? ***Transportation recommendations from the MIS were used as guideposts, but not required actions of the land use vision plan; instead, the land use and growth projections identified in the vision plan were integrated into the Eastern Corridor transportation planning process to identify appropriate fit of proposed transportation solutions.*** c) won't expanding SR 32 draw more traffic**?** ***Please see Draft EIS Table 7.4 for travel benefits expected by the proposed multi-modal improvements***. d) why was no-build alternative dismissed? ***The no build alternative was determined in the MIS phase not to meet project purpose and need, but is carried through the EIS phase of the project as the baseline for comparison of impacts.*** e) aren't aesthetic impacts to LMR forbidden under Section 7? And f) given tendencies for LMR to meander over time, how can assurance be given that piers won't end up in river? ***The response to questions (e) and (f) is as follows: As noted in Draft EIS Table 6.1, bridge design and river crossing details will be developed in Tier 2, at which time, visual impacts and channel activity will be assessed following FHWA and ODOT guidelines. Appropriate context sensitive design solutions at the proposed river crossing will be developed in Tier 2 based on consideration of environmental, community and engineering issues, and input from the public and other resource agencies. Mitigation will be developed in Tier 2, as necessary based on assessment of findings and public input and agency coordination, and included in the final project plans. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.*** g) doesn't relocated SR 32 conflict with the land use vision plan, which calls for a reduction in the area for transportation***? See response to question (b) above.*** h) if projected growth in the area is infill, what is the need for a through highway? ***Please see Draft EIS Table 7.4 for travel benefits expected by the proposed multi-modal improvements***. i) won't an expanded SR 32 induce more traffic? ***See response to question (c) above***. j) is association of SR 32 with the Appalachian Highway Development System a conflict with the city's interest in SR 32 not becoming an interstate highway? ***Relocated SR 32 is not intended or planned, nor will be designed and constructed, as an interstate highway. Relocated SR 32 will be designed as a controlled-access major arterial facility with parkway-type elements, and will not meet design standards for interstate systems.*** k) how does proposed new LMR bridge follow goals put forth in the State's river management plan? ***A new river crossing does not contradict ODNR's plan for protecting the Little Miami River; Ohio Revised Code Section 1517.16 does not prohibit new crossings, but gives approval authority to ODNR for proposed structures.***
Newtown issues • Supporting Individual Comments (see Table 3): #1, 24, 249 (3 total)	Summary of Comments: These public comments express various concerns regarding impacts to Newtown, including: 1) One individual suggested using urban interchanges (as few as possible) in lieu of at-grade intersections through the Valley (Newtown) area, stating that trucks would become congested at signals, and consider constructing a truck lane going up the Mt. Carmel hill; he also stated that the DEIS should specifically study air pollution impacts in the Little Miami river valley. ***Comment acknowledged. Alignment details, including access configurations, will be further developed in Tier 2. Regarding air quality, OKI's regional air quality analysis meets USEPA's requirements for demonstrating conformity with air quality standards and goals established by the Clean Air Act Amendments of 1990, and no individual air quality assessment is required by federal or other statutes.*** 2) One individual expressed concern about Newtown becoming bisected by the project, thought constructing both rail and highway was not cost effective (preferred rail only), suggested attracting industry to Clermont County, so fewer workers would be traveling to Hamilton County, and opposed a new LMR bridge. ***Avoidance and minimization of impacts to communities will be further evaluated in Tier 2, and fully considered in***

TABLE 4. PUBLIC COMMENTS BY TOPIC AND RESPONSES

Primary Emphasis And Supporting Individual Comments	Summary of Comments and *Response or Decision (in bolded italics)*
	the assessment of alternatives. The Eastern Corridor MIS, which provided the basis for Tier 1 work, concluded that a multi-modal strategy is needed to effectively address transportation problems in the area, and that travel demand cannot be addresses by public transportation alone. 3) one individual opposed a proposed transportation corridor through Newtown / Anderson Township, stating it would ruin existing attributes (quiet, beautiful and safe). ***Impacts to Newtown and other communities will be minimized in Tier 2 during detailed alignment development, and communities will continue to be provided opportunity for review and comment.***
Mariemont issues • Supporting Individual Comments (see Table 3): #6, 36, 204 (3 total) Note: Comments received from Village of Mariemont are summarized under "Comments from groups / jurisdictions"	Summary of Comments: These public comments oppose the northernmost LMR crossing area (nearest Mariemont), are concerned about noise impacts, air pollution, LMR floodplain and scenic quality, and reduced property values for residences in this part of Mariemont. ***Tier 1 work developed several alignment options in the vicinity between US 50/Red Bank Road and Newtown Road that avoided or minimized impacts to the numerous ecological and cultural resources occurring in this area. These alternatives will be further developed in Tier 2, and a detailed comparative analysis of environmental impacts per NEPA requirements will be conducted, including consideration of the issue (above) raised by Mariemont. A preferred alternative will be selected in consideration of avoidance and minimization of impacts (including those noted above), public input, cost, purpose and need, and other project issues.***
Anderson Township issues • Supporting Individual Comments (see Table 3): #10, 18, 188, 247 (4 total)	Summary of Comments: These public comments express various concerns for Anderson Township, including: 1) Two individuals state that access to the Eastern Corridor improvements is critical for Anderson Township, particularly at Eight Mile Road, Ancor, and Newtown Road. ***Tier 1 alternatives described in Draft EIS Chapter 3.4.1 and shown on Figure 3.12 of the Draft EIS do include access at these locations; access configuration and design details will be further developed in Tier 2.*** 2) One individual noted that the southernmost relocated SR 32 corridor appears to avoid LMR oxbow, saves Clear Creek, and maximizes floodwall double usage of SR 32 for Newtown. ***Comment acknowledged. Tier 1 work developed several alignment options in the vicinity of the LMR floodplain that avoided or minimized impacts to the numerous ecological and cultural resources occurring in this area. These alternatives will be further developed in Tier 2, and a detailed comparative analysis of environmental impacts per NEPA requirements will be conducted, including consideration of streams and floodplains. A preferred alternative will be selected in consideration of avoidance and minimization of impacts, public input, cost, purpose and need, and other project issues.*** 3) One individual stated that relocated SR 32 should be built only if it decreases backups in Anderson Township and does not adversely affect property values in the township. ***Demonstration of travel improvements and costs by proposed multi-modal transportation improvements are addressed in Draft EIS Chapter 7.1.1 and 7.2. Impacts to Anderson Township and other communities will be minimized in Tier 2 during detailed alignment development, and communities will continue to be provided opportunity for review and comment.*** 4) One individual commented that new roads are not needed, but that Anderson Township could be served by upgrading existing roads and providing alternative modes such a s bus and bikeway; he also noted that Beechmont Avenue between Salem and I-275 needs improvement, such as more bus service. ***The Eastern Corridor MIS, which provided the***

TABLE 4. PUBLIC COMMENTS BY TOPIC AND RESPONSES

Primary Emphasis And Supporting Individual Comments	Summary of Comments and *Response or Decision (in bolded italics)*
	basis for Tier 1 work, concluded that a multi-modal strategy is needed to effectively address transportation problems in the area, and that travel demand cannot be addressed by public transportation alone. More frequent bus service on Beechmont Avenue between Salem and I-275 is a Tier 1 TSM core project, as described in Draft EIS Chapter 3.4.1.
DEIS comments and NEPA - Various issues • Supporting Individual Comments (see Table 3): #255, 260 (2 total)	Summary of Comments: These individuals offered comments on various issues, including: 1) New bridge – a no new bridge option is not evaluated***. As described in the Draft EIS, river crossing options were developed and evaluated in the MIS planning phase of work for ability to meet long-range regional transportation need. Like many other specific options evaluated and dismissed in the MIS phase (including, for example, high-speed ferry boat commuter service on the Ohio River between Coney Island and downtown Cincinnati, or exclusive busway between downtown Cincinnati and Fairfax, or extensive HOV lanes on I-275 and I-471), a no new river crossing option was found not to adequately address the long-range transportation needs of the region and, in consideration of technical analyses appropriate to the MIS planning work as well as stakeholder and public input, was not recommended as part of the long-range plan for the region (and therefore was not included as part of the reasonable alternative array for the Draft EIS). The planning process history and context of the project, including this particular option as well as others eliminated in planning, was part of the information presented to the public at the beginning of the NEPA process, and was also part of the information provided to cooperating state and federal agencies in the scoping process. Please see Section 2.5.1 of this final EIS for further explanation regarding river crossing alternatives.*** *2)* Air quality – no air quality assessment was conducted. ***OKI's regional air quality analysis meets USEPA's requirements for demonstrating conformity with air quality standards and goals established by the Clean Air Act Amendments of 1990, and no individual air quality assessment is required by federal or other statutes.*** 3) Scenic river designation – no mention that the LMR was the first to receive this designation and that NPS comments were not considered. ***NPS comments have been obtained and considered throughout the Tier 1 work phase through their involvement in four agency coordination meetings, and review of both the preliminary Draft EIS and Draft EIS documents, as summarized in the Draft EIS.*** 4) Water quality – a new bridge will significantly impact water quality, and the 1998 305b report states several lower river segments were not meeting designated uses. ***Expected impacts to water quality of the LMR are discussed in Draft EIS Chapter 5.6.4. Draft EIS Chapter 4.1.4 summarizes stream impairment in the lower LMR from 2000 and 2002 305(b) reports.*** 5) Drinking water – DEIS does not investigate how network of roadway improvements will affect sole source aquifer***. Impact tables in Draft EIS Chapter 5 include preliminary encroachment on the aquifer by proposed alternatives, and Draft EIS Chapter 8 (Table 8.3) summarizes commitment in Tier 2 to complete all federal requirements pertaining to aquifer protection as alignment details are more fully developed, including coordination with USEPA.*** 6) Phase II NPDES nothing was included in the DEIS about how the project will impact compliance with Phase II NPDES requirements***. The project relative to NPDES requirements is discussed in Draft EIS Chapter 5.6.4 and Chapter 8, Table 8.3.*** 7) Flooding – no analysis was conducted to evaluate how increases in impervious surfaces would affect downstream flooding. ***The impacts tables included in Draft EIS Chapter 5 address preliminary floodplain encroachments. Commitment is made to complete***

TABLE 4. PUBLIC COMMENTS BY TOPIC AND RESPONSES

Primary Emphasis And Supporting Individual Comments	Summary of Comments and *Response or Decision (in bolded italics)*
	all required coordination, evaluation and permit application applicable to floodplains during Tier 2, as described in Draft EIS Chapter 8, and as included in this Final EIS.
	8) Wetland loss – why can't project be developed without altering the few remaining wetlands along the LMR. ***Site specific wetland avoidance and minimization will continue to be evaluated in Tier 2, and, as necessary, mitigation will be developed as part of the 404/401 permit process and included in final project plans. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.***
	9) Riparian corridors – DEIS did not evaluate how changes in the riparian zone coupled with increased runoff would effect stream morphology and downstream erosion. ***Preliminary impacts to streams are described in Draft EIS Chapter 5.2 and presented in the impact tables included in Chapter 5. Commitment is made to complete in Tier 2 all required coordination, studies and evaluation, and permit application applicable to surface waters once alignment details are more fully developed, including addressing the concerns noted above, and including avoidance and minimization of impacts to the extent possible.***
	10) Aquatic life – DEIS does not support conclusion that project will not affect aquatic life use designations. ***Preliminary impacts to aquatic biota are described in Draft EIS Chapter 5. Aquatic life use designations will be specifically addressed and evaluated in Tier 2 during detailed alignment development and as part of the 404 permit and 401 water quality certification processes.***
	11) Listed species – DEIS does not elaborate on how project will impact state and federal listed species. ***Preliminary impacts to state and federal listed species are described in Draft EIS Chapter 5, and will continue to be evaluated in Tier 2 as alignments are further developed. All required coordination and conservation measures will be conducted as necessary for compliance with provisions of the Fish and Wildlife Coordination Act (48 stat. 401, as amended; 16 USC 661 et seq.), Section 7 of the Endangered Species Act of 1973, as amended, and the U.S Fish and Wildlife Service's Mitigation Policy. Specific avoidance and minimization measures will be developed following agency coordination, and incorporated into final project plans, as necessary. These commitments were described in Draft EIS Chapter 8 and are included in this Final EIS.***
	12) Noise – no noise analysis was conducted. ***As described in the Draft EIS Chapter 4.1.11, the Tier I noise evaluation consisted of a preliminary screening only - to determine potential noise receptors, indicating areas of noise sensitivity - not necessarily impact. Since circulation of the Draft EIS, existing ambient noise readings and a preliminary analysis of future noise readings along the LMR based on best available information was conducted in order to address noise impacts as related to USDOT Section 4(f) applicability, and it was determined that noise impacts needed to constitute a Section 4(f) constructive use are not present; this information is summarized in an FHWA letter to DOI dated September 19, 2005 (see Appendix C). Detailed noise and vibration studies will be conducted during Tier 2 in accordance with all state and federal guidelines when alignments are further developed and receptors are more specifically identified. Noise and/or vibration abatement measures, if required, will be developed during the detailed design phase of a project and included in the final project plans.***
	13) ODNR scenic rivers approval – scenic rivers approval is needed for Tier 1 and Tier 2. ***Coordination with ODNR has been conducted for the Eastern Corridor throughout project development, from the MIS through Tier 1 work. During the MIS, ODNR was represented on the project Task Force, and stated that they would consider support***

TABLE 4. PUBLIC COMMENTS BY TOPIC AND RESPONSES

Primary Emphasis And Supporting Individual Comments	Summary of Comments and *Response or Decision (in bolded italics)*
	of a new bridge, but not without substantial mitigation for protecting the river. Measures for protecting the Little Miami River, including those outlined by ODNR, will be further evaluated and developed in Tier 2, and all required coordination, evaluation and approvals applicable to the Little Miami River will be conducted during Tier 2, including continued coordination with ODNR Scenic Rivers. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS. 14) Increase bus routes – why does plan rely so heavily on expanded bus when people do not use them now***. Performance results described in Draft EIS Chapter 7 (Table 7.4) indicate that transit share will increase with the proposed multi-modal plan.*** 15) Light rail – light rail was added as an afterthought to reinforce a new bridge***. As described in the Draft EIS, the Eastern Corridor MIS determined that a multi-modal strategy was required to adequately address transportation issues, and the Tier 1 Draft EIS work identified feasible alternatives for effectively executing the multi-modal components of the regional long range transportation plan, including TSM, expanded bus transit, new rail transit, new highway capacity and new bikeways.*** 16) LMR meandering – will this require future channel work***. Studies will be conducted in Tier 2 following ODOT's Specifications for Subsurface Investigations, ODOT's Geotechnical Engineering Design Checklists and/or other appropriate analyses, to identify underlying conditions in the Little Miami River valley to be used in bridge location and design, and this information will be used to develop reasonable measures for avoiding/minimizing impacts to free-flow.*** 17) Hahn archaeological site – DEIS does not mention potential constructive use of the site per Section 106 definitions. ***Tier 1 work identified known National Register sites in the study area (per Tier 1 work plans described in Draft EIS Appendix A), and potential Section 106 and Section 4(f) involvement is described in Draft EIS Chapter 5.3.3. Use of the site per Section 106 definition will be evaluated in Tier 2 as alignments are further developed, and measures will be developed for avoidance, minimization and mitigation, as necessary.***
Suggests alternatives outside or in addition to proposed plan • Supporting Individual Comments (see Table 3): #31, 33, 34, 45 (4 total)	Summary of Comments: These public comments suggest alternatives or solutions outside the proposed plan, including: 1) Instead of Oasis Line, use existing rail from Eggleston Ave to Xavier University, then Wasson Line to Fairfax/Mariemont. ***The rail corridor to Xavier is addressed in the I-71 LRT study, and the recommendation described in the Draft EIS for the Wasson Line is that it be part of the long-term regional rail framework with no immediate action in project development other than preservation of existing rail right-of-way for future transportation purposes, due to the uncertainty in funding of the I-71 LRT.*** 2) One individual suggested terminating at the Norwood Lateral to the west and the existing I-275/SR 32 interchange to the east; and also suggested developing a second ring around Cincinnati as an alternate route. ***These routes were not part of the MIS Recommended Plan forwarded into the Tier 1 work phase.*** 3) One individual suggested that new bus service extend beyond I-275 to SR 28 in Milford, where a park-and-ride could be located in one of two commercial areas (grocery plazas). ***This comment pertains to SORTA/Metro.*** 4) One individual suggested Metro lower bus pass fares for routes to Milford, since service is not provided on weekends or holidays. ***This comment pertains to SORTA/Metro.***

TABLE 4. PUBLIC COMMENTS BY TOPIC AND RESPONSES

Primary Emphasis And Supporting Individual Comments	**Summary of Comments and *Response or Decision (in bolded italics)***
Opposes public hearing open format • Supporting Individual Comments (see Table 3): #7	Summary of Comments: A public "hearing" is supposed to be a question and answer session. ***Federal guidelines for public involvement (FWHA 1996) allow for an open forum (informal style) as one of several options for holding a public hearing.***
Comments from groups / jurisdictions • Supporting Individual Comments (see Table 3): #23, 30, 153, 203, 215, 216, 239, 267 (8 total)	*These are summarized and addressed in Table 5 – 8 letters received representing 6 different groups*

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
Eric Partee, Little Miami River Incorporated Letter dated January 10, 2004 and Statement for record submitted at Dec. 9, 2004 Public Hearing	COMMENTS FROM LETTER DATED JANUARY 10, 2005: Comment, Page 1 all and page 2, paragraphs 1-4: LMI provides background information on: events leading to LMR's designation in the National Wild and Scenic Rivers System; OEPA recognition of the LMR as an "Exceptional Warmwater Habitat" (EWH); that Audubon Society's designated of the LMR into their "Important Bird Habitat" program; and LMI ownership of the Horseshoe Bend Nature Preserve and the occurrence of other public parks in the LMR valley. ***Comment acknowledged. This same information is also included in the Draft EIS in Chapter 4.1.4, page 4-10 (scenic river designation); Chapter 4.14, page 4-15 (EWH designation); and Chapter 4.1.9, page 4-33 (Horseshoe Bend). The Little Miami River corridor is included in Audubon's Important Bird Program, although the focus area for the Little Miami in this program is the Spring Valley Wildlife Area, located about 46 miles north of Cincinnati.*** Comment, Page 2, paragraphs 5-6 and page 3, paragraph 1-2: LMI summarizes management objectives from the ODNR "Little Miami Scenic River Assistance Manual" (circa 1970's) regarding bridge crossings (existing sites should be utilized and new crossings should be avoided) and floodplains (new roads should not be constructed in floodplains), stating that ODNR adopted these measures. ***A new river crossing does not contradict ODNR's plan for protecting the Little Miami River. The Little Miami Scenic Rivers Assistance Manual (February 1977) was developed as part of the application process under Section 2(a) (ii), of the Wild and Scenic Rivers Act, P.L. 90-542. The manual outlined goals and provided recommended standards as a means of coordinating efforts to protect the river, and provided an inventory of known, proposed and authorized projects in the proposed designated area. The relocation of U.S. 50/32 was identified as a proposed project. The proposed crossing of the Little Miami in 1977 was located in approximately the location as is proposed for the current project. The possibility of a new crossing did not impact the decision to designate the lower reach of the Little Miami as a component of the National Wild and Scenic Rivers System. The Assistance Manual does not preclude a new bridge crossing among its goals and recommended standards.*** ***In addition to the Assistance Manual, the 1985 "Little Miami State Scenic River Management Plan" identifies, among its proposed implementation tasks, an expectation that ONDR be involved with agencies in early coordination and environmental mitigation on public projects impacting the Little Miami River (as has occurred in the Eastern Corridor project since the beginning of the MIS planning process and through the Tier 1 NEPA process). The 1985 "Little Miami State Scenic River Management Plan" does not prohibit new river crossings. Further, the Ohio Revised Code Section 1517.14 through 18 does not prohibit new crossings, but gives approval authority to ODNR for projects within 1,000 feet of the normal water line of a state designated component of the state scenic river system (ORC 1517.14) and for projects by state agencies or political subdivisions that cause channel modifications to any watercourse within a wild, scenic or recreational river outside the limits of a municipal corporation; such agencies or subdivisions must first obtain approval of the structure or channel modification from the ODNR director (ORC 1517.16). Coordination with ODNR has been conducted for the Eastern Corridor throughout project development, from the MIS through Tier 1 work. During the MIS, ODNR was represented on the project Task Force, and, although they did not vote to include a new bridge in the recommended plan, recognized local support for the project, and stated that they would consider support of a new bridge, but not without substantial mitigation for protecting the river, as summarized in a letter dated June 7, 2002 (see Draft EIS, Appendix C) and in recent correspondence dated January 4, 2005. During Tier 1 work, ODNR attended four agency coordination meetings, and was provided opportunity to review the preliminary Draft EIS and Draft EIS documents. Measures for protecting the Little Miami River, including those outlined by ODNR, will be further evaluated and developed in Tier 2, and all required coordination, evaluation and approvals applicable to the Little Miami River will be conducted during Tier 2, including continued coordination with ODNR Scenic Rivers. These commitments were described in Draft EIS Chapter 8,***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	and are included in this Final EIS. Comment, Page 3, paragraph 3: LMI strongly objects to failure of the Eastern Corridor Land Use Vision Plan to consider LMI ORVs. ***This comment pertains to the Land Use Vision process, conducted by the Hamilton County Regional Planning Commission under separate cover from the Eastern Corridor Draft EIS work.*** Comment, Page 3, paragraphs 4-5: LMI requested in its role as a member of the Tier 1 Review Committee, that NPS be more frequently consulted regarding preparation of alternatives to a new river crossing proposal, and shares concerns with NPS regarding removal of option 2 during the MIS phase. ***NPS was updated and involved throughout the Tier 1 work phase, including attendance at four agency coordination meetings, and was provided opportunity to review both the preliminary Draft EIS and Draft EIS documents; they provided comments regarding project development on six occasions, including four summarized in the Draft EIS and two summarized in this Final EIS. As described in the Draft EIS, "Option 2" for a possible highway river crossing was developed and evaluated in the MIS planning phase of work for ability to meet long-range regional transportation need. Like many other specific options evaluated and dismissed in the MIS phase (including, for example, high-speed ferry boat commuter service on the Ohio River between Coney Island and downtown Cincinnati, or exclusive busway between downtown Cincinnati and Fairfax, or extensive HOV lanes on I-275 and I-471), this option was found not to adequately address the long-range transportation needs of the region and, in consideration of technical analyses appropriate to the MIS planning work as well as stakeholder and public input, was not recommended as part of the long-range plan for the region (and therefore was not included as part of the reasonable alternative array for the Draft EIS). The planning process history and context of the project, including this particular option as well as others eliminated in planning, was part of the information presented to the public at the beginning of the NEPA process, and was also part of the information provided to cooperating state and federal agencies in the scoping process. Please see Section 2.5.1 of this Final EIS for further explanation regarding river crossing alternatives.*** Comment, Page 3, paragraph 6 and page 4, paragraphs 1-4: LMI objects ODNR's rational for endorsement of the proposed LMR bridge based on local political support, stating that ODNR fails to fulfill its commitment to uphold the intent of the LMR river management plan and state-administering agency of the LMR national wild and scenic river. ***Please see response to comment Page 2 (above).*** Comment, Page 4, bottom and page 5: LMI endorses and re-states DEIS comments provided by Rivers Unlimited. ***Comment acknowledged. No response needed.*** Comment, Page 5, bottom and page 6, paragraph 1: LMI requests that the Anderson (Five Mile) Connector be studied and included in the DEIS***. The Anderson Connector was not included in the MIS Recommended Plan for the Eastern Corridor, and conclusions regarding this connector are outlined in the MIS document.*** Comment, Page 6, paragraph 2: LMI suggests that a new river crossing would threaten ORVs of the LMR by attempting to construct a bridge in an area that exhibits a high degree of meandering, projecting that additional future channel work would be required to redirect the LMR away from the bridge. ***Studies will be conducted in Tier 2 following ODOT's Specifications for Subsurface Investigations, ODOT's Geotechnical Engineering Design Checklists and/or other appropriate analyses, to identify underlying conditions in the Little Miami River valley to be used in bridge location and design, and this information will be used to develop appropriate measures for accounting for channel activity and potential impacts. These commitments are included in this Final EIS. Historical meanders of the Little Miami River are discussed in Chapter 4.1.4, page 4-17 of the Draft EIS.***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	Comment, age 6, paragraphs 3 and 5 and page 7, paragraphs 1 and 2: LMI notes that the Tier 1 DEIS should include: an assessment of the impacts of vehicular pollutants on the floodplain; a visual impact analysis and a more comprehensive noise analysis, and questions the validity of the traffic modeling results. ***These detailed analyses are more appropriately evaluated in Tier 2 when more specific alignment details are developed; commitment to conduct these studies is outlined in Draft EIS Table 8.3, and included in this Final EIS. Vehicular pollutants from highway runoff will be addressed as part of the 401 water quality assessment and MS4 stormwater analysis conducted in Tier 2. Traffic modeling for Tier 1 analyses used OKI's approved regional travel demand forecasting model (Version 6.0), as described in Chapter 1 of the Draft EIS.*** Comment, Page 6, paragraph 4, page 7, paragraphs 3-4, and page 8, paragraph 1: LMI notes that no specific air quality analysis was conducted for the LMR valley (only an OKI regional analysis), and lists 24 scientific studies linking health risks with highway pollution. ***OKI's regional air quality analysis meets USEPA's requirements for demonstrating conformity with air quality standards and goals established by the Clean Air Act Amendments of 1990, and no individual air quality assessment is required by federal or other statutes. Specific findings and conclusions from OKI's transportation conformity analysis, which included the recommended Eastern Corridor transportation investments, are summarized in OKI's 2030 Regional Transportation Plan (available for viewing from the OKI website).*** Comment, Page 8, bottom to page 18, top: LMI endorses and re-states DEIS comments provided by the Sierra Club. ***Comment acknowledged. No response needed.*** Comment, Page 18, paragraph 3: LMI restates that pollution from road surface runoff be assessed in Tier 1, and states that it is not in the public interest to spend public funds on a tier 2 analysis of new crossing alignments. ***Please see LMI comment page 6, paragraphs 3 and 5 and page 7, paragraphs 1 and 2 (above) for response addressing highway runoff, and see LMI comment page 3, paragraphs 4 and 5 (above) for response regarding a new river crossing.*** *Specific LMI comments on DEIS pages:* DEIS pages 2-2, 2-3: LMI notes from Table 2.1 that no-build ADT on SR 32 and US 50 (both west of Newtown Road) will remain effectively unchanged from 1995 to 2030, not justifying costs and impacts of the project, and suggests that a new SR 32 will facilitate loss of Hamilton County population. ***Traffic modeling conducted for the project indicates that no build traffic on US 50 east and west of Newtown Road will decrease slightly by 2030 (as indicated in Draft EIS Table 2.2), likely because of rerouting to other roads in the local network (such as Round Bottom Road or SR 32) due to the already bottlenecked and congested conditions along this stretch of roadway through Mariemont. Level of service on US 50 in this area, however, will be below-standard by 2030, as indicated in Draft EIS Table 2.3, and overall travel performance in the Eastern Corridor and OKI region under a no build scenario is expected to deteriorate, as indicated in Draft EIS Table 2.3. Draft EIS Chapter 5.6.2, pages 5-72 to 5-75, describes expected future development in the Eastern Corridor, summarizing findings from the Eastern Corridor Economic Analysis and Eastern Corridor Land Use Vision Plan, and provides information regarding expected job and residential increases (not losses).*** DEIS page 4-22: Wetland 3 (Clear Creek) should be identified as a high quality wetland. ***Wetlands 8, 9 and 12 in the Draft EIS are those associated with Clear Creek (not Wetland 3); they qualify as moderate quality features based on ORAM work conducted in Tier 1. Recently, it has been observed that new beaver activity has occurred in the Clear Creek area, and wetland conditions in the area are dynamic; ORAM scores and wetland quality will be updated, as necessary, in Tier 2 during detailed wetland delineation studies. These commitments are included in this Final EIS.***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	DEIS page 5-38: Noise impacts to wildlife should be included in the DEIS. ***Detailed noise studies will be conducted during Tier 2 in accordance with all state and federal guidelines when alignments are further developed and receptors are more specifically identified.*** DEIS page 5-39: No mitigation is possible for a unique resource such as a National Scenic River. ***The preliminary mitigation strategy for the Eastern Corridor, discussed in Chapters 5.6.4 and 8.3.2 of the Draft EIS, and the preliminary environmental commitments included in this Final EIS, provide opportunity for restoring and protecting stream and riparian conditions along this urban stretch of the Little Miami River; mitigation details will be further developed in Tier 2, and fully evaluated and coordinated through state and federal agencies, as applicable.*** DEIS p 5-81: The existing transmission line at the Horseshoe Bend area is beneficial in providing edge habitat for wildlife, and impacts do not compare to that of a highway. ***Commitment is made in this Final EIS to evaluate in Tier 2 appropriate design strategies for protecting wildlife following FHWA guidelines, such as construction of wildlife crossings, creation of transition habitat, fencing strategies, vegetation plantings, etc.*** DEIS page 5-85: Bald eagles are annually seen fishing along the LMR in the area of the proposed bridge. ***Comment acknowledged. Chapter 4.1.7 of the Draft EIS summarizes coordination with ODNR regarding the occurrence of bald eagle nests in the project vicinity (none are reported), and notes that no individuals were observed during Tier 1 field surveys. Use of the Little Miami River by bald eagle and potential habitat for this species will continue to be evaluated in Tier 2, as appropriate. Specific avoidance and minimization measures will be developed following agency coordination, and incorporated into final project plans, as necessary. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.*** LMI summary statements, pages 19-20: LMI reiterates concern that Eastern corridor is multi-modal in name only and that the Tier 1 DEIS be revised to promote a no new river crossing of the LMR. ***These concerns are addressed in previous responses. No additional response needed.*** LMI STATEMENT SUBMITTED AT THE PUBLIC HEARING ON DECEMBER 9, 2004: Subset of issues expressed and addressed in above LMI comments. ***No response needed (comments are addressed above).***
Marilyn Wall, Sierra Club (SC) Letter dated January 10, 2004 and Draft EIS Comments submitted at Dec. 9, 2004 Public Hearing	COMMENTS FROM LETTER DATED JANUARY 10, 2005: Comment 1 (re: project purpose and goals): Bringing forth a large-scale limited access connector between two interstate highways is not a means of neighborhood access (as stated on page DEIS 5-59), but interstate access. The project addresses neither comprehensive effective solutions nor neighborhood goals in neither reducing local traffic nor solving regional issues. ***The project is comprehensive in that it is multi-modal, addressing regional demand, as well as the travel needs of neighborhoods such as access, mode choice and connectivity between jobs and residences. Draft EIS Chapter 7.1 addresses benefits to local traffic and regional issues.*** The project fails to address larger environmental goals by not addressing air quality, quality of life and protection of the LMR. ***The Draft EIS addresses these issues in Chapter 4.1.11 (air quality), Chapter 5.6 (secondary and cumulative impacts) and Chapter 8.3 and 8.4 (mitigation and environmental commitments). Measures for protecting these resources will continue to be evaluated and updated in Tier 2.*** Major goals such as development of Ancor properties are unrelated to improvements such as Red Bank connection to relocated SR 32, and can be achieved without the project. ***SC is referring to major goals for the Eastern Corridor as identified in the MIS, which includes***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	development of a transportation solution that supports economic goals for the area. Development in the Ancor, area is being undertaken separately from the proposed project; access to this area, however, is being considered and developed as part of the project to support this MIS goal. The project fails to provide a fiscal framework for all portions of the project. ***A preliminary financial strategy and implementation plan for all components of the project are described in Draft EIS Chapter 7.2.2 and 7.3, and will continue to be developed in Tier 2.*** Comment 2 (re: goal of tier 1 work): The goal as stated in the DEIS appears to move ahead with highway, and is no different from previous highway interests seeking a new LMR bridge. ***As described in the Draft EIS, the Eastern Corridor Major Investment Study determined that a multi-modal strategy was required to adequately address current and future transportation problems and travel demand, and the Tier 1 Draft EIS work identified feasible alternatives for effectively executing the multi-modal components of the regional long range transportation plan, including TSM, expanded bus transit, new rail transit, new highway capacity and new bikeways.*** Comment 3 (re: expanded bus): Expanded bus options are limited in scope, funding is uncertain and ridership is barely mentioned, appearing but as a window dressing to make a highway plan look multi-modal. ***The expanded bus plan, described in Draft EIS Chapter 3.3.2 and 3.4.1 (page 3-16), was a comprehensive development effort that included: an analysis of key 2030 linkages for the Eastern Corridor; analysis of RTDM output; and planning for consistency with Eastern Corridor MIS recommendations, the MetroMoves Regional Transit Plan, and findings from the Eastern Corridor Land Use Vision Plan. A preliminary financial strategy and implementation plan for all components of the project are described in Draft EIS Chapter 7.2.2 and 7.3, and will continue to be developed in Tier 2.*** Comment 4 (re: bike): There is no mention of proposed bikeways along Mill Creek, and biking as a true transportation alternative is not made more viable by this plan. ***The bikeway component of the Eastern Corridor project, described in Draft EIS Chapter 3.4.1, page 3-39, consists of facilities being planned by local jurisdictions linked to major bike corridors identified in OKI's Bike Plan, and is therefore consistent with the regional bike network within eastern Hamilton and western Clermont counties. Key regional links from the Eastern Corridor include the Ohio River Trail and Lunken Trail in Cincinnati, and the Little Miami River Scenic Trail in Milford. The Mill Creek Greenway plan, located just to the west of, but not part of the Eastern Corridor project, is part of the overall OKI regional bike plan; it includes proposed facilities along Mill Creek from Butler County to the Ohio River in Cincinnati, with opportunity to also link with the Ohio River Trail - and ultimately to planned bikeways within the Eastern Corridor.*** Comment 5 (re: rail transit): SC comments include: there is no consideration of using existing LMR rail crossing rather than building an extensive multi-modal crossing; funding uncertainties make rail unlikely as a viable option; with the demise of the I-71 LRT, light rail is hardly an option, and there is no discussion of mixing LRT and DMU technologies; why is there no connection to AMTRAK; there is no mention of or connection to High Speed Rail Hub proposal currently under development in Ohio; rail transit appears but as a window dressing for highway. ***Use of the existing rail crossing over the LMR interferes with existing freight operation at the Claire Yard, located north of the LMR in the south part of Fairfax and Mariemont. Currently, the I-71 LRT is no longer in the regional long-range plan, and the Draft EIS recognizes that funding is uncertain, and recommends corridor preservation of the Wasson Line only, with no further work effort anticipated in Tier 2. AMTRACK and the Intercity Rail Study (also referred to as the Midwest Regional Rail System or High Speed Rail by SC) are located outside the Eastern Corridor; potential for connection to this system via the riverfront portion of the proposed Oasis Line will be evaluated in Tier 2.*** Comment 6 (re: new highway capacity): Need for a new highway/truckway from I-71 to I-75 with

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	relocated SR 32 is not demonstrated by traffic counts, travel improvements, costs, other benefits and retention of jobs and housing in Hamilton County; induced travel demand is not considered. ***Demonstration of travel improvements and costs are addressed in Draft EIS Chapter 7.1.1 and 7.2; jobs and housing benefits were addressed in the economic assessment conducted for the project, as summarized in Draft EIS Chapter 1.4; and updates to the regional travel demand model used for the Tier 1 work, which addressed induced travel among other issues, are described in Draft EIS Chapter 1.6.2.*** Comment 7 (re: sprawl): Adverse environmental impacts, social and economic impacts and loss of population and jobs due to sprawl resulting from the project are not mentioned in the DEIS, and there is nothing in the DEIS to backup claims of infill. ***Draft EIS Chapter 5.6.2, pages 5-72 to 5-75, describes expected future development in the Eastern Corridor, summarizing findings from the Eastern Corridor Economic Analysis and Eastern Corridor Land Use Vision Plan, and provides information regarding expected job and residential increases and expected land use changes that support the conclusion that secondary development is not expected to occur as inadvertent, uncontrolled sprawl, but as planned, desirable development, primarily infill by nature, consistent with local and regional planning, and supported by the transportation network.*** Comment 8 (re: air quality): Air quality cannot be assured without independent analysis of the Travel Demand Model, and OKI has repeatedly claimed its transportation plan meets ozone standards, when it hasn't. ***OKI's regional air quality analysis meets USEPA's requirements for demonstrating conformity with air quality standards and goals established by the Clean Air Act Amendments of 1990, and no individual air quality assessment is required by federal or other statutes. Specific findings and conclusions from OKI's transportation conformity analysis, which included the recommended Eastern Corridor transportation investments, are summarized in OKI's 2030 Regional Transportation Plan (available for viewing from the OKI website).*** Comment 9 (re: funding): The project is not fiscally constrained and lacks funding for non-highway modes. ***A preliminary financial strategy and implementation plan for all components of the project are described in Draft EIS Chapter 7.2.2 and 7.3, and will continue to be developed in Tier 2.*** Comment 10 (re: SORTA): There is no assessment of how this project meshes with SORTA / MetroMoves. ***Please see response to SC Comment #3 above.*** Comment 11 (re: segmentation): Widening Red Bank Road from Fair Lane to Brotherton and widening I-275 have moved forward before completion of the EIS, and this negates the environmental process. ***The I-275 widening is being conducted separately from the Eastern Corridor project. As discussed in Draft EIS Chapter 3.4.1, the TSM core project list (which includes Red Bank Road from Fair Lane to Brotherton) will be updated in Tier 2, and only those projects with expected improvements to the overall multi-modal transportation services in the Eastern Corridor will become part of the Tier 2 work program.*** Comment 12 (re: preliminary mitigation and environmental commitments): SC comments include: this section fails to recognize National Scenic River designation, conforming with state's management plan, floodplain issues, LMR meanders, T&E species in the LMR, air quality, noise, cultural resources, increased traffic and effects on neighborhoods; LMR impacts cannot be mitigated; cannot mitigate unless impacts are known; NPS has been ignored in the process; key environmental constraints of a bridge crossing are not addressed. ***Draft EIS Chapter 8.3 and 8.4 and Tables 8.2 and 8.3 list preliminary environmental commitments, mitigation and expected permit involvement for the project that will be completed in Tier 2 as alignments are further developed, addressing the LMR, floodplain, T&E species, noise, cultural resources, and communities. Please see SC Comment #8 (above) for response regarding air quality and Comment #21 (below) for response regarding conformity to ODNR's***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	management plan. SC comments regarding LMR meanders, NPS involvement, and LMR mitigation are similar to LMI comments; please see responses to the following LMI comments submitted January 10, 2004 (above): Page 6, paragraph 2; Page 3, paragraphs 4-5; and DEIS page 5-39. Comment 13 (re: MIS): Opponents of the LMR river crossing were excluded from the MIS sub-committee that addressed river crossings and reached a consensus to include a highway component and new LMR crossing. ***This commentary pertains to the MIS process.*** Comment 14 (re: land use): DEIS does not address issue of smart growth and transit friendly development which might make rail and bus proposals a reality. ***Chapters 5.2.1 to 5.2.6 of the Draft EIS describe how components of the proposed multi-modal plan support land use priorities in each of the six geographic areas of the Eastern Corridor; please refer to the subheadings titled "Land Use Fit and Secondary and Cumulative Impact Considerations" in each of these sections for specific examples of expected transit friendly development and smart growth.*** Comment 15 (re: economic analysis): Proposed gains in residents and jobs in 10 and 20 years are slight and highly theoretical. ***Not possible to respond to this qualitative commentary.*** Comment 16 (re: Travel Demand Model): a. 1995 data used in TDM is outdated; truck origin and destination data is absent from the TDM analysis. ***Data has been updated to baseline conditions using acceptable methods, including truck data, per the region's FHWA-approved TDM. Truck data is included in the RTDM and was used; 1995 was the model calibration year, and does not mean that the model only uses "1995 data". Socio-economic data, networks forecasted for future years based on more recent data.*** b. Sierra Club asked to be part of a TDM peer review panel; was there one? ***The Sierra Club was a member of and attended the meetings of the Eastern Corridor RTDM review panel.*** c. TDM used in the I-71 corridor had limited ability to analyze transit; has this changed? ***The updated RTDM incorporates improved ability to evaluate transit response in the regional network.*** d. Does the modal choice model and trip distribution model include bike and walkway, reflect land use changes, and what were the land use alternatives considered? ***The RTDM does not produce specific forecasts for bike and pedestrian trips, but does account for non-car (transit) travel and related walk connections in its mode-choice component. The RTDM also accounts for land use and land use changes. The modeling was done based on the 2030 forecast of the relevant socio-economic variables provided by OKI. This forecast was developed by OKI considering land use changes.*** e. What years were used for truck trip tables, was there a truck survey, and how does data vary during economic turndowns? ***Truck forecasts for 2030 were performed by OKI as part of the peer-reviewed model update.*** f. Was cost of fuel considered in the TDM and economic analysis, and was an alternative of increased local economy considered? ***Fuel costs were considered. Local economic factors corresponding to the 2030 LRP forecast were considered.*** ***g.*** What changes were made in the socio-economic data for futures and why was there no apples-to-apples comparison done from the MIS to DEIS (2020 to 2030)*?* ***The MIS used available planning tools (including the then-current version of the RTDM) and approved and appropriate techniques and methods for planning-level evaluations. The DEIS used an updated model and data.*** h. What population changes were assumed in the model and was immigrants, global economy and US jobs going overseas factored into the analysis? ***The modeling work incorporated appropriate population and employment factors, as coordinated with the peer review group.*** i. With limited origin-destination data, how can promise of moving traffic out of

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	neighborhoods be assured? ***The modeling work and the updated TDM incorporated appropriate, peer-reviewed origin-destination components.*** ***j.*** Sierra Club conducted an independent analysis of the Eastern Corridor TDM work, and resulted in different conclusions regarding VMT, travel time reductions, and projected traffic for the new LMR bridge and other bridges, and concludes that the modeling conducted for the project underestimates the impact of induced demand of the new bridge and overestimates the benefits ***We are not aware of this independent analysis (this may be in reference to an independent analysis that was performed by the Sierra Club during the MIS phase, which first refuted the findings of the MIS, but then later itself was admitted, in the media by the Sierra Club, to have been flawed). The work in the DEIS used peer-reviewed methods and techniques and the FHWA-approved RTDM.*** *The Sierra Club formally requests an executable copy of the TDM, all data put into the model and a copy of the model in electronic format.* ***A formal request has been received and is being processed by the TID in coordination with OKI.*** Comment 17 (re: public involvement): Sierra Club found it difficult to keep apprised of project meetings, schedules, agendas and requests for information, and noted that the timing of the public hearing was near holidays, less than 30 days from public notice of the DEIS, and that it was not make clear that a public recorder was at the meeting to take public comments. ***Public involvement opportunities throughout the Tier 1 process were announced in various forms, including website announcements/calendar, mailings, and media releases, as described in Draft EIS Chapter 6. The public hearing was held 20 days following federal register public notice, longer than the 15-day minimum required by federal statute. Verbal comments at the hearing were taken at a station identified as such, where a public recorder was available for taking comments throughout the evening.*** Comment 18 (re: traffic counts): a. There is no documentation of need based on traffic counts when comparing 1995 to 2030 data. ***Traffic forecasts are discussed in the Tier 1 DEIS.*** b. The DEIS provides limited TDM data and no basis of comparison between build, including induced travel demand, and no-build; and no assessment of truck traffic. ***The build forecast fully incorporates induced travel demand and truck traffic, per the peer-reviewed and FHWA-approved TDM. All of the effects and benefits reported for the build alternative are increments beyond the baseline no-build condition.*** c. No information is provided on how travel will increase in Clermont County from the project, nor on loss of jobs due to relocating to Clermont County, loss of economic vitality in Cincinnati and Hamilton county and loss of housing in Hamilton County. ***The TDM work evaluated travel forecasts in all parts of the Eastern Corridor, and projections for key routes are included in the Tier 1 DEIS. Draft EIS Chapter 5.6.2, pages 5-72 to 5-75, describes expected future development in the Eastern Corridor, summarizing findings from the Eastern Corridor Economic Analysis and Eastern Corridor Land Use Vision Plan, and provides information regarding expected job and residential increases (not losses).*** Comment 19 (re: safety): The cause of accidents is not indicated and no case is made that the new highway capacity will reduce accidents. ***Chapter 2.2.4, page 2-8 of the Draft EIS reports that, of the total accidents occurring in the Eastern Corridor, "going straight", "turning left" and "stopped-in-traffic" were the top three pre-accident actions according to Ohio Department of Public Safety records; as reflected in Table 2.4 on the same page, and other information available from the Ohio Department of Public Safety (website), statewide average accident rates for smaller (2-lane), undivided roadways, in general, are typically higher compared to the accident rates for improved (4-lane+), divided facilities.*** Comment 20 (re: Great Lakes / Mid Atlantic Corridor): This study neglects to mention the

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	GL/MAC study which proposes to bring I-73/I-74 through the Greater Cincinnati area, connecting I-74 and SR 32, and, as such, the limited access connection from I-71 to I-275 via Red Bank/relocated SR 32 needs to be part of an EIS that studies the entire I-73/I-74 corridor. ***Feasibility studies for the I-73/I-74 corridor conducted in the early 1990's did not identify specific corridor locations through the Cincinnati area or Ohio as a whole; these corridor projects were never carried forward for additional study nor incorporated into any state or regional transportation plan, with no further consideration anticipated at this time.*** Comment 21 (re: Chapter 4 – Affected Environment): SC makes the following comments: The DEIS neglects to address the National Wild and Scenic River, especially ORV's, its economic and social values or cost to degrading the river. ***Preliminary assessment of potential impacts to river values appropriate to Tier 1 is presented in Draft EIS Chapter 5.6.4. More detailed assessment of impact to the Little Miami River will be further evaluated in Tier 2 as alignments are further developed. Commitment is made in Tier 1 to complete all required coordination, evaluation and permit application applicable to the Little Miami River during Tier 2, as described in Draft EIS Chapter 8 and included in this Final EIS.*** Creating a new crossing violates ODNR's management plan. ***A new river crossing does not contradict ODNR's plan for protecting the Little Miami River. The Little Miami Scenic Rivers Assistance Manual (February 1977) was developed as part of the application process under Section 2(a) (ii), of the Wild and Scenic Rivers Act, P.L. 90-542. The manual outlined goals and provided recommended standards as a means of coordinating efforts to protect the river, and provided an inventory of known, proposed and authorized projects in the proposed designated area. The relocation of U.S. 50/32 was identified as a proposed project. The proposed crossing of the Little Miami in 1977 was located in approximately the location as is proposed for the current project. The possibility of a new crossing did not impact the decision to designate the lower reach of the Little Miami as a component of the National Wild and Scenic Rivers System. The Assistance Manual does not preclude a new bridge crossing among its goals and recommended standards.*** ***In addition to the Assistance Manual, the 1985 "Little Miami State Scenic River Management Plan" identifies, among its proposed implementation tasks, an expectation that ONDR be involved with agencies in early coordination and environmental mitigation on public projects impacting the Little Miami River (as has occurred in the Eastern Corridor project since the beginning of the MIS planning process and through the Tier 1 NEPA process). The 1985 "Little Miami State Scenic River Management Plan" does not prohibit new river crossings. Further, the Ohio Revised Code Section 1517.14 through 18 does not prohibit new crossings, but gives approval authority to ODNR for projects within 1,000 feet of the normal water line of a state designated component of the state scenic river system (ORC 1517.14) and for projects by state agencies or political subdivisions that cause channel modifications to any watercourse within a wild, scenic or recreational river outside the limits of a municipal corporation; such agencies or subdivisions must first obtain approval of the structure or channel modification from the ODNR director (ORC 1517.16). Coordination with ODNR has been conducted for the Eastern Corridor throughout project development, from the MIS through Tier 1 work. During the MIS, ODNR was represented on the project Task Force, and, although they did not vote to include a new bridge in the recommended plan, recognized local support for the project, and stated that they would consider support of a new bridge, but not without substantial mitigation for protecting the river, as summarized in a letter dated June 7, 2002 (see Draft EIS, Appendix C) and in recent correspondence dated January 4, 2005. During Tier 1 work, ODNR attended four agency coordination meetings, and was provided opportunity to review the preliminary Draft EIS and Draft EIS documents. Measures for protecting the Little Miami River, including those outlined by ODNR, will be further evaluated and developed in Tier 2, and all required coordination, evaluation and approvals applicable to the Little Miami River will be conducted during Tier 2, including continued coordination***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	with ODNR Scenic Rivers. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS. Spanning the river currently will not prevent piers from being in the river in the future due to meandering. ***Studies will be conducted in Tier 2 following ODOT's Specifications for Subsurface Investigations, ODOT's Geotechnical Engineering Design Checklists and/or other appropriate analyses, to identify underlying conditions in the Little Miami River valley to be used in bridge location and design, and this information will be used to develop appropriate measures for accounting for channel activity and potential impacts. These commitments are included in this Final EIS.*** Assessment of wildlife is limited, including for bald eagle. ***Chapter 4.1.7 of the Draft EIS summarizes coordination with ODNR regarding the occurrence of bald eagle nests in the project vicinity (none are reported), and notes that no individuals were observed during Tier 1 field surveys. Use of the Little Miami River by bald eagle and potential habitat for this species and other wildlife will continue to be evaluated in Tier 2, as appropriate. Specific avoidance and minimization measures will be developed following agency coordination, and incorporated into final project plans, as necessary. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.*** Air quality: given historic failure of the region to meet conformity and unlikelihood that transit will not be built due to lack of funding, air quality conformity of the project is not assured. ***Please see response to SC Comment #8 (above) regarding air quality conformity and response to Comment #9 regarding funding.*** Noise and visual impacts will cause detriment to the ORVs of the LMR, including recreational use by canoeists, and free flow will be impaired as the stream meanders around bridge piers. ***Please see two comments above (comment on spanning the river) regarding impacts to LMR values. Commitment is made to complete all required coordination, evaluation and permit application applicable to the Little Miami River during Tier 2.*** No serious assessment of alternatives to a bridge crossing are made in the DEIS. ***Bridge crossing alternatives were evaluated during the MIS phase of the project, as summarized in Chapter 3.2.2 of the Draft EIS.*** Impacts to water quality, aquatic species due to new roadway are ignored, and how will infill minimize impervious surfaces and how will greenspace be expanded; potential for accidental spills into the LMR is ignored. ***Preliminary impacts to water quality and aquatic species are described in Draft EIS Chapter 5.2 and presented in the impact tables included in Chapter 5. Commitment is made to complete in Tier 2 all required coordination, studies and evaluation, and permit application applicable to impacts to surface waters, including avoidance and minimization to the extent possible. Opportunity for greenspace expansion is addressed in Draft EIS Chapter 8.3.2 where key components of the preliminary mitigation strategy are described.*** The DEIS does not address how relocated SR 32 will affect the floodplain and increase flooding. ***The impacts tables included in Draft EIS Chapter 5 address preliminary floodplain encroachment. Commitment is made in Tier 1 to complete all required coordination, evaluation and permit application applicable to floodplains during Tier 2, as described in Draft EIS Chapter 8, and as included in this Final EIS.*** Environmental justice is given no real assessment, and the Part A review committee lacks minority representation. ***Reaching environmental justice communities and obtaining their input has been a key component of the Eastern Corridor public involvement plan through a variety opportunities including mailings, fliers, radio and newspaper ads, community meetings, etc., as described in Draft EIS Chapter 6 and Appendix B. The Part A Review Committee (also referred to as the Implementation Group) was comprised of***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	representatives from the six project funding partners for oversight of the Part A work, as also described in Draft EIS Chapter 6. Archaeological resources are given scant consideration. ***The Tier 1 cultural resources work plan was developed with coordination from the State Historic Preservation Office and other resource agencies, as described in Draft EIS Chapter 1.5.2, and commitment to conduct detailed Phase 1 field studies and other assessments for compliance with state and federal requirements in Tier 2 is described in Draft EIS Chapter 8, and included in this Final EIS.*** Comment 22 (re: alternatives): The DEIS fails to consider alternatives to the Red Bank / relocated SR 32 limited access highway. The MIS work phase established the context and scope of improvements for the Tier 1 work, which included recommendations for improvements to Red Bank Road and a relocated SR 32. ***Relocated SR 32 will be a controlled access arterial roadway (not limited access) west of I-275, as described in Draft EIS Chapter 3.*** Comment 23 (re: transit): If bus and rail were serious options, they would be built before highway. ***Draft EIS Chapter 7.3 describes the recommended implementation strategy, which includes early implementation of some transit components.*** Sierra Club summary statements (page 11): Amend DEIS to fully consider alternatives to a new river crossing and limited access highway; amend DEIS to consider robust transit and freight rail plan; needs to be an independent analysis of sprawl impacts, TDM modeling and air conformity analysis. ***These comments were raised previously in this letter; please see above responses.*** SIERRA CLUB STATEMENT SUBMITTED AT THE PUBLIC HEARING ON DECEMBER 9, 2004: Subset of issues expressed and addressed in above Sierra Club comments. ***No response needed (comments are addressed above).***
Quinn McKew, American Rivers (AR) Letter dated January 7, 2005	General comments, page 1: American Rivers (AR) is concerned that sufficient study has not been given to Option 2 – an alternative to building anew bridge across the LMR National Wild and Scenic River, and shares concerns with NPS's preliminary determination that a new bridge could have a direct and adverse effect on the scenic and recreational values of the river. ***As described in the Draft EIS, "Option 2" for a possible highway river crossing was developed and evaluated in the MIS planning phase of work for ability to meet long-range regional transportation need. Like many other specific options evaluated and dismissed in the MIS phase (including, for example, high-speed ferry boat commuter service on the Ohio River between Coney Island and downtown Cincinnati, or exclusive busway between downtown Cincinnati and Fairfax, or extensive HOV lanes on I-275 and I-471), this option was found not to adequately address the long-range transportation needs of the region and, in consideration of technical analyses appropriate to the MIS planning work as well as stakeholder and public input, was not recommended as part of the long-range plan for the region (and therefore was not included as part of the reasonable alternative array for the Draft EIS). The planning process history and context of the project, including this particular option as well as others eliminated in planning, was part of the information presented to the public at the beginning of the NEPA process, and was also part of the information provided to cooperating state and federal agencies in the scoping process. Please see Section 2.5.1 of this Final EIS for further explanation regarding river crossing alternatives.*** Comment re: Ohio management plan: AR is concerned that the proposed LMR bridge directly contradicts the State's management plan for protecting the river, particularly the riparian zone. ***A new river crossing does not contradict ODNR's plan for protecting the Little Miami River. The Little Miami Scenic Rivers Assistance Manual (February 1977) was developed as part of the application process under Section 2(a) (ii), of the Wild and Scenic Rivers Act, P.L. 90-542. The manual outlined goals and provided recommended standards as a means of coordinating efforts to protect the river, and provided an inventory of known,***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	proposed and authorized projects in the proposed designated area. The relocation of U.S. 50/32 was identified as a proposed project. The proposed crossing of the Little Miami in 1977 was located in approximately the location as is proposed for the current project. The possibility of a new crossing did not impact the decision to designate the lower reach of the Little Miami as a component of the National Wild and Scenic Rivers System. The Assistance Manual does not preclude a new bridge crossing among its goals and recommended standards. ***In addition to the Assistance Manual, the 1985 "Little Miami State Scenic River Management Plan" identifies, among its proposed implementation tasks, an expectation that ONDR be involved with agencies in early coordination and environmental mitigation on public projects impacting the Little Miami River (as has occurred in the Eastern Corridor project since the beginning of the MIS planning process and through the Tier 1 NEPA process). The 1985 "Little Miami State Scenic River Management Plan" does not prohibit new river crossings. Further, the Ohio Revised Code Section 1517.14 through 18 does not prohibit new crossings, but gives approval authority to ODNR for projects within 1,000 feet of the normal water line of a state designated component of the state scenic river system (ORC 1517.14) and for projects by state agencies or political subdivisions that cause channel modifications to any watercourse within a wild, scenic or recreational river outside the limits of a municipal corporation; such agencies or subdivisions must first obtain approval of the structure or channel modification from the ODNR director (ORC 1517.16). Coordination with ODNR has been conducted for the Eastern Corridor throughout project development, from the MIS through Tier 1 work. During the MIS, ODNR was represented on the project Task Force, and, although they did not vote to include a new bridge in the recommended plan, recognized local support for the project, and stated that they would consider support of a new bridge, but not without substantial mitigation for protecting the river, as summarized in a letter dated June 7, 2002 (see Draft EIS, Appendix C) and in recent correspondence dated January 4, 2005. During Tier 1 work, ODNR attended four agency coordination meetings, and was provided opportunity to review the preliminary Draft EIS and Draft EIS documents. Measures for protecting the Little Miami River, including those outlined by ODNR, will be further evaluated and developed in Tier 2, and all required coordination, evaluation and approvals applicable to the Little Miami River will be conducted during Tier 2, including continued coordination with ODNR Scenic Rivers. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.*** <u>Comment re: air quality:</u> AR comments that the DEIS pays insufficient attention to current air quality problems in the Eastern Corridor, and that the FEIS should more rigorously examine the regional air pollution likely to be generated by the new highway system, as well as the cost of health care impacts. ***OKI's regional air quality analysis meets USEPA's requirements for demonstrating conformity with air quality standards and goals established by the Clean Air Act Amendments of 1990, and no individual air quality assessment is required by federal or other statutes. Specific findings and conclusions from OKI's transportation conformity analysis, which included the recommended Eastern Corridor transportation investments, are summarized in OKI's 2030 Regional Transportation Plan (available for viewing from the OKI website).*** <u>Comment re: water quality impacts:</u> AR comments that the DEIS does not fully assess effects of large numbers of cars and trucks that will be crossing over the river and floodplain, including impacts from vehicular pollutants and road salt. ***Vehicular pollutants from highway runoff will be addressed as part of the 401 water quality assessment and MS4 stormwater analysis conducted in Tier 2.*** <u>Comment re: alternatives:</u> AR is concerned by the lack of attention given to MIS Option 2, and that the proposed multi-modal plan only gives lip service to viable transit and rail options. ***Please see response to <u>General Comments, page 1</u> (above).***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	Comment re: Wild and Scenic riverbed: AR comments that the DEIS does not address that the proposed bridge location is at a point where the river meanders within the floodplain, and is concerned that the river will eventually move to one of the piers, obstructing flow and reducing ORVs. ***Studies will be conducted in Tier 2 following ODOT's Specifications for Subsurface Investigations, ODOT's Geotechnical Engineering Design Checklists and/or other appropriate analyses, to identify underlying conditions in the Little Miami River valley to be used in bridge location and design, and this information will be used to develop appropriate measures for accounting for channel activity and potential impacts. These commitments are included in this Final EIS. Historical meanders of the Little Miami River are discussed in Chapter 4.1.4, page 4-17 of the Draft EIS.***
Stephanie Hines, Little Miami River Partnership Letter dated January 10, 2005	Comment re: Existing management plans: LMRP expresses concern that the existing management plan between the Ohio Scenic Rivers Program and NPS noting that LMR bridges should be developed from existing sites and new crossings be avoided, was not afforded serious consideration in the NEPA process; LMRP requests that Option 2 be fully evaluated in the Tier 1 EIS and carried through to the next tier. ***A new river crossing does not contradict ODNR's plan for protecting the Little Miami River. The Little Miami Scenic Rivers Assistance Manual (February 1977) was developed as part of the application process under Section 2(a) (ii), of the Wild and Scenic Rivers Act, P.L. 90-542. The manual outlined goals and provided recommended standards as a means of coordinating efforts to protect the river, and provided an inventory of known, proposed and authorized projects in the proposed designated area. The relocation of U.S. 50/32 was identified as a proposed project. The proposed crossing of the Little Miami in 1977 was located in approximately the location as is proposed for the current project. The possibility of a new crossing did not impact the decision to designate the lower reach of the Little Miami as a component of the National Wild and Scenic Rivers System. The Assistance Manual does not preclude a new bridge crossing among its goals and recommended standards.*** ***In addition to the Assistance Manual, the 1985 "Little Miami State Scenic River Management Plan" identifies, among its proposed implementation tasks, an expectation that ONDR be involved with agencies in early coordination and environmental mitigation on public projects impacting the Little Miami River (as has occurred in the Eastern Corridor project since the beginning of the MIS planning process and through the Tier 1 NEPA process). The 1985 "Little Miami State Scenic River Management Plan" does not prohibit new river crossings. Further, the Ohio Revised Code Section 1517.14 through 18 does not prohibit new crossings, but gives approval authority to ODNR for projects within 1,000 feet of the normal water line of a state designated component of the state scenic river system (ORC 1517.14) and for projects by state agencies or political subdivisions that cause channel modifications to any watercourse within a wild, scenic or recreational river outside the limits of a municipal corporation; such agencies or subdivisions must first obtain approval of the structure or channel modification from the ODNR director (ORC 1517.16). Coordination with ODNR has been conducted for the Eastern Corridor throughout project development, from the MIS through Tier 1 work. During the MIS, ODNR was represented on the project Task Force, and, although they did not vote to include a new bridge in the recommended plan, recognized local support for the project, and stated that they would consider support of a new bridge, but not without substantial mitigation for protecting the river, as summarized in a letter dated June 7, 2002 (see Draft EIS, Appendix C) and in recent correspondence dated January 4, 2005. During Tier 1 work, ODNR attended four agency coordination meetings, and was provided opportunity to review the preliminary Draft EIS and Draft EIS documents. Measures for protecting the Little Miami River, including those outlined by ODNR, will be further evaluated and developed in Tier 2, and all required coordination, evaluation and approvals applicable to the Little Miami River will be conducted during Tier 2, including continued coordination with ODNR Scenic Rivers. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.*** ***Please see below for response regarding evaluation of Option 2.***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	Comment re: Compliance with NEPA requirements to assess alternatives to proposed action: LMRP is concerned that the DEIS does not assess more than one alternative to a river crossing, and uses the MIS as the main reason why Option 2 is not viable, citing that the MIS framework was not designed as an EIS process and cooperating agencies were not afforded appropriate access to the process. ***As described in the Draft EIS, "Option 2" for a possible highway river crossing was developed and evaluated in the MIS planning phase of work for ability to meet long-range regional transportation need. Like many other specific options evaluated and dismissed in the MIS phase (including, for example, high-speed ferry boat commuter service on the Ohio River between Coney Island and downtown Cincinnati, or exclusive busway between downtown Cincinnati and Fairfax, or extensive HOV lanes on I-275 and I-471), this option was found not to adequately address the long-range transportation needs of the region and, in consideration of technical analyses appropriate to the MIS planning work as well as stakeholder and public input, was not recommended as part of the long-range plan for the region (and therefore was not included as part of the reasonable alternative array for the Draft EIS). The planning process history and context of the project, including this particular option as well as others eliminated in planning, was part of the information presented to the public at the beginning of the NEPA process, and was also part of the information provided to cooperating state and federal agencies in the scoping process. Please see Section 2.5.1 of this Final EIS for further explanation regarding river crossing alternatives.*** Request for formal participation in future EIS activities: LMRP requests to be a formal participant in future EIS activities, with a more significant consultation role. ***This request will be considered as the project progresses into Tier 2***.
Mike Fremont, Rivers Unlimited Letter dated January 6, 2005	Comment re: LMR is a National and Scenic River: Rivers Unlimited provides background information on LMR scenic river designation and comments that the DEIS should acknowledge that had a bridge been in place in 1981, the lower section of the LMR would not have qualified to be a National River, as too many ORV qualities would have been reduced or destroyed, and that the U.S. Secretary of the Interior could remove the designation with impunity. ***These comments should be referred to the Secretary of the Interior.*** Comment re: benefit-cost of the national river: Rivers Unlimited comments that the DEIS fails to acknowledge the dollar value contributed by the LMR to the regional economy, that the DEIS should note that the park potential (at the proposed crossing area) would be a stark loss to the community if the bridge/highway goes through it, and that there is no way to mitigate such an environmental loss. ***The preliminary mitigation strategy for the Eastern Corridor, discussed in Chapters 5.6.4 and 8.3.2 of the Draft EIS, and the preliminary environmental commitments listed in this Final EIS, provide opportunity for restoring and protecting stream and riparian conditions along this urban stretch of the Little Miami River; mitigation details will be further developed in Tier 2, and fully evaluated and coordinated through state and federal agencies, as applicable.*** Comment re: oil and the Eastern Corridor: Rivers Unlimited comments that: the DEIS fails to acknowledge the world and national growing scarcity of oil and gas, and provides a list of reference materials on the subject; that the project only gives lip service to transit and rail options; and that the DEIS's preferred alternative highway selection is obsolete. ***As described in the Draft EIS, the Eastern Corridor Major Investment Study determined that a multi-modal strategy was required to adequately address current and future transportation problems and travel demand, and the Tier 1 DEIS work identified feasible alternatives for effectively executing the multi-modal components of the regional long range transportation plan, including TSM, expanded bus transit, new rail transit, new highway capacity and new bikeways. Preferred alternative selection, which will not take place until Tier 2, will follow guidelines outlined by FHWA and the ODOT project development process steps for complying with federal and state NEPA requirements.*** Comment re: Great Lakes Mid-Atlantic Corridor: Rivers Unlimited comments that the DEIS fails to acknowledge that the Eastern corridor is an important link in what is known as the Great

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	Lakes Mid-Atlantic Corridor, and that if the project's highway segment is a part of that corridor, that the DEIS cover the full environmental effect of the Great Lakes Corridor on the LMR valley. ***Feasibility studies for the I-73/I-74 corridor conducted in the early 1990's did not identify specific corridor locations through the Cincinnati area or Ohio as a whole; these corridor projects were never carried forward for additional study nor incorporated into any state or regional transportation plan, with no further consideration anticipated at this time.*** Comment re: threat to national wild and scenic river system: Rivers Unlimited comments that the DEIS fails to note that a bridge at the proposed location is at a point where the river moves within its floodplain, which means future river work may be required, and free-flow may be reduced, which violates scenic river law. ***Detailed studies will be conducted in Tier 2 following ODOT's Specifications for Subsurface Investigations, ODOT's Geotechnical Engineering Design Checklists and/or other appropriate analyses, to identify underlying conditions in the Little Miami River valley to be used in bridge location and design, and this information will be used to develop appropriate measures for accounting for channel activity and potential impacts. These commitments are included in this Final EIS. Historical meanders of the Little Miami River are discussed in Chapter 4.1.4, page 4-17 of the Draft EIS.*** Comment re: public health: Rivers Unlimited comments that: an independent reviewer should certify proposed ADT's and that the model used did not account for induced traffic; the DEIS fails to acknowledge that the Eastern Corridor does not now meet air quality standards; the DEIS should quantify actual costs of premature deaths, health care costs and lost workdays due to increased traffic; Rivers Unlimited list 24 studies linking health risks with highway pollution, and comments that the DEIS should include references to all of them. ***Traffic modeling for Tier 1 analyses used OKI's approved regional travel demand forecasting model (Version 6.0), as described in Chapter 1 of the Draft EIS. OKI's regional air quality analysis meets USEPA's requirements for demonstrating conformity with air quality standards and goals established by the Clean Air Act Amendments of 1990, and no individual air quality assessment is required by federal or other statutes. Specific findings and conclusions from OKI's transportation conformity analysis, which included the recommended Eastern Corridor transportation investments, are summarized in OKI's 2030 Regional Transportation Plan (available for viewing from the OKI website).*** Comment re: automotive pollution and road salt: Rivers Unlimited comments that the DEIS should assess effects of vehicular pollutants and road salt from the large numbers of cars and trucks crossing the floodplain each day. ***Vehicular pollutants from highway runoff will be addressed as part of the 401 water quality assessment and MS4 stormwater analysis conducted in Tier 2.*** Comment re: a parkway?: Rivers Unlimited comments that the DEIS should remove the reference to relocated SR 32 as a "parkway" (on page 3-8) since heavy truck traffic is expected to be the same as I-275 (1500 to 5000 trucks per day). ***The reference noted by RU is information summarized in the Draft EIS as taken from the MIS.*** Comment re: flight from urban Cincinnati: Rivers Unlimited comments that the DEIS does not adequately describe impacts of the proposed highway on Cincinnati's population drain, and that projects of this type are known to expedite sprawl. ***Draft EIS Chapter 5.6.2, pages 5-72 to 5-75, describes expected future development in the Eastern Corridor, summarizing findings from the Eastern Corridor Economic Analysis and Eastern Corridor Land Use Vision Plan, and provides information regarding expected job and residential increases and expected land use changes that support the conclusion that secondary development is not expected to occur as inadvertent, uncontrolled sprawl, but as planned, desirable development, primarily infill by nature, consistent with local and regional planning, and supported by the transportation network.***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
Mayor Dan Policastro, Village of Mariemont Letter dated January 4, 2005	Comment, Page 1 and page 2, paragraph 1: The Village of Mariemont questions direct benefit from the project, particularly regarding projected no build traffic on US 50 west and east of Newtown Road (expected to decrease). ***The modeling work conducted for the project indicates that no build traffic on US 50 east and west of Newtown Road will decrease slightly by 2030 (as indicated in Draft EIS Table 2.2), likely because of rerouting to other roads in the local network (such as Round Bottom Road or SR 32) due to the already bottlenecked and congested conditions along this stretch of roadway through Mariemont. Level of service on US 50 in this area, however, will be below-standard by 2030, as indicated in Draft EIS Table 2.3, and overall travel performance in the Eastern Corridor and OKI region under a no build scenario is expected to deteriorate, as indicated in Draft EIS Table 2.3.*** Comment, Page 2, paragraphs 2-4 and page 3, paragraphs 1-3: The Village of Mariemont adamantly objects to Alternative C in Segment II, stating concerns regarding: decreased property values, destabilization of the Miami Bluff hillside, increased air and noise pollution, negative impacts on parks near this route, and destruction of an area rich in archaeological artifacts. The Village prefers Alternative L/F in this area located furthest downstream from Horseshoe Bend, and requests that Alternative C be deleted from future correspondence and exhibits. ***Tier 1 work developed several alignment options in the vicinity between US 50/Red Bank Road and Newtown Road that avoided or minimized impacts to the numerous ecological and cultural resources occurring in this area. These alternatives will be further developed in Tier 2, and a detailed comparative analysis of environmental impacts per NEPA requirements will be conducted, including consideration of the issue (above) raised by Mariemont. A preferred alternative will be selected in consideration of avoidance and minimization of impacts, public input, cost, purpose and need, and other project issues.*** Comment, Page 3, paragraph 5 and page 4: The Village of Mariemont offers specific DEIS comments on the following: Landslide susceptibility along Miami Bluff was not addressed. ***Severe erosion potential soils in the area are mapped on Figure 4.2 of Draft EIS Chapter 4, which includes the Mariemont Bluff area.*** The Village would like additional information on air and noise impacts. ***Detailed noise studies will be conducted during Tier 2 in accordance with all state and federal guidelines when alignments are further developed and receptors are more specifically identified. Regarding air quality, OKI's regional air quality analysis meets USEPA's requirements for demonstrating conformity with air quality standards and goals established by the Clean Air Act Amendments of 1990, and no individual air quality assessment is required by federal or other statutes. Specific findings and conclusions from OKI's transportation conformity analysis, which included the recommended Eastern Corridor transportation investments, are summarized in OKI's 2030 Regional Transportation Plan (available for viewing from the OKI website).*** The DEIS did not adequately measure visual sensitivity of the area. ***As noted in Draft EIS Table 6.1 (response to NPS comments dated May 27, 2004), bridge design and river crossing details will be developed in Tier 2, at which time, visual impact assessment, as necessary, will be conducted following FHWA guidelines (Visual Impact Assessment for Highway Projects, Office of Environmental Policy, undated; Publication No. FHWA-HI-88-054). Appropriate context sensitive design solutions at the proposed river crossing will be developed in Tier 2 based on consideration of environmental, community and engineering issues, and input from the public and other resource agencies. Mitigation will be developed in Tier 2, as necessary based on assessment of findings and public input and agency coordination. Visual mitigation measures, if required, will be developed during the detailed design phase and included in the final project plans. These commitments were described in Draft EIS Chapter 8, and are included in this Final EIS.***

TABLE 5. GROUP / JURISDICTION COMMENTS AND RESPONSES

Name/Group and Date	Summary of Comments and Response or Decision *(in bolded italics)*
	The Village would like to see specific information on how the project will impact zoning, development trends, demographic conditions. ***Draft EIS Chapter 5.6.2, pages 5-72 to 5-75, describes expected future development in the Eastern Corridor, summarizing findings from the Eastern Corridor Economic Analysis and Eastern Corridor Land Use Vision Plan, and provides information regarding expected job and residential increases and expected land use changes.*** The Village questions Table 4.9 which states under General Focus Area Trends that Terrace Park, Indian Hill and Mariemont have household incomes slightly lower than the SR 32 focus area***. In Draft EIS Table 4.9, Mariemont is included in the Wooster Focus Area along with Terrace Park, Indian Hill, as well as Milford, Miami Township and Columbia Township (these focus areas correspond to Land Use Vision Plan geographic area breakdowns), and general focus area trends refer to average conditions across the entire focus area (not just Mariemont, Terrace Park and Indian Hill).***

APPENDIX A
DRAFT EIS NOTIFICATION

Notification Materials

- **Federal Register Notice of Availability**
- **Legal Notice**
- **Press Release**
- **Public Hearing Flyer**

Environmental Impact Statements; Notice of Availability

[Federal Register: November 19, 2004 (Volume 69, Number 223)]
[Notices]
[Page 67729-67730]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr19no04-50]

==========

ENVIRONMENTAL PROTECTION AGENCY
[ER-FRL-6657-7]

Environmental Impact Statements; Notice of Availability

Responsible Agency: Office of Federal Activities, General Information (202) 564-7167 or http://www.epa.gov/compliance/nepa.

Weekly receipt of Environmental Impact Statements
Filed November 8, 2004, Through November 12, 2004
Pursuant to 40 CFR 1506.9.

EIS No. 040445, FINAL EIS, AFS, WY, ID, High Mountains Heli-Skiing (HMH) Project, Issuance of a New 5-Year Special Use Permit (SUP) to Continue Operating Guided Helicopter Skiing in Portions of the Bridger-Teton National Forest and Caribou-Targhee National Forest (CTNF), Teton and Lincoln Counties, WY and Teton and Bonneville Counties, ID, Wait Period Ends: December 20, 2004, Contact: Ray Spencer (307) 739-5400.

Revision of FR Notice Published on 09/24/2004: CEQ Wait Period Ending 10/25/2004 has been Reestablished to 12/20/2004. Due to Incomplete Distribution of the FEIS at the time of Filing with USEPA under Section 1506.9 of the CEQ Regulations.

EIS No. 040527, DRAFT EIS, AFS, IN, German Ridge Restoration Project, To Restore Native Hardwood Communities, Implementation, Hoosier National Forest, Tell City Ranger District, Perry County, IN, Comment Period Ends: January 3, 2005, Contact: Ron Ellis (812) 275-5987.
EIS No. 040528, DRAFT EIS, FHW, OH, Eastern Corridor Multi-Modal (Tier 1) Project, To Implement a Multi-Modal Transportation Program between the City of Cincinnati and Eastern Suburbs in Hamilton and Clermont

Counties, OH, Comment Period Ends: January 3, 2005, Contact: Mark VonderEmbse (614) 280-6854.
EIS No. 040529, DRAFT EIS, COE, MA, Cape Wind Energy Project, Construct and Operate 30 Wind Turbine Generators on Horseshoe Shoal in Nantucket Sound, MA, Comment Period Ends: January 18, 2005, Contact: Karen Adams (978) 318-8338.
EIS No. 040530, FINAL EIS, FRC, LA, Sabine Pass Liquefied Natural Gas (LNG) and Pipeline Project, Construction and Operation LNG Import Terminal and Natural Gas Pipeline Facilities, Several Permits,

[[Page 67730]]

Cameron Parish, LA, Wait Period Ends: December 20, 2004, Contact: Thomas Russo (866) 208-3372.
EIS No. 040531, FINAL EIS, AFS, MO, East Fredericktown Project, To Restore Shortleaf Pine, Improve Forest Health, Treat Affected Stands and Recover Valuable Timber Products, Mark Twain National Forest, Potosi/Fredericktown Ranger District, Bollinger, Madison, St. Francois and Ste. Genevieve Counties, MO, Wait Period Ends: December 20, 2004, Contact: Ronnie Raum (573) 364-4621.
EIS No. 040532, FINAL EIS, FHW, IN, IN-25 Transportation Corridor Improvements from I-65 Interchange to U.S. 24, Funding, Right-of -Way and U.S. Army COE Section 404 Permit Issuance, Hoosier Heartland Highway, Tippecanoe, Carroll and Cass Counties, IN, Wait Period Ends: December 20, 2004, Contact: Matt Fuller (317) 226-5234.
EIS No. 040533, FINAL EIS, FHW, WA, WA-104/Edmonds Crossing Project, Connecting Ferries, Bus and Rail, Funding, NPDES Permit and COE Section 10 and 404 Permit, City of Edmonds, Snohomish County, WA, Wait Period Ends: December 20, 2004, Contact: Peter Eun (360) 753-955 .
EIS No. 040534, FINAL EIS, COE, FL, Picayune Strand Restoration (formerly Southern Golden Gate Estates Ecosystem Restoration), Comprehensive Everglades Restoration Plan, Implementation, Collier County, FL, Wait Period Ends: December 20, 2004, Contact: Bradley A. Foster (904) 232-2110.
EIS No. 040535, DRAFT EIS, AFS, UT, Duck Creek Fuels Treatment Analysis, To Reduce Fuels, Enhance Fire-Tolerant Vegetation and Provide Fuel Breaks, Dixie National Forest, Cedard City Ranger District, Kane County, UT, Comment Period Ends: January 3, 2005, Contact: David Swank (435) 865-3700.

Dated: November 16, 2004.
Ken Mittelholtz,
Environmental Protection Specialist, Office of Federal Activities.
[FR Doc. 04-25711 Filed 11-18-04; 8:45 am]
BILLING CODE 6560-50-P

6220 Legal Notices / Accepting Bids

Open House Public Hearing Eastern Corridor Transportation Study Tier 1 Draft Environmental Impact Statement (Tier 1 DEIS) Sponsored by the Ohio Department of Transportation on behalf of the U.S. Department of Transportation Co-sponsored by the Hamilton County Transportation Improvement District December 9, 5:30 pm-8 pm Fairfax Recreation Building, 5903 Hawthorne Avenue, Fairfax, OH 45227 This will be an open house hearing with opportunity for the public to review the Tier 1 DIES and provide comments. The Tier 1 DEIS establishes feasible corridor locations for a multi-modal transportation improvement plan for the eastern sector of the Cincinnati metropolitan area. Final locations of projects and possible right-of-way needs are not part of the Tier 1 DEIS. All comments received at the hearing or by mail by January 10, 2005 will be addressed and documented in the Tier 1 Final Environmental Impact Statement (Tier 1 FEIS). Visit the project web site, , for additional information. The Eastern Corridor Project is in under the administration of the Hamilton County Transportation Improvement District. Written and verbal comments can be submitted at the public hearing, via the project web site or by contacting the Eastern Corridor Project Office, 4790 Red Bank Expressway, Suite 208, Cincinnati, OH 45227 (open 8-4 Tues.-Thurs.).

From: Andi Johnson [ajohnson@hsr.com]
Sent: Wednesday, March 02, 2005 11:54 AM
To: Osborne, Deborah
Subject: Release

We sent this to the following media outlets:

1. Cincinnati Enquirer
2. Cincinnati Post
3. Cincinnati Herald
4. Community Press
5. Business Courier
6. CityBeat
7. Channels WLWT 5, WCPO 9,WKRC 12, FOX19 and WB 64
8. Radio – 97.9 FM MoJo, WRMM 98 FM, WLW AM, WIZF 100.9 FM, WDBZ 1230 AM, WNKU AM

The Eastern Corridor

Eastern Corridor Project Office
4790 Red Bank Expressway
Suite 206/208
Cincinnati, OH 45227
www.easterncorridor.org
Fax/Voice Mail 513.271.3898

FOR IMMEDIATE RELEASE

CONTACT: Andi Johnson
Public Relations Consultant
(513) 346-3481, ajohnson@hsr.com

Open House Public Hearing For Eastern Corridor Project

CINCINNATI, December 7, 2004 — Citizens are invited to review proposed plans and preliminary environmental data of the first phase of the Eastern Corridor Project. The information will be presented at an open house public hearing on Thursday, December 9, 2004. The public can review and comment on the feasible corridor locations for the multi-modal transportation improvement program, which includes rail transit, bus, roadway and bikeway projects for the eastern sector of the Cincinnati metropolitan area. The hearing will cover this and other information from the Tier 1 Draft Environmental Impact Statement (DEIS), which is the concluding first portion of the overall project. The Draft EIS has been submitted to the U.S. Department of Transportation Federal Highway Administration for approval pending public review and comment.

"This project has worked diligently to understand the land use needs of our many communities from downtown to Clermont County and this has translated into strategic transportation solutions," said John Dowlin, Hamilton County Commissioner. "To reach this point, demonstrates that the jurisdictions are working together to develop a cost-efficient transportation program, based not just on highways, that will benefit the region."

The Eastern Corridor Open House Public Hearing is scheduled for:

- Thursday, December 9, 2004
  Fairfax Recreation Center
  5903 Hawthorne Avenue
  Fairfax, OH 45227
  5:30 p.m.-8:00 p.m.

-more-

Eastern Corridor PE/EIS, implemented by the Hamilton County Transportation Improvement District.

Cooperative Effort of: Hamilton County, Clermont County, City of Cincinnati, Ohio-Kentucky-Indiana Regional Council of Governments, Ohio Department of Transportation, Southwest Ohio

The Tier 1 DEIS open house public hearing is sponsored by the Ohio Department of Transportation (ODOT) on behalf of the U.S. Department of Transportation and is co-sponsored by the Hamilton County Transportation Improvement District (HCTID).

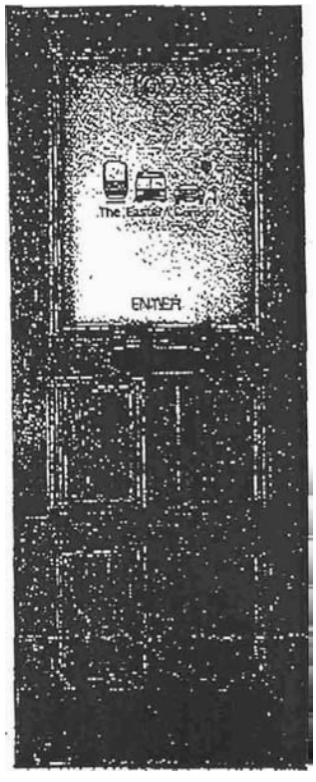
About The Eastern Corridor PE/EIS

The Eastern Corridor Preliminary Engineering/Environmental Impact Statement (PE/EIS) work is being conducted under the administration of the HCTID on behalf of Hamilton County, Clermont County, City of Cincinnati, Southwest Ohio Regional Transit Authority, Ohio-Kentucky-Indiana Regional Council of Governments and the Ohio Department of Transportation.

The Eastern Corridor project is a study evaluating transportation improvements needed in the eastern sector of the Cincinnati metropolitan area. Final recommendations as to exact locations, project configurations, and right-of-way needs will be presented in a public venue at a later date. For more information, visit the project Web site at www.easterncorridor.org, leave a message via voice mail or fax at (513) 271-3898 or write to Eastern Corridor Project Office, 4790 Red Bank Expressway, suite 206/208, Cincinnati, OH 45227. The Eastern Corridor Project Office is open to the public Tuesday through Thursday, 8 a.m. to 4 p.m.

-###-

OUR DOORS ARE OPEN!



ATTEND THE OPEN HOUSE PUBLIC HEARING AND REVIEW THE FIRST PHASE OF WORK FOR THE EASTERN CORRIDOR PROJECT.

Plan to attend the Open House Public Hearing on Thursday, December 9, 2004 at the Fairfax Recreation Center and review current Eastern Corridor Project information. The Eastern Corridor Project is a long-range multi-modal transportation improvement program for the eastern part of the metropolitan area.

Thursday, December 9, 2004
Fairfax Recreation Center
5903 Hawthorne Avenue Fairfax, OH 45227
5:30 p.m. – 8:00 p.m.

For more information log on to www.easterncorridor.org, or call the voicemail hotline at 513.271.3898.

The Eastern Corridor

APPENDIX B
PUBLIC HEARING SIGN-IN SHEETS

Open House Public Hearing
Fairfax Recreation Center
Thursday, December 9, 2004
5:30 p.m. – 8:00 p.m.

Welcome!
Please Print Your Name

NAME	ADDRESS	EMAIL
Norm Wright	3300 Woodcrest Mariemont, OH 45227	normwright@attbi.net
Anne Lyon	6643 Shorewood Dr Amelia OH 45102	alyon@greenacres.org
PAUL GRUNER		
Dan Klepal	Engineer	dklepal@engineer.com
Betty Rhoades	3 Devon 45827	brhoades@att.net
Howard Peacock	624 Root Ln.	
DAVID HALDEMAN	6404 COPPER ST.	haldeman@fuse.net
Jo Ann Merrill	6232 Cheviot Dr	
Joe Beckler	5391 Miami Ave	
Sherrie Heyse	8524 St Ives Pl 45255	
DAVE HUNT	4949 Tealtown Rd Milford	dahunt@fuse.net
Mike Welsen	9800 Misty Morn Cir Cincinnati Ohio 45242	
[illegible]	Gilbert Ave	CH-9
Joan	5911 E Woodmont Ave, OH 45213-2009	jfriedland@fuse.net
ANDY BETTS	7731 HOSBROOK ROAD	ABETTS@CINCI.RR.COM
TRICIA MUSE	4642 W Mitchell Ave 45232	MYOOSEMY@YAHOO.COM
Tom Caruso	2283 Donnington Ln 45244	TomCaru@Fuse.net
Steve Bergmann	HDR Engineering	SBergmann@HDRINC.com
Richard Naberhaus	3569 Michigan Ave 45208	RichardNaberhaus@yahoo.com
Peggy Landes	4287 Ashley Oaks 45227	
Nancy Reind	6214 Robison Rd Cincinnati	45213
Clark Carmichael	2875 Tanglewood Ct	45244

The Eastern Corridor

Open House Public Hearing
Fairfax Recreation Center
Thursday, December 9, 2004
5:30 p.m. – 8:00 p.m.

Welcome!
Please Print Your Name

NAME	ADDRESS 45227↓	EMAIL
HILLIARD J. FJORD	6725 WOOSTER PIKE	
Tom Vogler	4941 Tealtown Rd	Milford OH
Ted Light	3542 Herschel View 45208	lighttb@yahoo.com
Howard & Jan Melvin	1296 Crestwood	Janmelvin@ATT.NET
Allison Banerji	3759 Chickadee Ct.	fairfax OH
TOM BRINKMAN	3215 HARDISTY Av	B Tom@GoBrinkman.com
Jeff & Beth Smith	5912 E. Woodmont Ave	
Janet Kravitz	4162 Braindonmore Dr. Cinti, OH 45255	
Sarah Piercy	5340 Wooster Cinti oh 45226	
MERRIB STUBBS	7370 WILLOWBROOK W 45237	mlstillpass@stillpass.com
John Altman	6616 Pleasant	Mariemont
Jane Earls	711 MIAMI AVE	Terrace Park
BOB Repasky	488 Crestline #2 Cinci, OH	
Roger MANNM	P.O. Box 406 Wmsburg, Oh.	RepenJm@fuse.net
Helen C. Black	5900 Drake Rd 45243	
Ellis O. Jackson	1251 Westminster 45229	
David Lammrish	4955 Beechwood Rd	
Richard Lammrish	4762 Platte Road.	
Robert Bartlett	3744 Indianview Ave	Mariemont
Marty Bartlett	" "	"
Gail Hedican	3777 Ault Park	45208
Marie Kowski	7813 Hopper Rd	45255
Jim Hulsfeld	1428 Herschel	45208

12/09/04

The Eastern Corridor

Advisory Committee
Fairfax Recreation Center
Thursday, December 9, 2004
3:30 p.m. – 4:30 p.m.

Welcome!
Please Print Your Name

NAME	ADDRESS	EMAIL
Reggie Victor	City of Cincinnati	reggie.victor@cincinnati-oh.gov
Bob Weiss	City of Cincinnati	robert.weiss@cincinnati-oh.gov
Gary Mercer	MTA/LandVision	ON FILE
Chris Smith	One Stop Shop Cincinnati 45202	
Jerry Ballard	ODNR-Scenic Rivers	
Ted Hubbard	Ham Co TIP Ham Co Eng's Office	Ted.Hubbard@HamiltonCo.org
Bill Killen	Clermont Chamber	William.Killen@clermontchamber.com
Tim Reynolds	SORTA	treynold@queencitymetro.com
Dave Spinney	Clermont Co.	
Lois M. Ethridge	CL. Co. Planning.	
Jenny Kaminer	Village of Fairfax	jkaminer@fuse.net
Martha Kelly	City of Cincinnati	martha.kelly@cincinnati-oh.gov
Steve Sievers	Anderson Twp	ssievers@andersontownship.org
Jeff Wright	City of Milford	j.wright@milfordohio.org
Jeff McGreary	City of Cincinnati	jeff.mcgreary@cincinnati-oh.gov
Mike [illegible]	Columbia Twp.	
Diana Nadeau	ODOT	
JAY HAMILTON	ODOT	
Larry Hoffman	ODOT	
Andi Johnson	HSR	ajohnson@hsr.com
Sarah Stone		
Heather Wagner		
HENRY DOLIVE	ANDERSON TWP	hdolive@andersontownship.org

The Eastern Corridor

Open House Public Hearing
Fairfax Recreation Center
Thursday, December 9, 2004
5:30 p.m. – 8:00 p.m.

Welcome!
Please Print Your Name

NAME	ADDRESS	EMAIL
ANDY MAUK	408 STANTON Terrace Park 45174	AMAUK@CTMT.COM
DAVID [illegible]	1031 OLD STATE RT 74 45103	DLUSBEAR@AOL.[illegible]
Hope J Ford	6725 Wooster 45227	
Charlene Metzger	555 Pepper Ridge 45244	
Carol Buhl	1507 Woodland Dr. Loveland 45140	MINDMUIE@fuse.net
Bob Rusk	6617 Elm St 45227	RLRD webTV
JAMES STUART	6617 ELM ST. MARIEMONT 45227	
Bob Newton	2322 GLADSTONE AV	BOBN@[illegible].NET
Paul Haberhans	2518 SALEM ST	HOFNRIE@AOL.COM
ROBERT [illegible]	[illegible]	
Susan Olson	4299 Ashley Oaks Dr	dolson2@cinci.rr.com
Douglas H. Kent	6710 MIAMI BLUFF DR.	
ERIC D PARTEE	[illegible] PRICE ROAD	partee@[illegible]
Christine Moran	2859 Gilna Ct. 4524	
Dieter Schmid	2925 ALMS 45206	dieter@one.net
STEPHEN W. SCHWARTZ	4247 ASHLEY OAKS DR. CINTI. 45227	
R D GOLDSTEIN	6752 MURRAY	CINTI 45227
DON K. HOPKINS	3754 POCAHONTAS AV	MARIEMONT 45227
Tom Flynn	3950 Red Bank Rd	Cin 45227
Rich Kiley		
Laura Jans	625 Rust Ln Cin OH 45244	
2 PARKER COWGILL	890 WALLACE MILFORD	PCOWGILL@SOC.[illegible]

12/09/04

The Eastern Corridor

Open House Public Hearing
Fairfax Recreation Center
Thursday, December 9, 2004
5:30 p.m. – 8:00 p.m.

Welcome!
Please Print Your Name

NAME	ADDRESS	EMAIL
Jerry Garrison	6806 Maimi Bluff	Jerrygarrison fuse.net
Robin Hendley	6341 Ridgefield Dr.	robinh@fuse.net
Dave Yane	3900 Fulton Grove Rd.	
Christina Lindgren	7895 Ashley View Dr	
Wes Gimbert	3636 Victoria Ln	ngimbert@cinci.rr.com
Paul Braasch	2372 Clermont Center Dr, Bat.	
STEPHEN ROBERTS	7150 RAGLAND RD. #28	sroberts@graypape.com
Lynne Lefebvre	7762 Ashley View, 45227	
Mary Alice Maze	6734 Chestnut St	45227
Chris Nyberg	3624 Suncrest	45208
Peter Naylor	5709 Arnsby	peter.naylor@busenet?world.NBA
MIKE BARNES	553 Chamberlin, Milford	michael.barnes clermont county
Mary Jo Johnson	1251 Westminster Dr 45229	
CINDY BOWLING	621 RUST	CINCINNATI CINDY@JUNO.COM
Doug Adams	6928 Miami Bluff Dr. 45227	

The Eastern Corridor

Open House Public Hearing
Fairfax Recreation Center
Thursday, December 9, 2004
5:30 p.m. – 8:00 p.m.

Welcome!
Please Print Your Name

NAME	ADDRESS	EMAIL
Otis Miller	11432 Coltman Rd Bethel Ohio 45106	
Machelle Phillips	5444 Fenwick Ave Hy 45212	
ROBERT WITHERBY	7021 GRACE AVE 45227	
ELIZABETH RUSS	2190 EASTERN AVE 45202	
DAN RODGERS	2190 EASTERN AVE 45202	
Katie Danko	515 Wyoming Ave 45215	katie.danko@sierraclub.org
BRIAN GRIFFITH	820 Laverty Lane 45230	
Eileen Salamon	5395 Miami Ave 45226	
Mr/Mrs David Trotter-Engel	1055 Old St Rt 74 45103	Bluebear@aol.com
Susan Cober	8004 Ashley View Dr. 45227	
ELBERT BURTON	7913 BATAVIA PIKE	
Dave Kent	2379 Madison Rd., Apt. 2 45208	
Gordon Miller	4194 Ashley Oaks Dr 45227	
MIKE FREMONT	515 WYOMING AVE 45215	
Edmund G Motz	6334 Clough Pike 45244	

The Eastern Corridor

Advisory Committee
Fairfax Recreation Center
Thursday, December 9, 2004
3:30 p.m. – 4:30 p.m.

Welcome!
Please Print Your Name

NAME	ADDRESS	EMAIL
Tom Hoft	8485 Broadwell	thoft@senco.com
Mark Policinski	OKI	mpolicinski@oki.org
Linda Snow	205 W. Orchard Lebanon, OH	
Mel Martin	5644 Majjernan	melmar@cinci.RR.com
Ted Shannon	5903 Hawthorne	TSHA@Fuse.Net
George Glover	2910 Lokeoak Court Cinti, Ohio 45243	

APPENDIX C
AGENCY COMMENTS RECEIVED

Agency Comments

- **U.S. Department of the Interior, National Park Service letter dated December 7, 2004 2001**
- **Ohio Environmental Protection Agency letter dated December 17, 2004**
- **Ohio Environmental Protection Agency letter dated December 20, 2004**
- **U.S. Environmental Protection Agency, Region 5 letter dated December 30, 2004**
- **Ohio Department of Natural Resources letter dated January 5, 2005**
- **Federal Transit Administration letter dated March 10, 2005**
- **U.S. Department of the Interior, National Park Service letter dated April 18, 2005**
- **Federal Highway Administration letter to U. S. Department of the Interior dated September 19, 2005**

United States Department of the Interior

National Park Service

Midwest Region
601 Riverfront Drive
Omaha, Nebraska 68102-4226

12-07-04

L7617 (MWR-PL/C)

Mr. Timothy Hill
Administrator, Office of Environmental Services
Ohio Department of Transportation
Central Office, P.O. Box 899
Columbus, Ohio 43216-0899

Dear Mr. Hill:

I appreciate you sending us the Tier 1 draft environmental impact statement (DEIS) for Eastern Corridor Multi-modal Projects, Hamilton and Clermont Counties, Ohio. The DEIS proposes a new bridge crossing the Little Miami National Scenic River. We have begun our preliminary review of the DEIS and would like to share with you our thoughts on the project. Further comments will be forthcoming in a Department of the Interior response.

The Little Miami National Scenic River (LMR) is a state-administered component of the National Wild and Scenic Rivers System. Ohio's comprehensive river protection program, which included the development of a river management protection manual (1980) and establishment of a Scenic River Advisory Council (Council), enabled the LMR to qualify for designation as a National Wild and Scenic River under section 2(a)(ii) of the Wild and Scenic Rivers Act (Act). The purpose for designating the LMR was to preserve its free-flowing character; water quality; and outstanding scenic, recreational, biologic, geologic and historic values.

I appreciate the collaborative process and approach taken in the development of the DEIS, and I look forward to the continued cooperative efforts on this important project. Clearly, the engagement of various local stakeholders in the Eastern Corridor Major Investment Study (MIS), which resulted in a recommended plan for addressing transportation issues in the project area and identified alternatives to be developed in the DEIS, was an important step in the process. The National Park Service (NPS) is a cooperating agency in the preparation of the DEIS, and as such I am troubled that the NPS was not included in key decisions made during the MIS planning process.

A greater concern is the removal of a viable option between the conceptual alternatives development phase and the DEIS. The relocation of State Route 32 was identified as a major issue in the MIS process. Option 2, which included the relocation of State

Route 32 without a new bridge crossing over the LMR had been actively considered as a conceptual alternative within the corridor, yet was eliminated in the MIS process in favor of option 1, which included a new bridge. While I understand the decision to eliminate this alternative was made upon the recommendations of the MIS Task Force, it is important to note the NPS, a critical stakeholder and cooperating agency, was not offered an opportunity to review and comment on the recommended plan, despite our letter notifying of our responsibility as the permitting authority for the LMR (August 26, 1997). In addition, the absence of this option is in direct contradiction to the State's approved management plan (LMR Assistance Manual, 1980) and is opposed by the Council. As a 2(a)(ii) river, we rely on the State of Ohio to protect and enhance the rivers Outstandingly Remarkable Values (ORV) per the State's river management plan, pursuant to the Act.

Given the concerns which we have expressed, the lack of the Council's support for removing the "no new bridge" alternative, and the incompatibility of the "new bridge" alternative with the State of Ohio's management plan for protecting the LMR, I would like to again urge you to fully evaluate option 2 in the final Tier 1 EIS. I firmly believe it is in the public interest to carry forth option 2 as a preferred alternative, particularly in light of the affected nationally significant resources. Option 2 supports the stated project purpose and need and the State's obligation to protectively manage this national river, pursuant to the Act.

As we have shared in past correspondence and in meetings, should the bridge design and construction activities qualify as a "water resources project" pursuant to the Act, then a section 7(a) determination would be required. Please be advised, it is our *preliminary* determination that any water resources project on the LMR directly related to the construction of the Little Miami bridge crossing, including temporary structures, could have a direct and adverse effect on the *scenic* and *recreational* ORV of the LMR.

The NPS has a continuing interest in working with the Federal Highway Administration to ensure that project impacts to resources of concern to the NPS are adequately addressed. I am committed to the Administration's principles of cooperative conservation and transportation infrastructure streamlining, and I look forward to finding a solution that ensures an environmentally sound, safe, and efficient transportation network is achieved in a timely manner.

Sincerely,

Ernest Quintana
Regional Director

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

December 17, 2004

Timothy M. Hill, Administrator
Ohio Department of Transportation
Office of Environmental Services
PO Box 899
Columbus, Ohio 43216-0899

Re: Eastern Corridor Study
Draft Environmental Impact Statement (Tier 1)

Dear Mr. Hill:

We appreciated the opportunity to review the Eastern Corridor Draft Environmental Impact Statement (DEIS, Tier I). We received this document in our office on November 16, 2004. The report provided updated information to the DEIS (Preliminary) that we received in our office on March 31, 2004. We understand the primary purpose of the Eastern Corridor project is to provide a multi-modal solution to travel mobility and efficiency constraints between Cincinnati and the suburbs east of Cincinnati in Hamilton and Clermont Counties, Ohio. In addition, the project would promote economic growth and development in the area. The Teir I report described feasible alternatives (general location and operation corridors) for the multi-modal components presented in the report. Other issues described in the report include ecological resources, economics, public involvement, and secondary and cumulative impacts. At a later date, we understand that a Tier II report will be issued on the proposal.

Overall, we are pleased with the systematic approach used by the Eastern Corridor Committee to identify and address key project concerns and ecological issues. The Tier I report adequately covered several of the concerns presented in our March 31, 2004 letter (mitigation, Horseshoe Bend, etc.).

However, the discussion in the report on land use, demographics, and commercial and residential growth in the project area is indicative that careful planning of transportation needs in the Eastern Corridor is essential to protect valuable habitat and wildlife. Increases in urbanization, economic development, and population growth in the project area, as projected in the report, if uncontrolled, have potential to heighten the problem of environmental pollution, impervious surface, habitat disturbance, imperilment of endangered and threatened plants and wildlife, and encroachment of invasive species. Many of these issues were articulated in the report. We would appreciate further clarification on these issues in future reports. Our targeted comments below expand upon these concerns:

1. **Area #2 -** The report (page 5 -35) stated that the SR 32/rail transit corridor will create approximately 55 acres of new impervious surface, resulting in an increase in stormwater runoff in the area. We would like to see the construction of impervious surface near the Little Miami River minimized to the best extent possible. We would like to see consideration given to developing alternate locations for the SR 32/Rail transit corridor (and the two bus/rail transit stations). Alternatives may be constructing adequate stormwater detention facilities and/or creating sufficient buffer vegetation between the impervious surfaces and Little Miami River, to handle stormwater runoff and its pollutants.

2. **Horseshoe Bend -** Because the Horseshoe Bend area contains valuable ecological resources, we would like stream crossings in the Horseshoe area to be avoided, if practicable. An upstream crossing (item 1, page 5-34) or southernmost crossing about 3000 feet downstream from the Horseshoe Bend (item 4, page 5-34) appear to be the best options among the four presented in the report. A crossing downstream is preferable because the quality of the stream (based on QHEI score) is lower downstream of the Bend than upstream of the Bend.

4. **Protected animals and plants:** The report described several endangered or threatened plants and animals that have been identified within or adjacent to the proposed project area. In the Tier II report or subsequent submittals, we would like further clarification on protected and rare species and procedures that will be used to minimize or correct the problem. We are interested in ODNR's and USFWS comments on this issue.

5. **Holistic or water-shed level analysis of ecological resources and impacts:** Under our Section 401/Isolated Wetland Program, we are compiling project-related impact data in our GIS system with hope of using this information at a later date in developing a watershed-level method for assessing projects. Therefore, in addition to a discussion of individual impacts, we would like to see an analysis of ecological impacts from a holistic or broader perspective, preferably in terms of watersheds residing within or immediately adjacent to the proposed project area. This information may be merged in the "Secondary and Cumulative Impact Considerations" section appearing in each "Area" analysis. The analysis may contain a discussion, at a minimum, of the following parameters:

   - ☐ Percent or proportion of impervious surface.
   - ☐ Breakdown (percent or proportion) on ecological resources (wetlands, woodland, open space/green space, ponds, streams, etc.) and their estimated impacts.
   - ☐ Estimate of existing/projected land use and growth within and adjacent to the project area.

- ☐ TMDL rating/information, if available.
- ☐ Endangered, threatened, rare, or uncommon plants and animals
- ☐ Other pertinent considerations

As far as data format, It would be desirable to graphically display the parameters as points or aerial coverage units (e.g. Polygrids) within the respective watershed.

Regarding the level of involvement or detail in the watershed analysis, we are not looking for a labor-intensive, costly, effort or development and use of tailored watershed assessment tools or methods. We would like to see the analysis draw upon existing resources, such as those presented in the Tier I report, or information that is readily available.

There is a wealth of ecological information that can be obtained from local watershed-based groups, such as the East Fork Watershed Collaborative (e.g. Lower East Fork Watershed Management Plan 2003), Mill Creek Watershed Council (e.g. Mill Creek Restoration Project, Mill Creek Greenway Master Plan), and Hamilton County Soil and Water Conservation District. Also, as you may know, Ohio EPA DSW has useful information (e.g. Biological and Water Quality of the West Fork Mill Creek, 2002, Biological and Water Quality Study of the Little Miami River Basin, 1998) that can be accessed from our web page. With the information on the watershed, you would then use professional judgement in drawing conclusions on the overall ecological condition of the watershed, focusing on specific resources, and how it will be affected by the project. We also would like to see a watershed-level approach used in mitigation and habitat restoration planning (see mitigation section, below).

6. **Habitat Fragmentation:** A project of this size and scope (multi-modal) in likely to pose habitat fragmentation issues. As we believe habitat integrity is important in maintaining species diversity and wildlife, we would like to see an assessment of habitat fragmentation and its impact on ecological resources, including aquatic resources and wildlife. In the discussion, we would like to see how fragmentation will be avoided or minimize and, for unavoidable fragmentation, measures that will be taken to restore fragmented habitat and habitat connectivity.

7. **Bikeway Project:** We would like to see the proposed bikeway trail created as far from the Little Miami River and East Fork, as practicable, to minimize disturbances.

8. **General Mitigation Suggestions** We believe the creation of a special committee (page 5-40) to consider and develop mitigation activities is essential for a project of this size with potential of impacting many important and sensitive ecological resources. In addition to the mitigation opportunities described in the report, we

offer some general suggestions on developing the compensatory mitigation plan. We encourage considering the acquisition and conversion of disturbed areas (e.g. Brownsfield). As we stated in our previous response (PDEIS), we encourage working with local watershed and conservation groups, many of which are developing or implementing mitigation and restorative activities within their respective watersheds. Many of these groups are focusing on correcting flooding and stormwater runoff problems, nutrient enrichment in streams, sanitary overflows, and impaired riparian habitat. A theme common to most of these groups is how to address the problem of impervious surface which has been directly correlated with stream degradation, for example, by causing significant levels of run-off and pollution within the watershed.

The creation of "green space" is gaining support in many communities throughout Ohio. For example, the Mill Creek Watershed Council developed the Mill Creek Watershed Greenway Master Plan with a goal of improving property along the primary channel and tributaries of Mill Creek. We encourage the Eastern Corridor Committee to recognize the importance of "green space" and habitat preservation in the Eastern Corridor project and to consider its application in compensatory mitigation planning.

Mitigation strategy: As stated above we believe mitigation should be viewed broadly, at the watershed level. Priority should be given to those altered or disturbed ecological resources that have the most impact on the integrity of the watershed. The Mill Creek Restoration Project group, for example, has targeted several impaired aquatic resources for restoration in the West Fork Mill Creek sub-watershed (see attachment).

We are looking forward to reviewing the Tier II report. If we can be of further assistance to you on this initiative, feel free to contact me at (614) 644-2138.

Sincerely,

Arthur L. Coleman, Jr.
Environmental Specialist, Division of Surface Water

cc: Max Hagan, Louisville District, USACOE/Ohio Field Office (Cincinnati)
William Cody, Asst. Administrator, OES/ODOT,
Mike Pettegrew, Supervisor, Permits, OES/ODOT, Larry Hoffman, OES/ODOT
Kenneth Lammers, USFWS, Mary Knapp, USFWS
Randy Sanders, ODNR, Diana Zimmerman, DSW/SWDO

HAM-32
PID 22970

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 S. Front Street
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

December 20, 2004

Timothy M. Hill, Administrator
Ohio Department of Transportation
Office of Environmental Services
PO Box 899
Columbus, Ohio 43216-0899

Re: Eastern Corridor Study
Draft Environmental Impact Statement (Tier 1)
(*Addendum to December 17, 2004 letter*)

Dear Mr. Hill:

As an afterthought to our December 17, 2004 letter on the above-referenced report, we would like to further expand upon the watershed-scale impact assessment and mitigation opportunities (*General Mitigation Suggestions*) described in our previous response, using as examples, investigative efforts conducted in the Mill Creek and Lower East Fork (Little Miami River) Watersheds. We inadvertently excluded this information from our previous response. The later watershed appears to reside within the eastern one-third of the study area. Although the Mill Creek Watershed is, at most, on the extreme western edge of the study area we included it in our discussion because we believe the environmental issues we reviewed in several informative studies are representative of other watersheds and subwatersheds residing within the project area.

Background and Rationale

Addressing ecological resources and impacts on an individual or "piecemeal" scale is a standard practice. The primary disadvantage of targeting mitigation on individual resources is that this approach may be treating the "symptom" but not the problem and, in the grand scheme, mat not be effective in restoring overall water quality. Expanding the scale of assessment and prioritizing resources for restoration or mitigation may have more merit in protecting overall watershed integrity. Compensating for the loss of a one acre Category 1 wetland by creating a larger, but equivalent-quality wetland within the watershed, may satisfy regulatory mandates but may not be the best approach for the watershed if the wetland is improperly designed and located to maximize benefits to the watershed. The TR55 model discussed below can be used to establish a suitability land use analysis, for example, to show places suitable within a watershed for wetland construction in convertible land used in greenway planning. Although such a detailed level of analysis may be impracticable for the Eastern Corridor study, a qualitative or less rigorous watershed level analysis will suffice until more refined standardized, and

cost-effective techniques become available. A watershed-level analysis, if used, can be deferred until a later stage of project development, for example, when the preferred alternative is chosen.

Mill Creek Watershed

It is apparent that the Mill Creek Watershed has been significantly impacted by development, primarily residential development. This has created major stormwater run-off and flooding problems in the watershed. A comprehensive investigation of this problem was published in a report (A Critical Examination of Storm Water Runoff Management Techniques: The Mill Creek Watershed Case Study, Ohio; Thesis; 2003). The report used the ArcView GIS 3.2 extension TR55 model to estimate run-off volumes (based on a 2.75 inch rainfall event) in the watershed with respect to the amount of vegetation (ft^3) and the amount of impervious surface (ft^3). The model estimates that the current land cover type (e.g. impervious surface, greenway, etc.) in the watershed will produce 402,557,506 cubic feet of runoff. Runoff will be 8% more than this estimate if all the covertland (approximately 12.75%) is changed to impervious surface. Whereas, the volume of runoff decreases by 3% when all of the covertland is covered by trees (Greenway approach). If two other stormwater/flooding abatement alternatives, constructed wetlands and the disconnect approach (e.g. disconnecting building down spouts from stormwater system), are used in combination with the greenway approach, impervious surface decreases to 15% and the amount off runoff is reduced by 20%. A fourth approach, tunnel method was considered but dismissed for further consideration as a stormwater/flood abatement alternative because of its high cost and impact it would have on the environment if constructed.
The tunnel approach consists of the construction of a 16 mile long tunnel approximately 300 to 350 feet below and along Mill Creek. It would be designed to handle stormwater generated during a flood event. Its flow capacity would be 9,700 cfs, and the storage capacity, 469 million gallons.

Lower East Fork Little Miami River Watershed

According to The Lower East Fork Watershed Management Plan (2002), approximately 23.95% of the streams draining the Eastgate area within the Lower East Fork Watershed are F-type streams (Rosgen) that are unstable. They are located primarily along Hall Run and an unnamed tributary to Salt Run. They are characterized by high bank erosion, high sedimentation, and significant entrenchment. The degradation of the streams within this watershed is due primarily to urbanization (over 20%) and imperviousness (11.6%).

Recommendations

There is compelling argument for minimizing impervious surfaces within (and adjacent to) the watersheds, and converting or restoring impervious surface into viable habitat such as greenway corridors. We recommend careful consideration be given to green space development in the Eastern Corridor project, as referenced in the report (page 5-74). For unavoidable impacts, restoration or mitigation planning may include, in addition to greenway habitat, constructed wetlands to handle excess stormwater and provide water quality improvements within the watershed. Additional efforts may include the restoration, creation, preservation, and enhancement of riparian habitat and woodlands, especially those located at Brownsfield or disturbed sites and vacant or abandoned property. The "Disconnect" approach would provide some stormwater/flooding relief but would have to be implemented on a large scale in order to be effective. In addition, it would be necessary to develop a comprehensive program to convince developers and property owners of the importance and benefits of the disconnect approach. Because of the multitude of resources and projects targeting watershed improvement in the project area, we believe it would be of mutual benefit for the Eastern Corridor group and ODOT to consider getting involved in, or supporting, these efforts.

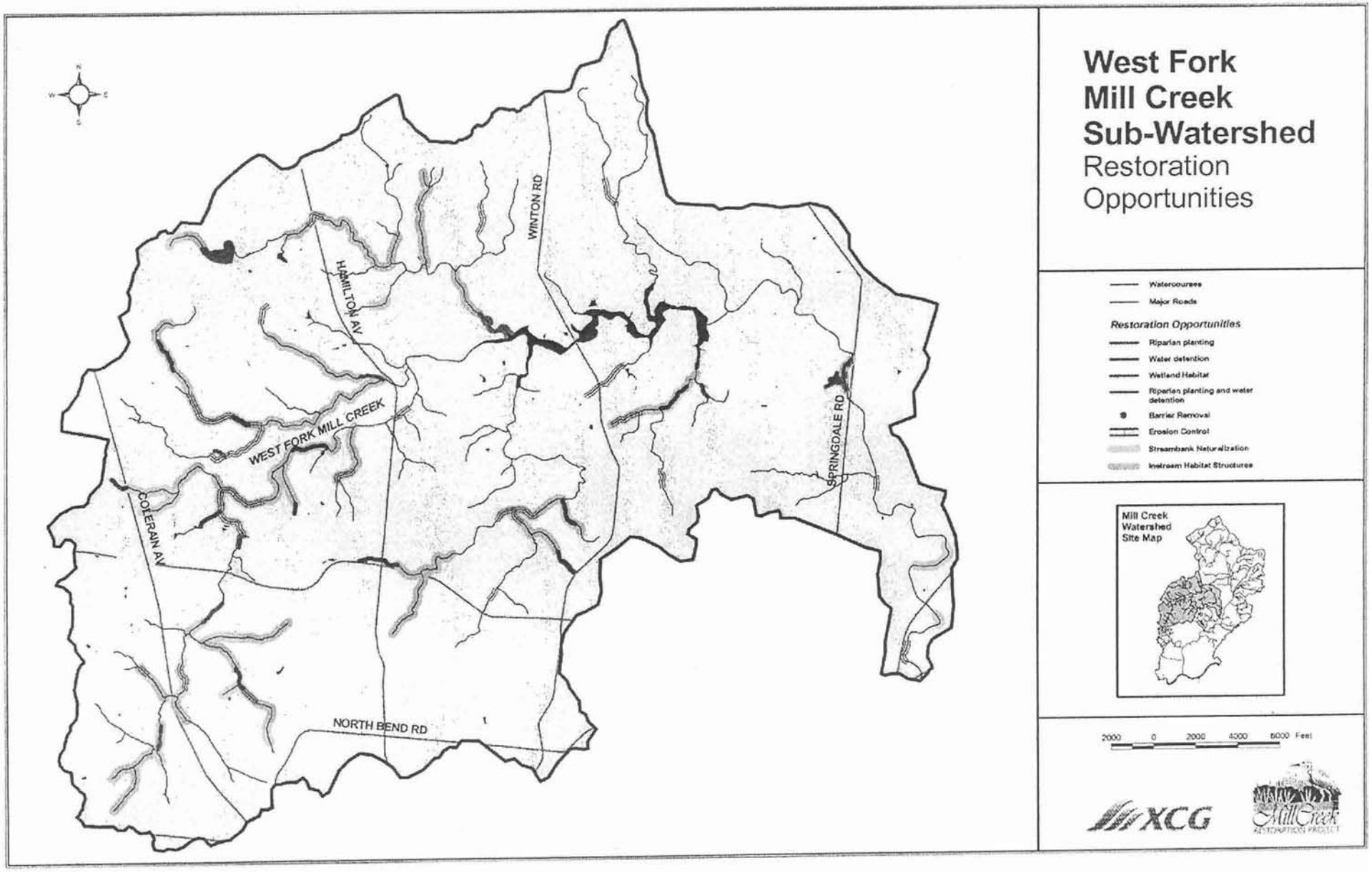
If you would like a further discussion of this issue, I may be reached at (614) 644-2138.

Sincerely,

Arthur L. Coleman, Jr.

Arthur L. Coleman, Jr.
Environmental Specialist
Division of Surface Water

cc: Max Hagan, Louisville District, USACOE/Ohio Field Office (Cincinnati)
William Cody, Asst. Administrator, OES/ODOT
Mike Pettegrew, Supervisor, Permits, OES/ODOT
Larry Hoffman, OES/ODOT
Kenneth Lammers, USFWS
Mary Knapp, USFWS
Randy Sanders, ODNR
Diana Zimmerman, DSW/SWDO



West Fork Mill Creek Sub-Watershed

Restoration Opportunities

Watercourses
Major Roads

Restoration Opportunities

Riparian planting
Water detention
Wetland Habitat
Riparian planting and water detention
Barrier Removal
Erosion Control
Streambank Naturalization
Instream Habitat Structures

Mill Creek Watershed Site Map

2000 0 2000 4000 6000 Feet

XCG

Mill Creek Restoration Project

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

DEC 3 0 2004

REPLY TO THE ATTENTION OF

B-19J

Mark Vonder Embse
Federal Highway Administration
Ohio Division Office
200 North High Street
Columbus, Ohio 43215

RE: Tier 1 Draft Environmental Impact Statement for the Eastern Corridor Multi-Modal Projects, Hamilton and Clermont Counties

Dear Mr. Vonder Embse:

In accordance with Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (U.S. EPA) has reviewed the proposed Tier 1 Draft Environmental Impact Statement (DEIS) for the Eastern Corridor Multi-Modal Projects in Hamilton and Clermont Counties. The project involves regional transportation planning for the area east of Cincinnati and includes bus, railway, bike path, and highway construction or improvements.

The U.S. EPA recognizes the complexity of large-scale transportation planning in an area with numerous Section 4(f) and 6(f) resources, and we respect the effort and coordination put into this and earlier documents. It is clear from the DEIS that many years of planning have preceded this project and that several communities, State, and Federal agencies participated in developing this project to meet the area's transportation needs, which are well-documented and described in both the DEIS and the earlier Major Investment Study (MIS). In particular, the project's attempt to manage all transportation needs and promote both rail and bus line alternatives at a Tier I planning stage is notable. The U.S. EPA provided comments on the preliminary DEIS on May 6, 2004; several of the comments have been addressed by the DEIS.

The U.S. EPA notes that decisions made at the Tier 1 stage of the project affect whether certain impacts can or cannot be avoided in the later Tier 2 projects. The U.S. EPA's concerns are primarily related to potential environmental impacts of the proposed new bridge across the Little Miami River in the Area #2- Ohio 32/Wooster West section of the larger project area. We are also concerned about questions regarding application the National Wild and Scenic River Act, Section 7 to the project. Although we have made specific comments regarding this aspect of the project, we defer to the National Park Service for expertise in determining whether or not Section 7 applies to the project, for issues regarding the state's

management plan for the river, and for expertise regarding potential impacts to the river's wild and scenic nature. We also note that the proposed highway plan for Area #2 - Ohio 32/Wooster West has the potential to traverse several Section 4(f) and 6(f) resources. Although many of these concerns may be avoided or mitigated during Tier 2 project development, Tier 1 decisions may render some impacts unavoidable in the Hahn Field Archeological District (Area #2 - Ohio 32/Wooster West)and the Cincinnati Street Gas Lamps Districts (Area#1). We recognize the difficulty involved in avoiding resources in an area that is resource rich. We also recognize that the lead agency makes choices among a variety of benefits and impacts to find the best solution; these choices rely on a clear identification of all relevant constraints. For this reason, we strongly advise that the Final EIS include, as much as possible, the results or status of consultation with the State Historic Preservation Office and the National Park Service.

U.S. EPA has rated the DEIS an "EC-2." This means that the U.S. EPA has identified environmental impacts that should be avoided in order to fully protect the environment and suggests corrective measures which may require changes to the preferred alternative or mitigation measures that can reduce impacts. The rating also means that the DEIS does not contain sufficient information to fully assess environmental impacts of the preferred alternative or other alternatives that are reasonably available to the project. Our detailed comments and summary of our rating definitions are enclosed.

If you have any questions, please contact Anna Miller of my staff at (312) 886-7060 or miller.anna@epa.gov.

Sincerely,

Anna C. Miller for KAW

Kenneth A. Westlake, Chief
NEPA Implementation Branch

Enclosures

U.S. EPA Region 5 Comments
Tier 1 Draft Environmental Impact Statement (DEIS)
Eastern Corridor Multi-Modal Projects, Hamilton and Clermont Counties

Section 7 application to the project
The DEIS states that Section 7 of the National Wild and Scenic Rivers Act will not apply to the project, since the bridge is intended to be a clear span crossing with no piers in the water or construction activity in the stream. However, since the decisions on alignment and bridge placement do not happen until Tier 2, it is not definite that the bridge design will not change or have other impacts in such a way as to make Section 7 applicable.

We are aware that the National Park Service (NPS) has concerns regarding this decision and other matters relating to the Little Miami River's management as a designated Wild and Scenic River. We therefore recommend that the Final EIS document resolution of the Section 7 applicability question. As an alternative, we recommend describing coordination efforts between NPS and the project sponsors on this aspect of the project.

Little Miami River Bridge Crossings and Alignments
Some alignments for the relocated SR32 and the new bridge in Area #2 may increase impacts to the Little Miami River. We realize specific alignments within a corridor are usually Tier 2 matters; however, the existence and placement of a new bridge is central to the overall Tier 1 multi-modal plan, especially in connecting the eastern suburbs with the rest of the highway system and with the proposed Modal Convergence Area west of the river. For this reason we strongly recommend describing the impacts from the bridge as fully as possible.

The Final EIS needs to completely describe the direct, indirect, and cumulative impacts of the possible SR32 alignments within the corridor. This would provide the baseline of potential impacts within this corridor. For example, one alignment appears to cross the Horseshoe Bend area of the river. (We note that the Ohio Department of Natural Resources prefers this area not be crossed directly since it is part of a scenic nature preserve.) Furthermore, this could very likely be an active and meandering part of the channel. Another potential alignment appears to cross the Little Miami where there is either an island or a side channel. It is unclear how a clear span bridge will address this particular physiographic feature. Our suggestions regarding this area of the DEIS are:

- Describe what stretches of the river are or may be active channels
- Discuss the fate of a clear span bridge in the Horseshoe region or other potentially active channel regions.
- Discuss the potential future impacts from a bridge placed in a potentially active channel of the Little Miami, given the river's future development within the floodplain. That is, is the channel likely to meander and necessitate bridge maintenance that would impact the river beyond what is contemplated by this DEIS?

We further recommend assuring that the bridge will not be placed over the most active channel stretches and/or that bridge design will take future river bed changes into account. In short, we suggest further discussing efforts to minimize the need for extensive bridge and pier maintenance that could significantly increase anticipated impacts to the river, water quality, habitat, or scenic values. This should also be documented in the in the Final EIS.

Impacts to the scenic aspects of the river
Given the Little Miami River's status as a designated Wild and Scenic River, we suggest discussing specific visual impacts and mitigation in Area #2 where scenic values are likely to be impacted by a new bridge. We suggest including a discussion of possible context-sensitive design elements.

Consideration of Option 2
In our previous comments on the preliminary DEIS, we noted that a second option for relocating SR32 without a new river crossing was mentioned but not evaluated as an alternative. The DEIS addresses this comment by referring to the Major Investment Study (MIS). The MIS contains traffic projections comparisons between the two options as well as a summary table of the environmental impacts of both options. The MIS also mentions to other factors involved in selecting Option 2, such as letters of support. Overall, however, the MIS does not provide a clear description of the decision-making process. Under NEPA, however, the decision-making process needs to be transparent. Therefore we again recommend revising the DEIS discussion of Option 2 to include the factors that led to its being omitted from further consideration. We suggest that the project sponsors explain why Option 2 is not a feasible, using the information in the MIS and linking it to the decision against evaluating its environmental impacts fully as another alternative, for comparison to Option 1.

Cumulative and secondary impacts
We recommend the Final EIS address the following cumulative and/or secondary impacts for Area #2:

- Cumulative impacts of the new bridge with regards to scenic values, since the bridge will cross the longest stretch without a bridge in the region.
- Secondary impacts of the relocated SR 32 regarding the potential for new development (in addition to the mentioned infill development and redevelopment of brownfields). The discussion could also include any known measures that may prevent additional development in current greenspaces, such as zoning or limited access controls.
- Cumulative and secondary impacts associated with removal of riparian woodland acreage in Area #2 in the Little Miami River vicinity.

Endangered Species
The project in Area #2 may result in removal of as much as 20 acres of forest in the bridge crossing vicinity. This may affect the habitat or occurrence of endangered species such as the bald eagle or Indiana bat. We recommend early coordination with the U.S. Fish and Wildlife Service to avoid or minimize impacts.

Wetlands
The DEIS lists wetlands impacts on the order of 1-10 acres for each sub-area of the larger study area. Our primary interest is that the Tier 2 development stages continue to avoid or reduce wetlands impacts, especially where natural and forested wetlands are concerned. We also suggest the DEIS use extra caution regarding wetlands impacts in the Little Miami River area. During Tier 2, it may be appropriate to look at spanning wetlands as well as the river itself.

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION*

Environmental Impact of the Action

LO-Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS sate, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate
The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information
The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment

Osborne, Deborah

From: Larry Hoffman [Larry.Hoffman@dot.state.oh.us]
Sent: Wednesday, January 05, 2005 4:19 PM
To: Keith Smith; Hans Jindal; Record, Rick; Osborne, Deborah
Cc: Tim Hill; Fredric Steck; Donald Rostofer; Mark.VonderEmbse@fhwa.dot.gov
Subject: Fw: 04-0273; ODOT Tier 1 DEIS Eastern Corridor, HAM -SR32-0.00 (PID 22970)

---- Forwarded by Larry Hoffman/Environmental/CEN/ODOT on 01/05/2005 04:15 PM ----

"Sanders, Randy" <Randy.Sanders@dnr.state.oh.us>

01/04/2005 02:07 PM

To <larry.hoffman@dot.state.oh.us>

cc <fredric.steck@dot.state.oh.us>

Subject 04-0273; ODOT Tier 1 DEIS Eastern Corridor, HAM -SR32-0.00 (PID 22970)

ODNR COMMENTS TO ODOT; Tier 1 Draft Environmental Impact Statement (DEIS), Eastern Corridor Multi-Modal Projects Hamilton and Clermont Counties, Ohio, HAM-SR32-0.00, PID 22970.

Location: 14 square miles in the eastern sector of the Cincinnati metropolitan area, from downtown Cincinnati east to the I-275 outer belt in Clermont County.

Project: Tier 1 Draft Environmental Impact Statement (DEIS), which identifies feasible alternatives for different multi-modal components, including ranges of preliminary impacts and costs, to be carried through into tier 2 for more detailed study.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Rare and Endangered Species: The current ODNR Division of Natural Areas and Preserves' Natural Heritage Database records within the project area and the immediate vicinity are listed below. Status codes are as follows: E=endangered, T=threatened, P=potentially threatened, SC=species of concern, SI=special interest, FE=federal endangered. Although some of the records for these species may be in the vicinity of and not directly within the project area as defined up to this point in the process, the final corridors should be inventoried for these species as appropriate habitat may exist.

Little Miami State and National Scenic River

Salix caroliniana - carolina willow, P

Moxostoma carinatum - river redhorse, SC

Noturus stigmosus - northern madtom, E

Noturus eleutherus - mountain madtom, E

Lota lota - Burbot, SC

Cycleptus elongatus - blue sucker, E

Obliquaria reflexa - threehorn wartyback, T

Anodonta suborbiculata - flat floater, SC

Truncilla truncata - deertoe, SC

Truncilla donaciformis - fawnsfoot, T

Quadrula nodulata - wartyback, E

Graptemys pseudogeographica - false map turtle, SC

Porzana carolina - sora, SC

East Fork Little Miami River

Simpsonaias ambigua - salamander mussel, SC

Truncilla donaciformis - fawnsfoot, T

Truncilla truncata - deertoe, SC

Obliquaria reflexa - threehorn wartyback, T

Elliptio crassidens - elephant-ear, E

Noturus eleutherus - mountain madtom, E

Noturus stigmosus - northern madtom, E

Moxostoma carinatum - river redhorse, SC

Ohio River

Spermacoce glabra - smooth buttonweed, P

Moxostoma carinatum - river redhorse, SC

Lota lota - burbot, SC

Percina shumardi - river darter, T

Obliquaria reflexa - threehorn wartyback, T

Ellipsaria lineolata - butterfly, E

Elliptio crassidens - elephant-ear, E

Pleurobema cordatum - Ohio pigtoe, E

Quadrula metanevra - monkeyface, E

Immediate Vicinity

Trifolium stoloniferum - running buffalo clover, E, FE

Clonophis kirtlandii - Kirtland's snake, T

Lanius ludovicianus - loggerhead shrike, E

Fish and Wildlife: The ODNR Division of Wildlife (DOW) recommends the project be designed to avoid impacts to unique wildlife habitat such as wetlands and streams, particularly the Little Miami River. If minimal in-water work is necessary, the DOW recommends the in-water work be avoided from April 15 to June 15 to reduce impacts to fish reproduction. The DOW also recommends that the project be designed to have no impact on freshwater mussels or their habitat. As ODOT is aware, the project is in the historical range of the Bald eagle (*Haliaeetus leucocephalus*), a federally threatened and state endangered species. To determine potential impacts of the project on bald eagles it is recommended you continue to contact Mark Shieldcastle at the Ohio Department of Natural Resources, Division of Wildlife, Crane Creek Wildlife Research Station, to stay current on information regarding the presence of bald eagles in the area. He can be reached at (419) 898-0960. If a nest is located within ½ mile of the project site, coordination with the U.S. Fish and Wildlife Service is also necessary.

Scenic Rivers: The ODNR Division of Natural Areas and Preserves' Scenic River staff provide the following comments. The Little Miami River is designated as a State and National Scenic River and the project area is within the watershed of the Little Miami State and National Scenic River (LMR), in Hamilton and Clermont Counties, Ohio.

The following comments are submitted with regard to ORC Section 1517.16 for any projects constructed within the study area:

1. No storage of any idle equipment, fuels, lubricants, or other potentially toxic or hazardous materials, should be permitted within the one hundred year flood plain of the LMR, or any tributary thereof.

2. No riparian vegetation should be removed within one hundred twenty (120) feet of the ordinary high water mark (OHW) of the LMR, or within 50 feet of any tributary streams to the LMR. Any riparian areas disturbed in these areas should be reforested with native tree species.

3. A sediment and erosion control plan should be developed for any disturbed sites and implemented before earthwork commences. Particular attention should be given to any drainage ways (storm sewer inlets, swales, ditches or tributary streams) that could convey sediment-laden water directly to the LMR. Appropriately designed retention/detention structures should be constructed to remove sediment from construction site runoff as well as permanently treat any new post construction storm water discharges. Appropriately framed and entrenched sediment fence should be utilized around all storm drain drop inlets. **Due to difficulties with maintenance and susceptibility to failure, erosion controls utilizing straw bales should not be permitted.** All denuded areas should be seeded and mulched immediately upon completion of earthwork or if the area is to remain idle for more than seven days.

4. Stream crossings for utilities should be accomplished through the use of directional boring techniques. Bore pits should be located a sufficient distance from any stream banks to avoid possible inundation during a high flow event. Bore pits should also be located beyond any existing riparian forest buffer. If removal of trees from the riparian buffer is necessary then any disturbed areas should be revegetated with native riparian tree species. Any excess excavated material should be disposed of at an appropriate facility above the one hundred year flood elevation of the LMR or any tributary watercourse.

5. Crossing of tributary streams shall be designed in such a manner as to limit the amount of in-stream disturbance and filling of the adjacent floodplain. Crossings should be designed to clear span channels whenever possible and roadway approaches should be elevated above the 100-year flood elevation. These measures will help ensure the long-term stability of steam channels by limiting the impacts of hydraulic modification.

The following comments are submitted with specific regard to a relocated SR 32 Bridge/Crossing of the LMR: As referenced several times throughout the Tier 1 Draft EIS Document, the Director of ODNR has approval authority (per ORC Section 1517.16) for any proposed crossing of the LMR. The Director has stated in previous correspondence that any such approval would require sufficient mitigation. Such mitigation has been further defined in principle to include the following:

1. Fee simple purchase of undeveloped lands or the placement of conservation easements over lands adjacent to the proposed extended sections of Route 32. All of these lands or easements will be held by the Department of Natural Resources as a Scenic River Forest Preserve. This would result in none of the new road frontage be subject to development and many acres of land adjacent to the Little Miami being protected in perpetuity. These measures will ultimately protect floodplain from development, reduce impervious surfaces and decrease stormwater discharges to the Little Miami.

2. Clear spanning of the Little Miami River with the new bridge structure and no in-stream work. Elevation of all roadway sections in the one hundred year floodplain to allow for the unimpeded passage of the one hundred year flood event. These measures will minimize modifications to the natural flow regimes of the Little Miami's base flow and flood events greatly reducing hydrological modifications, channel instability, and degradation of in-stream habitat.

3. Implementation of the most stringent Best Management Practices for Bridge Construction sites as designed with cooperation of our Scenic Rivers staff. These measures will include sediment and erosion control practices, project phasing, reduced vegetative clearing, and other methods utilized to minimize or eliminate negative impacts resulting from construction site stormwater runoff.

4. Additional site-specific mitigation or Best Management Practices may be required as project development proceeds.

As stated in numerous sections of the document, it is understood that these preliminary mitigation requirements will be further developed during Part B of the Eastern Corridor study. If you have any further questions, please contact Jerry Lee Ballard at 513/934-0751.

Watershed Planning: The ODNR Division of Soil and Water recommends the Eastern Corridor Project (and similar large scale projects) should look for ways to integrate and link to local watershed planning and implementation programs.

1. ODNR recommends that the environmental components of this project recognize and use local planning efforts whenever possible. The two local planning efforts currently co-sponsored by ODNR and OEPA are on the East Fork of the LMR and the LMR itself. Contact information for both groups are provided below. An example of how these groups could possibly help would be suggesting compensatory mitigation within the impacted local watersheds.

2. **Linking local watershed planning with regional planning efforts such as OKI and the Southwest Regional Transit** Authority, is appropriate and promotes true comprehensive planning.

3. The linkages noted in (2) along with others to local municipalities, counties, utilities, etc. will also allow incorporation of stormwater (NPDES Phase II) management plans, drinking water protection plans, sewage treatment plans, green space, natural area and habitat protection plans, TMDLs, model stream protection ordinances, etc. This potentially aligns the infrastructure projects, to the best extent possible, with state and local water quality and habitat goals.

4. This is an opportunity to set a precedent of state support for local comprehensive watershed planning (economic, infrastructure and environmental) and decision making that could be used in other areas of the state preparing for growth.

5. Local endorsed plans and plans pursuing endorsement are excellent sources for targeting mitigation projects in impacted watersheds. DSWC recommends that, when available and if the disturbance to riparian or wetland areas occurs in the watershed with an endorsed plan or plan pursuing endorsement, the local watershed coordinator or group be consulted on

the mitigation proposals.

On page 11 of the Environmental Impact Statement under Preliminary Mitigation and Environmental Commitments, last paragraph, we suggest the following language:

" For example, ODNR and Ohio EPA sponsored watershed coordinators and local watershed planning activities are on-going in the East Fork of the Little Miami River and the Little Miami River itself. Local watershed groups and stakeholders can be consulted by contacting the watershed coordinators at: East Fork Little Miami River Watershed , Jay Dorsey (Watershed Coordinator), 513-732-7075, jay-dorsey@oh.nacdnet.org and Little Miami River Partnership, Dennis Tenwolde (Watershed Coordinator), 513-695-1187, dtenwolde@littlemiamiriver.org

ODNR also strongly recommends that NPDES Phase II permit holders be consulted in order for the most protective construction and long-term (post construction) storm water management features be incorporated into Tier 2 activities."

Navigation and Boating: The ODNR Division of Watercraft recommends navigational markings be placed in the area during the construction phase. These markings could include buoys in the watercourse and/or temporary signage along the river. The Division of Watercraft does provide grants to other state agencies, departmental divisions or local political subdivisions for the purchase and placement of navigational aids. Our Navigational Aid Program Administrator is: Carl Miller, Division of Watercraft, 2045 Morse Road Building A-2, Columbus, Ohio 43229; voice 614-265-6446. Additional information about this program can be found at http://www.ohiodnr.com/watercraft/navaids/default.htm

Special Flood Hazard Area: Portions of the proposed project will likely be located in a Special Flood Hazard Area. Please contact the local floodplain administrator(s). A list of community floodplain administrators can be found on the ODNR - Division of Water website at http://www.dnr.state.oh.us/water/floodpln/. To view a copy of a Flood Insurance Rate Map for your project area, you can either contact the community floodplain administrator, or obtain a copy online from the FEMA Flood Map Store at http://store.msc.fema.gov/.

ODNR appreciates the opportunity to provide these comments. Please contact Randy Sanders at 614.265.6344 if you have questions about these comments or need additional information.

Randall E. Sanders

Environmental Administrator

Division of Real Estate & Land Management

Ohio Department of Natural Resources

2045 Morse Rd, C4

Columbus, Ohio 43229-6693

614.265.6344

Fax 614.267.4764

randy.sanders@dnr.state.oh.us

U.S. Department
of Transportation
Federal Transit
Administration

REGION V
Illinois, Indiana,
Michigan, Minnesota,
Ohio, Wisconsin

200 West Adams Street
Suite 320
Chicago, IL 60606-5253
312-353-2789
312-886-0351 (fax)

MAR 10. 2005

Timothy M. Hill
Administrator
Office of Environmental Services
Ohio Department of Transportation
P.O. Box 899
Columbus, Ohio 43216-0899

Dear Mr. Hill:

We have reviewed the Tier 1 Draft Environmental Impact Statement. Overall, this document appears to provide sufficient analysis for a Tier 1 document. We do however offer the following comments:

1. There is concern regarding the examination of environmental justice ramifications due to the large number of displacements. For example, the highway projects will displace 95 to 479 single-family residences and 3 to 21 multi-family residences, in addition to 78 to 142 businesses. The Oasis rail segment will displace 21 single-family residences. This document should give percentages of low income and minority residents as well as low income and minority owned businesses that will be displaced by these projects.
2. It is recognized that bus transit improvements is part of the multi modal solution, however it is not clear whether bus rapid transit has been examined and discussed as an alternative to the proposed rail alternatives. Please clarify.
3. Will the cost & benefit analysis being conducted under separate cover from the NEPA evaluation be available for review prior to commencement of the Tier 2 document?

We appreciate the additional time allowed for review of this document. If you have any questions or concerns feel free to contact Vanessa Adams of my staff at (312) 886-0309.

Sincerely,

Rhonda M. Reed

Rhonda Reed
Director, Office of Planning
& Program Development

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

TAKE PRIDE IN AMERICA

APR 18 2005

ER 04/863

Mr. Dennis A. Decker
Division Administrator
Federal Highway Administration
Ohio Division Office
200 North High Street
Columbus, Ohio 43215-2048

Dear Mr. Decker:

As requested by the Federal Highway Administration (FHWA) and the Ohio Department of Transportation (ODOT), the Department of the Interior (Department) has reviewed the November 2004 *Tier I* Draft Environmental Impact Statement for **Eastern Corridor Multi-Modal Projects, from Downtown Cincinnati East to the I-275 Outerbelt in Hamilton and Clermont Counties, Ohio.**

The Eastern Corridor (EC) project affects the Little Miami River (LMR), which is a component of the National Wild and Scenic Rivers System (NWSRS). The Department approved the State of Ohio's (State) request to designate the LMR under section 2(a)(ii) of the Wild and Scenic Rivers Act (Act), as a component of the NWSRS. The National Park Service (NPS), on behalf of the Secretary of the Interior (Secretary), retains section 7(a) responsibilities under the Act and works cooperatively with the State to ensure other provisions of the Act are fully implemented. As such, the NPS is serving as a cooperating agency in the preparation of the subject draft environmental impact statement (EIS). The U.S. Fish and Wildlife Service (FWS) and NPS have been involved in coordination with ODOT for several years concerning the study. Last spring the FWS and NPS provided comments on ODOT's March 19, 2004, preliminary Tier I draft EIS for the study. Agency responses are included in the Tier I draft EIS, and for the most part, NPS and FWS comments have been addressed in the document. The Department offers the following comments and recommendations for your consideration:

GENERAL COMMENTS

The Department appreciates the collaborative approach to the development of the draft EIS, and we respect the effort and coordination put into this and earlier documents. We recognize multi-modal transportation planning for the greater Cincinnati area is an intricate planning effort involving multiple jurisdictions, an array of transportation needs, and numerous environmental challenges. It is evident from the draft EIS that several years of planning have preceded this project and several State and Federal Agencies and local communities participated in project planning. Transportation planning that promotes public transit options, including bus and commuter rail, is to be commended. We look forward to our continued involvement with this important project.

The draft EIS provides a substantial amount of information concerning important components of the natural environment in the project area. However, we disagree with some of the conclusions and found the draft EIS to be inadequate in several other respects. Our primary concerns with the document are summarized below and are explained in more detail in our specific comments.

The engagement of various local stakeholders in the major investment study (MIS) phase of the EC project, which led to the recommendations contained in the draft EIS, was an important step in the process. The MIS was published in April of 2000. As early as 1997, the NPS provided written notification to MIS officials which alerted them of the LMR's Federal designation and the Agency's permitting authority pursuant to the Act. However, the NPS was not formally notified of key decisions made during the MIS planning process affecting the LMR and other resources which the Agency has jurisdictional responsibilities for (section 4(f)/6(f)). The absence of the NPS in this process appears to be in conflict with the metropolitan area rules for transportation planning (23 CFR 450, subpart C), which outlines factors which shall be explicitly considered, analyzed as appropriate, and reflected in the planning process products. Directives include:

> Section 450.316(a)13: Consult with permit agencies to ensure early continued coordination with environmental resource protection and management plans, including Section 4(f) of the Department of Transportation Act (49 U.S.C. 303).
>
> Section 450.316(b)(5): Provide for the involvement of local, State and Federal environmental, resource and permit agencies as appropriate.
>
> Section 450.318(b), (c) and (d): Provide affected public agencies/permit agencies an opportunity to participate and establish the range of alternatives to be studied and evaluate environmental effects.

Importantly, the MIS process served to identify issues and concerns prior to the development of the draft EIS. The relocation of State Route 32 was identified as a major issue in the MIS process because of the potential impacts to the LMR. To address this, the MIS actively considered two viable conceptual alternatives for carrying traffic over the LMR and are referred to as "Option 1 and Option 2" in the MIS and draft EIS. Option 1 included a new bridge over the LMR in a new corridor; and Option 2 would have crossed the LMR on a widened existing crossing, and perhaps with an adjacent additional bridge structure, rather than creating a new corridor crossing. Option 2 was collaboratively developed specifically to avoid impacts to the LMR and to retain an alternative that would ensure consistency with the State's policy regarding designated rivers. In summarizing the MIS process, the draft EIS indicates the projected peak volumes for Option 1 and 2 do not vary significantly and travel benefits were associated with either Option, although Option 1 performed more efficiently. However, Option 2 was dropped at the end of the MIS process and not carried forward into the Tier I EIS planning effort for in-depth environmental impact analysis. While we appreciate the efforts made during the MIS process to include the public, and we understand a subgroup recommended the dismissal of Option 2, the draft EIS does not provide adequate justification for the decision made in the MIS process to eliminate Option 2 from further consideration.

A primary objective of the National Environmental Policy Act (NEPA) is to ensure agency decision makers take environmental factors into account. This objective is to be accomplished by presenting in the EIS the environmental impacts of a proposed action and all reasonable alternatives in comparative form so a clear basis for choice among options is provided to the agency decision makers and to the public. Each reasonable alternative is to be given substantial treatment and to be objectively evaluated. A Tier I draft EIS should retain a range of feasible alternatives that can reasonably meet the stated purpose and need for the project and which avoids or minimizes environmental impacts. Due to the absence of substantive analysis of Option 2 in the draft EIS, we do not believe that objective has been met. Unless it can be demonstrated that Option 2 is "fatally flawed" or is not a feasible (reasonable) alternative, we recommend consideration be given to the preparation and distribution of a supplement to the EIS to provide the public and agency decision makers with a detailed, rigorous analysis of the Option 2 alternative, including a comparative analysis to Option 1.

The improvement or expansion of existing corridors across the LMR (Option 2), or a new bridge adjacent to an existing crossing, would likely be found to be the environmentally preferred alternative if analyzed in detail and compared to the alternatives requiring construction of a new bridge in a new corridor. This option would best meet the project goal of protecting key environmental features in the project area. Related to this, while Council on Environmental Quality (CEQ) regulations only require the environmentally preferable alternative be identified in the record of decision, CEQ encourages the lead agency to identify it in the EIS.

We believe its identification as early as possible in the NEPA process aids the reader of the EIS in understanding the possible tradeoffs that may be made between environmental protection and other factors to be considered in the final selection of the preferred alternative. The guidance provided by CEQ in question No. 6 of the Forty Most Asked Questions Concerning CEQ's NEPA Regulations, indicates "the environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's section 101. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources. In the preamble to its NEPA regulations, CEQ indicated the objective of this requirement is to ensure that Federal Agencies consider which course of action available to them will most effectively promote national environmental policies and goals. We recommend identifying the environmentally preferred alternative at this stage of the planning process.

At several locations in the draft EIS, ODOT has indicated its intention to fully comply with provisions of the Fish and Wildlife Coordination Act, the Endangered Species Act, and the FWS's Mitigation Policy. Avoidance of impacts to fish and wildlife and their habitats, as is expressed in the Mitigation Policy, should be a high priority as ODOT develops its final project plans. Unavoidable impacts to streams, wetlands, riparian habitat (jurisdictional and non-jurisdictional, relative to section 404 of the Clean Water Act), and other forested habitats should be fully offset. Opportunities to restore habitats wherever feasible along the LMR corridor should be pursued, both as part of project mitigation and as proactive environmental stewardship, so as to improve the long-term environment of the lower LMR watershed. At several locations, the draft EIS states that mitigation measures are processed differently than the multi-modal projects themselves. We believe that mitigation must be considered integral to the respective projects. Compensatory mitigation should be provided concurrently with project construction or, where possible, in advance of such construction.

ENDANGERED SPECIES ACT COMMENTS

Updated Information on Federally Listed Species

Since the FWS's June 18, 2004 letter, no new species have been included in the list of Federal candidate species and federally listed (threatened and endangered) species for the project area. However, the guidance for considering potential impacts to the Indiana bat (*Myotis sodalis*) has been modified. For clarification, provided below is the updated guidance along with the past guidance, which is still applicable.

The proposed project lies within the range of the Indiana bat (*Myotis sodalis*), a federally listed endangered species. Since first listed as endangered in 1967, its population has declined by nearly 60 percent. Several factors have contributed

to the decline of the Indiana bat; these include the loss and degradation of suitable hibernacula human disturbance during hibernation, pesticides, and the loss and degradation of forested habitat, particularly stands of large, mature trees. Fragmentation of forest habitat may also contribute to the decline. Summer habitat requirements for the species are not well defined, but the following are considered important:

1. Dead or live trees and snags with peeling or exfoliating bark, split tree trunk and/or branches, or cavities, which may be used as maternity roost areas.

2. Live trees (such as shagbark hickory and oaks) which have exfoliating bark. Stream corridors, riparian areas, and upland woodlots which provide foraging.

Since many multi-modal project sites contain trees or associated habitats exhibiting some of the characteristics listed above, we recommend such trees and associated habitats be saved wherever possible. If such trees must be cut, further coordination with the FWS is recommended. Additionally, suitable bat roost trees should not be cut between April 15 and September 15.

If desirable trees are present and must be cut between April 15 and September 15, mist net or other surveys may be warranted to determine if bats are present. Any survey should be designed and conducted in consultation with the Endangered Species Coordinator in the FWS's Reynoldsburg, Ohio, Field Office. Surveys should be conducted in June or July, the peak time that the bats might be expected in the project area.

Surveys for Listed and Candidate Species

The ODOT's response to the FWS's comments on the preliminary draft EIS indicates that "field surveys to determine the occurrence of populations or potential habitat for Federal and State listed species will be conducted in Tier II on a project-by-project basis, specifically for Indiana bat, running buffalo clover, bald eagle and/or mussel surveys, as appropriate." The FWS appreciates this offer to conduct field surveys in the project vicinity and looks forward to continued coordination and consultation in the planning of the surveys. The ODOT should exercise caution to try not to make irreversible commitments in its planning should federally listed species be found on preferred alignments, for example. In such a case, formal consultation under section 7 of the Endangered Species Act of 1973, as amended, might be necessary.

SECTION 4(f) and SECTION 6(f) COMMENTS

Section 4(f) Department of Transportation Act of 1966

Sections 5.3.2 and 5.3.3 of the draft EIS identify 23 park facilities, properties, or archeological sites listed, or eligible for listing on the National Register of Historic Places (NRHP) which may be potentially impacted by the project in that they occur, in part, within the estimated corridor widths of the various modal alternatives under consideration. The draft EIS indicates avoidance and minimization of impacts will be further evaluated in Tier II work, and a section 4(f) evaluation will be prepared in the Tier II stage. We understand during Tier I planning efforts it is difficult to predict impacts, yet because decisions made in Tier I will drive planning in Tier II, avoidance opportunities could be lost during Tier I; and should, therefore, be fully explored and presented during Tier I planning. We refer you to 23 CFR 771.135, which describes section 4(f) evaluation process for tiered documents:

> "1) When the first-tier, broad-scale EIS is prepared, the detailed information necessary to complete the section 4(f) evaluation may not be available at that stage in the development of the action. In such cases, an evaluation should be made on the potential impacts that a proposed action will have on section 4(f) land and whether those impacts could have a bearing on the decision to be made. A preliminary determination may be made at this time as to whether there are feasible and prudent locations or alternatives for the action to avoid the use of section 4(f) land..."

Additionally, although we believe the mitigation described may satisfy the "planning" proviso of section 4(f), we do not agree to the underlying premise proposed by FHWA that FHWA avoided a section 4(f) use of these resources. According to FHWA's section 4(f) policy paper of March 1, 2005, "When a project proposes to use resources protected by Section 4(f), a Section 4(f) evaluation must be prepared." It is our opinion that a clear use of a section 4(f) resource will be made as a result of adopting some or all of the corridor alignments and under FHWA's own guidance, the mitigation itself does not alter the fact of that "use." We believe the determination by FHWA that no section 4(f) use is occurring was made in error.

Section 5.3.4 of the draft EIS finds that "section 4(f) may apply to the LMR in the project area" and "Section 4(f) applicability will be further evaluated during Tier II of the project." FHWA's policy paper states "publicly-owned waters of designated wild and scenic rivers are protected by Section 4(f)." The LMR is a designated wild and scenic river and is therefore a section 4(f) resource. While site-specific impacts and structure details have not been developed, a LMR crossing is proposed at one of four possible locations. Road and commuter rail traffic would pose major noise impacts, and the road itself represents a significant visual intrusion to an otherwise relatively natural setting within the designated corridor.

A bridge crossing the LMR would significantly and substantially interfere with the scenic and recreational values of the LMR. Visual and noise impacts are proximity impacts which constitute a "constructive use" of section 4(f) resources. Thus, a section 4(f) "use" clearly exists and potential impacts can be described and evaluated at this stage of the planning process. Section 5.3.4 of the draft EIS states "it is possible that construction may involve impacts of a temporary nature, such as placement of a temporary crossing, as determined during detailed design in Tier II." A temporary crossing is also a potential use of section 4(f) resources and should be properly evaluated.

In summary, until a section 4(f) evaluation is developed and provided to the Department for review, we cannot concur that there is no feasible and prudent alternative to the use of the section 4(f) protected resource identified in the project area, including the LMR; and we cannot concur that the action includes all possible planning to minimize harm to 4(f) resources resulting from such use. This is based on the fact that a section 4(f) evaluation, including a complete description of impacts, an analysis of efforts to avoid impacts, and a description of the planning to minimize harm, has not been developed in the draft EIS.

Section 6(f) Land and Water Conservation Fund Act

Table 4.4 of the draft EIS lists three properties that are within the Eastern Corridor detailed study area. These park projects were funded with assistance from the Land and Water Conservation Fund (L&WCF). They are:

Project No.	Name	Sponsor
39-00037	Newton Village Park	Village of Newton
39-00361	Little Miami Scenic River Park	City of Cincinnati
39-00990	Eden Park Waterfront	City of Cincinnati

Section 6(f)(3) of the Land and Water Conservation Fund Act (Public Law 88-578) states: "No property acquired or developed with assistance under this section shall, without the approval of the Secretary (of the Interior), be converted to other than public outdoor recreation uses." The Secretary shall approve such conversion only if (s)he finds it to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as (s)he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location."

A conversion occurs when the scope of a project is changed to other than public outdoor recreation uses. The question whether there is a change to other than public outdoor recreation use is based upon a comparison of the public outdoor recreation assets provided by the original L&WCF agreement and the impact of

any proposed changes thereto. If the changes provide for other than public outdoor recreation as originally agreed to, in all or in part, a conversion exists.

Likewise, it is stated in section 1010 of the Urban Park and Recreation Recovery (UPARR) Act of 1978 (Public Law 95-625) that: "No property improved or developed with assistance under this title shall, without the approval of the Secretary (of the Interior) be converted to other than public recreation uses." Conversions can be approved if substitute sites or facilities of reasonably equivalent location and usefulness are provided and the recipient has explored all practical alternatives.

Please refer to the May 27, 2004, letter from Acting Regional Director David N. Given, National Park Service, (Appendix C of the DEIS) on pages 13 and 14 which identified L&WCF and UPARR program projects which could be affected by the proposed alternatives in Tier I of the study. Mr. Samuel W. Speck, Director, Ohio Department of Natural Resources, 2045 Morse Road, Building D-1, Columbus, Ohio 43229-6693 and Mr. Willie Carden, Director, Cincinnati Park Board, 950 Eden Park Drive, Cincinnati, Ohio 45202, should be contacted to determine if the proposed project could have an impact to any of the sites listed.

WILD AND SCENIC RIVERS ACT COMMENTS

General Comments

The LMR was established under the Wild and Scenic Rivers Act in 1980 as a State-administered river, pursuant to section 2(a)(ii) of the Act. When the State petitioned the Secretary to designate the LMR as a component of the NWSRS, the designation was approved contingent upon the States demonstrated ability to protectively administer the LMR. As indicated in the Federal Register announcing the LMR's Federal designation (8/17/79), the State met this prerequisite by (1) designating the river under a State Scenic Rivers program, (2) developing a "Little Miami Scenic River Assistance Manual" (management plan) to ensure management responsibilities were met, and (3) establishing a Scenic Rivers Advisory Council to implement the LMR Assistance Manual.

The purpose for designating the LMR was to protect and enhance its free-flowing character, water quality, and outstandingly remarkable values (ORVs): scenic/aesthetic, recreational, geologic, fish and wildlife, historic (cultural and archaeological), and otherwise scientific values (Secretary of the Interior Report to 93rd Congress 1973; and amendments to the Act (16 U.S.C. 1271 et seq.). Section 1 and Section 10 responsibilities under the Act provides the context for evaluating potential environmental impacts to this nationally significant resource.

In response to FWS and NPS comments on the preliminary draft EIS regarding the ORVs of the LMR and all the national, State, and local attention given the LMR in support of its inclusion in the System, ODOT responded that "...it has

been recognized from the beginning of the Eastern Corridor project that emphasis be placed on protecting the LMR and other environmentally sensitive resources in the area." We appreciate this commitment and encourage ODOT to continue to coordinate closely with the NPS, FWS, and other resource agencies and organizations during subsequent planning, construction, and maintenance of the transportation projects to ensure this commitment to protect the ORVs of the LMR is fulfilled.

Specific Comments

Protecting the Little Miami River's ORVs

We are troubled the draft EIS recommends a new highway crossing the LMR in a new corridor, rather than using an existing corridor crossing. The LMR was included in the NWSRS in part because of its nationally significant scenic and recreational values. The draft EIS infers the scenic impact is not expected to be substantial "given the already disturbed river corridor...some of which may be removed as mitigation." We disagree. While other shore and bank developments were present at the time of designation, Congress did not believe the existence of these features made this section of the river unsuitable for designation as a wild and scenic river. Further, Section 10(a) of the Act establishes an enhancement policy for all rivers included in the NWSRS.

Although a specific design is not known at this time, the proposed bridge will consist of multiple travel lanes and will be elevated enough to span the river and the floodplain. A four-lane bridge cannot be hidden from view. The large mass of the proposed bridge (length, width, height, and multiple piers) in combination with its location in an unobstructed corridor with relatively few man-made intrusions would make it the most visibly dominate feature in this segment of the river. Placing a massive bridge where there previously was not one results in a fundamental change in the scenic qualities in this portion of the LMR at the time of designation. Opportunities to mitigate the visual impacts are very limited. A new multi-lane bridge crossing the river in a relatively natural and unspoiled corridor would significantly and substantially impact the scenic values of the LMR.

Additionally, the proposed new bridge crossing would degrade the recreational experience on the LMR in two primary ways: creating a major new visual intrusion on the natural scene and by generating noise. Canoeists and hikers enjoy the natural quite and solitude offered in the project area, which increases opportunities for viewing of birds and other wildlife. Currently, the sight of birds and other wildlife provides a unique recreational experience, particularly in such close proximity to a major metropolitan area. Substantial noise would be produced during construction, and once in place, the bridge would be a significant source of constant noise from both traffic and vehicle-induced vibration of the bridge and commuter rail. Recreational opportunities to enjoy

solitude, or the areas scenery and to view wildlife, would thus be substantially and significantly impaired. The severity and magnitude of the visual and recreational impacts to the LMR associated with a new bridge corridor crossing are so great that they cannot be significantly mitigated. The proposal would also have substantial direct and indirect impacts to associated fish and wildlife resources and values.

As acknowledged in the draft EIS, this project will result in an increase in secondary development in the project area, much of which is within the LMR watershed. Secondary developments, such as commercial and residential structures, pavements for streets, sidewalks, and parking lots significantly increase the amount of impervious surfaces; thereby, increasing runoff with associated pollutants into the LMR and its tributaries. We note and appreciate the fact that a land use vision plan has been developed to help manage growth in the EC project area and minimize adverse environmental impacts. We also recommend strict adherence to local zoning which protects the ORVs for which the LMR was included in the NWSRS. Such actions would also contribute to protection of the fish and wildlife resources associated with the LMR.

Section 10(a) Management Responsibilities

We respectfully remind FHWA and ODOT the State is required to protectively manage the LMR, pursuant to the requirements of the Act. Section 10(a) of the Act establishes an anti-degradation and enhancement policy for designated rivers. Section 10(a) states that components of the System... "shall be administered in such manner as to protect and enhance ... the values which enabled the river to be included in the System, and "...primary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeologic and scientific features."

As a 2(a)(ii) river, the Department relies on the State to manage the river to meet the requirements of the Act, including ensuring ORVs are protected and enhanced. We understand the State established Scenic Rivers Advisory Council opposes the proposed new bridge corridor crossing the LMR. We recommend ODOT ensures the proposal is not in conflict with Section 10(a) of the Act and guidance provided in the Assistance Manual for the LMR.

Section 7(a) Applicability

Section 7(a) of the Act provides substantial protection to designated rivers. We understand the NPS has previously provided information regarding its section 7(a) responsibilities and the types and kinds of projects that would require section 7(a) approval. We appreciate ODOT's coordination efforts on this matter. We remind ODOT it is the express responsibility of the NPS, on behalf of the Secretary, to determine if a proposal is subject to review pursuant to section 7(a)

Act. This should be clarified in the appropriate sections of the draft EIS, including responses to agency comments.

The draft EIS indicates "...it is not known at this time if a temporary instream crossing structure will be needed during bridge construction; a final determination will not be made until Tier II when further engineering details are developed." The ODOT should exercise caution to try not to make irreversible commitments in its planning, should a temporary instream crossing structure on the LMR be necessary. As a reminder, all construction activities, on the LMR or its tributaries, temporary or otherwise, which are considered "water resources projects" will require NPS evaluation pursuant to section 7(a) of the Act. Additionally, the river channel is actively meandering in the area of the proposed new bridge crossings. Lateral movement could affect the integrity of the bank in the vicinity of bridge support piers. Corrective maintenance activities could require additional section 7(a) review. The NPS requests a hydrological assessment is conducted for the river in the project area. We believe that the spanning must go beyond the ordinary high water (OHW) elevation because the LMR is an actively meandering stream. Today, a bridge pier may be above the OHW elevation, however, 30 years from now the pier could be in the main channel of the river. If a new bridge (in an existing corridor crossing) is considered unavoidable, the LMR and its 100-year floodplain should be completely spanned.

ENVIRONMENTAL IMPACT STATEMENT COMMENTS

General Comments

Because of the national significance, resource sensitivity, and specific management goals of the LMR, the LMR receives a higher level of protection (and has a lower threshold for accepting impacts). The LMR should be treated on an equal footing as other resources of national importance NRHP properties, federally listed species, wetlands, and floodplains). We recommend including the LMR as a stand-alone impact topic. This would enable the evaluation of impacts to the ORVs within the context of their national significance and the Act.

Although a specific corridor and bridge design has not been selected, we believe general direct and indirect impacts to each of the LMR ORVs can be evaluated during the current Tier I planning stage. Thresholds for each impact topic should be established to assist in determining differences between "minor, moderate, and major" or other qualifying terms. We recommend presenting the individual direct/indirect impacts in the same format as used for cumulative impacts as is displayed on page 5-81. The NPS, as a cooperating agency with special expertise on Wild and Scenic Rivers, requests an opportunity to review and provide internal agency comments to predicted impacts prior to the release of the final EIS.

Specific Comments:

Page 1-9: While initial project coordination meetings with State and Federal Regulatory Agencies was held on January 17, 2002, and April 12, 2002, the NPS was not made aware of these meetings (see also page 6-8). Both these sections imply otherwise. Please clarify.

The NPS was invited to participate as a Cooperating Agency in an October 28, 2002, and accepted in a letter to the ODOT dated November 8, 2002.

The FHWA notice of intent (NOI) announcing this tiered project was published in the Federal Register on June 3, 2002. Our records indicate the NOI was published on May 21, 2002. Related to this, see also page 6-9 (response to chapter 3.1.3) and explain within the context of the statement that indicates "Eastern Corridor PE/EIS work phase began in September 2001, community workshops have been conducted since January 2002," and public feedback channels, reports, and information centers have been in place since February 2001 (page 6-4). Clearly, the project involved an aggressive and wide ranging public involvement process, it appears that four of the five meetings were held prior to the publication of the NOI (see also appendix B). This could be confusing to some readers.

Page 4-17: This section documents active channel migration that is occurring on the LMR within the Horseshoe Bend area. The draft EIS notes "...even within the last 50 years, the LMR has shown significant movement (1,000+ feet) in the Horseshoe Bend area when compared to its present-day location." This poses additional concerns in the event bridge piers are placed in the floodplain. Depending on the location of piers and other support structures, channel movements could undermine these structures and could require additional consultation pursuant to the Act for bank stabilization work. We recommend a full geologic assessment of channel migration and future movements in the proposed new corridor crossings to better understand current and future impacts to the rivers free-flowing condition and other ORVs.

Page 4.38-440: Noise Abatement Criteria (23 CFR 772) were used as a reference to "determine which areas along existing or proposed roadway segments are estimated to experience sound levels that approach the NAC for categories B and C under existing and build conditions." For purposes of this screening, the LMR should be classified as a category A receptor. While the LMR is not a tract of land per se, the purpose and intent of the river's national designation is commensurate with the activity category defined for category A: "...parks, historic districts, and other public open spaces where *sensitivity and quiet are of extraordinary significance.*" Quiet and opportunities for solitude and enjoyment of the natural features are important elements of the LMR and are related to the values for which the river was included in the national system. As reflected in the stated management recommendations for the river (Secretary's

1973 report to Congress), the LMR is recognized for providing the kinds and types of activities that require special quantities of serenity and quiet. Given its proximity to the metropolitan community of Ohio, and its national significance, clearly, the serenity and quite offered by the LMR serves an important public need. We recommend FHWA give due consideration to this change.

Section 5.2.2: Key environmental issues and impacts for Area No. 2, which includes the LMR bridge crossing, are presented. A discussion of direct, indirect, and cumulative impacts, described in terms of timing, intensity, and duration is absent. Terms such as "short-term, adverse, and permanently modified" are used to describe some impacts, but lack clear definitions to help the reader understand and compare the relative impact to other resources and alternatives.

Page 5-35: Impacts to the views from the river are described by stating simply that "Views...will be permanently modified by placement of a roadway/transit corridor on a new alignment where no facility currently exists." We believe a more rigorous and quantitative analysis is required in an EIS. Please define "modified" and the methods and thresholds used to determine this impact intensity. The direct and indirect visual impacts should be discussed in context of the LMR's Federal designation and the river's outstandingly remarkable scenic values. Cumulative impacts should be evaluated as well. While we understand the proposed bridge specifications have not been developed, a visual simulation of the proposed bridge crossings at each corridor is requested. For this simulation, the Department recommends using designs for similar highway crossings of this nature, and which incorporate the known design features (travel lanes, width, elevation necessary to span river and floodplain, etc.). The draft EIS should then indicate the design is a simulation only to assist in assessing scenic values.

Page 5-80: The draft EIS concludes there would be "...no substantial secondary impacts to the LMR..." as a result of the project because controlled access through the corridor, with no new access points, would deter new development in this area. We disagree. While the expansion of existing agricultural and greenspace in the area is envisioned for the area, absent zoning controls or conservation easements, protection of these lands is not likely to be deterred. As a result, substantial secondary impacts to the LMR and its floodplain associated with increased development (secondary structures such as roads, sidewalks, and parking lots) may occur and will lead to increased impervious surface area and runoff into the LMR and its tributaries.

Page 5-82: General impacts associated with staging areas, access roads, and other temporary structures for bridge construction should be discussed, particularly impacts to cultural resources.

SUMMARY COMMENTS

We concur with comments made by the U.S. Environmental Protection Agency (EPA) and the Ohio Environmental Protection Agency (OEPA) on the preliminary draft EIS for the Eastern Corridor Multi-Modal Projects. We share OEPA's and EPA's position recommending the improvement or expansion of existing bridges across the LMR rather than constructing a new bridge in a new corridor crossing. The Department recommends ODOT fully evaluate the use of existing corridor crossings over the LMR, including a new bridge adjacent to existing bridges in a Supplemental Tier I EIS.

The Act and management guidelines establish a non-degradation and enhancement policy for all rivers included in the NWSRS. A new crossing in a new corridor could impair the river's ability to sustain its national designation and appears to be in direct conflict with the stated purposes of the Act, specifically section 1 and section 10(a). The proposed LMR bridge, or certain elements of the project located on tributaries to the LMR, may be subject to review under section 7(a) of the Act. It is our preliminary section 7(a) determination that any water resources project involving, or otherwise associated with the construction of an additional multi-lane highway bridge crossing the LMR in a new corridor, would likely have a direct and adverse effect on the outstandingly remarkable scenic and recreational values of the river. A water resources project that involves construction of a bridge adjacent to an existing corridor crossing, or otherwise associated with widening an existing corridor is preferred, and spans the river, would likely enable the project to be approved with standard mitigation.

Avoidance of impacts to fish and wildlife and their habitats, as is expressed in the Mitigation Policy, should be a high priority as ODOT develops its final project plans. Compensatory mitigation should be provided concurrently with project construction or, where possible, in advance of such construction.

Our comments on the applicability of section 4(f) are provided to give you an early indication of our thoughts about section 4(f) involvement. They do not represent the results of formal consultation by the Department of Transportation with the Department of the Interior, pursuant to the consultative requirements of section 4(f). Such requirements would be fulfilled only when the Department comments separately on any section 4(f) evaluation which may be prepared and approved by you for circulation. We recommend that the Final EIS not be completed and released until a draft section 4(f) consultation has been completed.

The Department has a continuing interest in working with FHWA and ODOT to ensure impacts to resources of concern to the Department are adequately addressed. For matters related to fish and wildlife resources and threatened and endangered species, please continue to coordinate with the Field Supervisor, U.S. Fish and Wildlife Service, 6950 Americana Parkway, Suite H, Reynoldsburg,

Ohio 43068-4127, telephone 614-469-6923. For matters related to the LMR and Section 4(f)/6(f) resources, please coordinate with Ms. Sue Jennings, National Park Service, Midwest Regional Office, 601 Riverfront Drive, Omaha, Nebraska 68102, telephone 402-661-1848.

We appreciate the opportunity to provide these comments.

Sincerely,

Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

cc:
Mr. Gordon Proctor, Director
Ohio Department of Transportation
1980 West Broad Street
Columbus, Ohio 43215

Mr. Samuel W. Speck
Director, Ohio Department of Natural Resources
1952 Belcher Drive, Building D-1
Columbus, Ohio 43224-1387

U.S. Department
of Transportation
Federal Highway Administration

Ohio Division Office
200 North High Street
Columbus, Ohio 43215

September 19, 2005

Mr. Willie R. Taylor, Director
Office of Environmental Policy and Compliance
U. S. Department of the Interior
Office of the Secretary
Washington, D.C. 20240

In Reply Refer To:
HEO-OH

Dear Mr. Taylor:

We appreciate the participation from the various agencies of the DOI, particularly from the NPS who agreed to serve as a cooperating agency in the NEPA process for the Eastern Corridor project, located in the vicinity of the City of Cincinnati, in Hamilton and Clermont Counties, Ohio. The NPS staff members in Omaha, Nebraska have been most willing to avail themselves on short notice to meet in person or via telephone with project sponsors and local stakeholders.

FHWA received formal comments from the DOI on the Tier 1 DEIS on April 21, 2005. Since that time, the Ohio Department of Transportation and the FHWA have continued to work with both the U.S. Fish & Wildlife Service (FWS) and the NPS to resolve the DEIS comments and include the formal responses in the FEIS. Over the past several years we have been in continuous communication with the NPS, primarily for issues pertaining to the Wild and Scenic Rivers Act (WSRA) and a proposed crossing of the Little Miami River (LMR) - a recreational component of the National Wild and Scenic Rivers System. This potential crossing of the LMR is a contentious issue among the various jurisdictions, resource agencies, and organizations who do not agree on the long-term vision for this river and the communities it serves and traverses.

We have had extensive conversations with the NPS, FHWA technical specialists, and FHWA legal representatives on two main issues: applicability of WSRA Section 7(a) and USDOT Section 4(f) to the LMR as a result of this proposed project. At this time, we are in agreement with the NPS that a structure spanning the bed and banks of the LMR will not require a Section 7(a) approval. A commitment has been made by the project sponsors to construct this type of bridge in a manner to avoid direct impacts to the river either permanently or temporarily during construction.

Regarding Section 4(f) applicability to the LMR, the bridge type and construction manner described above are anticipated to avoid direct use of the 4(f) recreational resource. However, the NPS raised the issue of "constructive use" impacts on the LMR's "outstandingly remarkable values" (ORVs). Constructive use only occurs in those situations where, including mitigation, the proximity impacts of a project on the 4(f) property are so severe that the activities, features or attributes that qualify the property or resource for protection under Section 4(f) are substantially impaired. Our consideration of Section 4(f) constructive use to the ORVs has been given with the best available information collected during the Tier I process. The ORVs assigned to the LMR in the vicinity of this project are scenic (aesthetic),

recreational, fish and wildlife (flora/fauna), geological, and historical resources (cultural and archeological).

The Little Miami Scenic Rivers Assistance Manual (Feb. 1977) was developed as part of the application process under Section 2(a) (ii), of the Wild and Scenic Rivers Act, P.L. 90-542. The manual provided an inventory of known, proposed and authorized projects in the proposed designated area. The relocation of U.S. 50/32 was identified as a proposed project. The proposed crossing of the Little Miami in 1977 was located in approximately the location as is proposed for the current project. The possibility of a new crossing did not impact the decision to designate the lower reach of the Little Miami as a component of the National Wild and Scenic Rivers System. The lower portion of the Little Miami Rivers was designated a recreational component of the system in 1979.

Opportunities for a range of recreational activities exist along the LMR and include canoeing and kayaking, fishing, bird watching, hiking, and walking. However, in the proposed bridge location, the primary activity is canoeing and kayaking. At this location the activity is limited by the periodic low flow conditions and the number of available take-outs downstream. The placement of a clear span across the river eliminates the concern of an obstructed river corridor for this use of the LMR. Opportunities for the other types of recreation have always been limited in the build area due to the lack of available publicly-owned land for access. Recreational access to the LMR could be pursued at the bridge site if the Ohio Department of Natural Resources and the local agencies find this beneficial to the local Cincinnati area. The FHWA review does not find that the value of the recreational resource in terms of its Section 4(f) significance will be meaningfully reduced or lost.

The degree of visual impact would be closely tied to the distance one is from the proposed bridge. In the vicinity of the proposed crossing, the views experienced by recreational users of the LMR are primarily in the foreground, not long distance due to the winding nature of the river and are less critical to the scenic quality of the view. The proposed bridge would be higher than the existing banks of the river, so it would be a dominant foreground element but only to users in close proximity to the bridge location. Controlling the amount of vegetation that is cleared on the banks would preserve the natural harmony and minimize the visual effects of the bridge. River users would view the bridge for a very limited time due to the bend prior to the build location. Currently there are no access points or trails in the build area for use by the wildlife observer or the angler. Should this type of recreational activity become available, the visual intrusion would increase as one approaches the proposed bridge.

In addition, within the context of this section of the river, the visual impacts of a proposed bridge are minimized by the existing urbanization of the area. Recreational viewers in the build location are influenced by utility towers adjacent to the river, gabion structures, manmade outlets, landfill operations, urban debris, and residential and commercial development. Furthermore, the seasonal variation allows increased visual intrusion from the urban scars of the area for approximately six months of the year. The urban elements paralleling the river now (and at the time of designation) have changed the pristine nature of the visual quality experienced for the recreationalist. The commitment of the proposed clear span provides for less visual intrusion. Minimization of the intrusion from the new bridge could be further achieved by choice of construction materials and the selection of a visually complimentary bridge type.

The WSRA recreational designation is defined as those sections of rivers that are readily accessible by road or railroad that may have some development along their shorelines, and may have undergone some impoundment or diversion in the past. The report recommending the addition of the Little Miami River to the National Wild and Scenic Rivers System (1973) established that the current project area contained urban development which was visible from the river, setting it apart from other sections in the designation request. Other documents preceding the designation continued to recognize problems with urban blight in this section. While these urban characteristics and flaws may have diminished scenic values of this section; they did not impact the qualification as a "recreational" component of the national system.

FHWA recognizes that the views from the river will be permanently modified by placement of a new bridge across the LMR. However, in comparison with the information available and the conditions present at the time of designation, the FHWA has determined that the impacts needed to constitute a constructive use are not present.

To address impacts associated with noise, we directed the Ohio Department of Transportation to provide us with existing ambient noise readings in the project study area at several locations along the LMR. The Leq (dBA) readings for these locations ranged from 51.5 to 56.0. Next, we directed ODOT to analyze future noise readings based on the best information available at this time. Typically, future noise readings are conducted later in the project development process when specific design information is known for the preferred alternative. However, in an attempt to respond to the noise issue in a comprehensive, but expedient way, assumptions were made for some of the input data such as planning level traffic for the 2020 design year, vehicle mix, speeds, height of the structure, roadway width, etc. The FHWA noise abatement criterion for recreational activity (Category B) is 67 dBA. The model provided predicted noise readings for forty-four receiver locations along the LMR and along an assumed roadway alignment. The highest predicted noise level is 62 dBA. Based on these readings and the noise abatement criterion of 67 dBA, it is FHWA's position that the noise impacts needed to constitute a constructive use are not present.

The currently available data indicates that the remaining ORVs for fish and wildlife, geological, and historical resources, will experience little or no impact at the proposed location. No historical resources or significant geologic features have been identified at the proposed bridge location. The FWS has offered to work with ODOT in the planning of additional species and habitat studies in the Tier II processs.

An evaluation of the potential impacts from the proposed project has been made by the FHWA. As outlined in 23 C.F.R. 771.135(p) (5), the FHWA has determined that the activities, features, and attributes that qualify the LMR for protection under Section 4(f) are not substantially impaired, therefore, constructive use does not exist. This determination will be re-evaluated in the Tier II EIS to determine if this preliminary decision remains valid. If you have any questions regarding FHWA's coordination on WSRA Section 7(a) or evaluation of USDOT Section 4(f), please contact Mark VonderEmbse, Senior Transportation Engineer, at (614) 280-6854.

Sincerely,

Dennis A. Decker
Division Administrator