



NE CORRIDOR AA/EIS

OUTLINE OF CONTENT *with Guiding Regulations*

May 19, 2010

HNTB

Submitted To:

Indianapolis Metropolitan Planning Organization (MPO)

200 East Washington Street, Suite 1922
Indianapolis, IN 46204

Central Indiana Regional Transportation Authority (CIRTA)

200 East Washington Street, Suite 2002
Indianapolis, IN 46204

Indianapolis Public Transportation Corporation (IndyGo)

1501 West Washington Street
Indianapolis, IN 46222

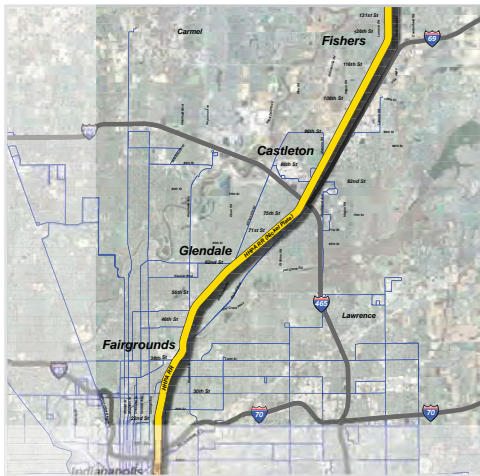
Submitted By:

HNTB Corporation

111 Monument Circle, Suite 1200
Indianapolis, IN 46204

In Association with:

ASC Group, Inc.
Dyer Environmental Services
MKC Associates
NS Services, LLC
Pioneer Consulting
The Planning Workshop
RL Banks



NE CORRIDOR: PROPOSED ROUTE

“This outline is a guide for anyone interested in understanding how the... federal regulations will be met...”

This outline is a guide for anyone interested in understanding how the substantive requirements of federal regulations will be met by the information contained in the Alternative Analysis/Environmental Impact Statement (AA/EIS). This outline contains references to the federal regulations that dictate the content and requirements of an AA/EIS as described in the Code of Federal Regulations (CFR) and the National Environmental Policy Act (NEPA) of 1969, as amended and codified in 42 USC 4321-4347. In addition to NEPA provisions, the AA/EIS will incorporate guidelines and regulations of the following:

- Federal Transit Administration (FTA)/Federal Highway Administration (FHWA) NEPA Regulations (23 CFR 771);
- FTA New Starts Regulations (49 CFR 611 and 49 USC 5309);
- FTA Major Capital Investment Projects Regulations (49 CFR 611);
- Federal Railroad Administration (FRA) Environmental Procedures (64 FR 28545);
- Council on Environmental Quality’s (CEQ) Implementing Regulations for NEPA (40 CFR 1500 through 1508);
- Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU);
- Section 4 (f) of the U.S. Department of Transportation’s (USDOT) Act of 1966 (49 USC 303, 23 USC Section 138, 23 CFR 771 and 774, and 36 CFR 800);
- Section 6 (f) of the Land and Water Conservation fund Act of 1965 (16 USC 460, 36 CFR 59.1);
- Section 106 of the National Historic Preservation Act (16 USC 470 and 36 CFR 800);
- Section 7 of the Endangered Species Act of 1973, as amended (7 USC 136, 16 USC 1531, 50 CFR 402);
- Bald and Golden Eagle Protection Act (50 CFR 13 through 22);
- Fish and Wildlife Coordination Act (16 USC 661-667);
- National Forest Management Act (16 USC 1604);
- Executive Order 13112 (Invasive Species);
- Migratory Bird Treaty Act (16 USC 700-19);
- Clean Air Act (42 USC 7401, 42 USC 7506, 40 CFR 50 through 96);
- Final Transportation Conformity Rule (40 CFR 93);
- Clean Water Act of 1972 (33 USC 1251);
- Federal Water Pollution Control Act (33 USC 1251);
- Farmland Protection Policy Act of 1984 (7 CFR 658);
- Title VI of the Civil Rights Act of 1964 (42 USC 2000d);
- Uniform Relocation Assistance and Real Property Acquisition For Federal and Federally Assisted Programs (42 USC 4601 and 49 CFR 24);
- Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations);
- Executive Order 11990 (Protection of Wetlands);
- Executive Order 11988 (Floodplain Management);
- Executive Order 13166 (Improving Access to Services for Persons with Limited English Proficiency);
- US Department of Transportation Order 5660.1A (Preservation of the Nation’s Wetlands);
- US Department of Transportation Order 5650.2 (Floodplain Management and Protection);
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)(42 USC 9601);
- Resource Conservation and Recovery Act (RCRA) (42 USC 6901);
- Other applicable federal, state, and local laws and regulations (e.g. Indiana Administrative Code).

This outline also describes the assessment methodologies that will guide the discussion of the affected environment, environmental impact analysis, and mitigation measures for the proposed Northeast Corridor project.

The MPO, CIRT, and IndyGo, in cooperation with the lead agencies, intend to prepare an EIS relating to proposed fixed guideway transit improvements in the Northeast Corridor located in the Indiana counties of Marion and Hamilton. As defined by the FTA, a “fixed guideway” refers to any transit service that uses exclusive or controlled rights-of-way or rails, entirely or in part. This outline fulfills the following objectives:

1. Provides a road map of the development of the AA/EIS;
2. Documents federal regulations and assessment methodologies that will be used to evaluate identified transportation improvement alternatives, as well as their potential effects to key natural, social, economic and land use resources; and
3. Contributes to the transparency of the overall project development process by describing the analysis tasks to be accomplished in each of the key resource areas.

Comments on the outline should be sent to the address below. Additional copies are available for review at www.indyconnect.org or by contacting **Anna M. Tyszkiewicz, Project Manager** at:

Indianapolis Metropolitan Planning Organization
City County Building, Suite 1922
200 E. Washington Street
Indianapolis, Indiana 46204
Phone: (317) 327-5487
E-mail: atyszkie@indy.gov



COVER SHEET

Guiding regulations: 40 CFR 1502.10; 40 CFR 1502.11; 40 CFR 1506.10

The AA/EIS will include a one page cover sheet which includes the following information:

- A list of the responsible agencies, including the lead agencies and any cooperating agencies;
- The title of the proposed action that is the subject of the statement together with the State and counties where the action is located;
- The name, address, and telephone number of the person at the agency who can supply further information; and
- A statement designating the document as a draft.

In addition to the one page cover sheet, a second page will be provided to include an abstract and a discussion of the timeline and process for submitting comments regarding the information contained in the AA/EIS.

This page intentionally left blank.



EXECUTIVE SUMMARY

Guiding regulations: 40 CFR 1502.10; 40 CFR 1502.12

This section will provide a summary of the major conclusions, alternatives considered, areas of controversy (including issues raised by the agencies and the public), and the issues remaining to be resolved prior to the issuance of the final environmental document.

This page intentionally left blank.



TABLE OF CONTENTS

Guiding regulations: 40 CFR 1502.10

This page intentionally left blank.

TABLE OF CONTENTS

Cover Sheet.....	5
Executive Summary	7
Table of Contents	9
Documentation	13
1.0 Purpose & Need	15
Description of Corridor/Study Area	16
Need for Transportation Improvements	16
Project Goals & Objectives	16
Transit System Linkages.....	16
Public/Agency Participation: Decision-Making.....	16
Role of DEIS in Project Development.....	17
2.0 Alternatives Considered	19
Alternatives Considered in Previous studies	20
Alternatives Refined During Scoping Process	20
Environmental Impact Statement Alternatives	20
Capital, Operating, & Maintenance Costs.....	21
3.0 Affected Environment & Environmental Consequences	23
Land Use & Socio-economic Conditions	24
Neighborhoods, Community Services & Facilities	24
Acquisitions & Displacements/Relocations.....	25
Environmental Justice.....	25
Visual & Aesthetic Resources.....	26
Cultural, Historic, & Archaeological Resources	27
Geology & Soils	28
Farmlands.....	28
Water Resources	29
Ecosystems	31
Threatened & Endangered Species.....	31
Air Quality	31
Noise and Vibration	32
Hazardous/Regulated Materials	33
4.0 Transportation System Impacts.....	35

TABLE OF CONTENTS

Existing Transportation Network	36
Roadway Operations	36
Transit Operations	37
Freight Operations	37
Parking Impacts	37
Pedestrian/Bicycle Access	38
5.0 Indirect & Cumulative Impacts	39
6.0 Comparison of Alternatives/Identification of LPA.....	41
Effectiveness in Meeting Purpose & Need	42
Evaluation Relative to Project Goals & Objectives	42
Transportation & Environmental Consequences	42
Cost-effectiveness	42
Financial Feasibility	42
Locally Preferred Alternative (LPA).....	43
7.0 Public/Agency Coordination	45
Public Involvement Program.....	46
Outreach During AA/EIS Scoping Process	46
Outreach During AA/EIS Process	46
Agency Coordination	47
Summary of Comments & Responses.....	48
AA/DEIS Distribution List	48
8.0 Section 4(f) & 6(f) Evaluation	49
Background & Regulatory Context	50
Description of the Proposed Project	50
Description of Section 4(f) Properties	50
Description of Section 6(f) Properties	50
Coordination	51
References	53
List of Preparers	55
List of Recipients.....	57
Index	59
Appendix A.....	61



DOCUMENTATION

Guiding regulations identified by chapter and throughout the following pages.

This page intentionally left blank.

Chapter

1.0 Purpose & Need

Guiding regulations: 40 CFR 1502.13



This chapter will identify the underlying transportation need that is to be addressed by the proposed project. This Purpose and Need statement (P&N) will establish the transportation problem that must be addressed in the analysis, serve as the basis for development of project goals, objectives and evaluation measures, and will provide a framework for determining which alternatives should be considered as reasonable options in a given corridor.

The P&N will focus on regional mobility, access, travel patterns, existing and projected land use, and economic development. The P&N will use information from previous studies as much as possible.

The following provides an outline and summary of key methodologies to be used as part of the Purpose and Need chapter of the AA/EIS.

DESCRIPTION OF CORRIDOR/STUDY AREA

Guiding regulations: 23 CFR 771.111(f)

The AA/EIS will provide a description of the project corridor/study area which includes geographic boundaries and description of the proposed logical termini.

NEED FOR TRANSPORTATION IMPROVEMENTS

Background

The AA/EIS will provide a brief overview of the existing transportation system within the Northeast Corridor.

Challenges within the Project Corridor

The AA/EIS will describe regional growth patterns, activity and employment centers, and travel patterns using demographic and employment data from the US Census and local agencies such as the Indianapolis MPO and Indianapolis Downtown, Inc.

Problems & Needs Specific to the Study Area

The AA/EIS will discuss the existing deficiencies of the transportation network and limited options for public transportation service in the project corridor. Using information from previous studies, as well as data developed during the preparation of the AA/EIS, a discussion of the travel and mobility challenges in the Northeast Corridor study area will be included.

Planning Context

The AA/EIS will discuss adopted transportation and land use plans, as well as their consistency and/or connection (if any) to the proposed Northeast Corridor project.

Summary of Transportation Issues to be Addressed

Using the information contained herein, the AA/EIS will provide a concise summary of the purpose and need of the Northeast Corridor project.

“The AA/EIS will discuss the existing deficiencies of the transportation network and limited options for public transportation service in the project corridor.”

PROJECT GOALS & OBJECTIVES

The AA/EIS will discuss the goals and objectives for the proposed Northeast Corridor project. This information will help articulate for the reader the desired “end state” following any transportation investment resulting from implementation of the AA/EIS alternatives will be.

TRANSIT SYSTEM LINKAGES

The AA/EIS will discuss how the proposed Northeast Corridor project would fit within the context of the existing and planned public transportation system in the Marion and Hamilton Counties.

PUBLIC/AGENCY PARTICIPATION: DECISION-MAKING

Guiding regulations: 40 CFR 1503.2; 40 CFR 1501.7

The AA/EIS will discuss the importance and role of the public and regulatory agencies in the transportation decision-making process. This discussion will define “scoping” and its role in the completion of the environmental studies and impact analysis. A detailed description of the public/agency scoping process, including the filing of the Notice of Intent (NOI), Project Initiation Packet, Scoping Information Booklet, public scoping meetings, agency scoping meeting, and the preparation of the scoping report.

Reference will also be provided to Chapter 6 for the complete discussion of the public involvement program, specific outreach efforts implemented during the development of the AA/EIS, as well as the comments received from this outreach effort.

ROLE OF DEIS IN PROJECT DEVELOPMENT

The AA/EIS will discuss the overall project development process, including the role of the AA/EIS document in that process. The AA/EIS will emphasize that the document is intended to provide full consideration of the potential impacts and benefits of the proposed Northeast Corridor project. Initially, the AA/EIS will be released as a Draft Environmental Impact Statement (DEIS) to allow resource and regulatory agencies and the public with an opportunity to review the findings of the engineering and environmental studies. The discussion will indicate that a Final Environmental Impact Statement (FEIS) will be prepared once permission is received from the FTA to proceed with preliminary engineering on the proposed project. The FEIS will contain more detailed engineering work and will address any outstanding environmental analysis issues to help the Indianapolis MPO, CIRT, and IndyGo make a decision on the Locally Preferred Alternative (LPA). The AA/EIS will also indicate that FTA will not grant approval for the project to enter final design and construction phases until preliminary engineering is complete and a FTA has issued a Record of Decision (ROD), as required by NEPA.

This page intentionally left blank.

Chapter

2.0 Alternatives Considered

Guiding regulations: 40 CFR 1502.14, 49 CFR 611, 49 USC 5309



This chapter will present the transportation alternatives developed and considered as part of this EIS, as well as the reasons behind elimination of any alternatives. This chapter will also include a summary of completed transportation plans and studies to provide the reader with context on alternatives previously considered, but eliminated from detailed study. The discussion within this chapter will primarily consist of adopted transportation plans, as well as information contained in the **Final Definition of Alternatives Report, Alternatives Evaluation Summary Report, Cost Estimating Methodology Technical Memorandum, and Cost Estimate Technical Report.**

The following provides an outline and summary of methodology to be used as part of the Alternatives Considered chapter of the AA/EIS.

ALTERNATIVES CONSIDERED IN PREVIOUS STUDIES

The AA/EIS will define a conceptual set of alternatives based on the DiRecTionS Final Evaluation of Alternatives Report dated September 30, 2008 and the Northeast Corridor Commuter Rail Start-Up Study dated August 12, 2008. Other relevant studies, such as the IndyGo Comprehensive Operations Analysis, the Central Indiana Transit Task Force recommendations, and the transit element of the 2035 Indianapolis MPO Long-Range Transportation Plan (LRTP), currently in progress, will also be considered.

Regional Rapid Transit Study (DiRecTionS)

The AA/EIS will discuss the findings and conclusions of the Regional Rapid Transit Study, including conceptual alternatives evaluated in the Northeast Corridor that were evaluated as part of the study.

Northeast Commuter Rail Start-up Study

The AA/EIS will discuss the findings and conclusions of the Commuter Rail Start-Up Study, including alternatives evaluated as part of the study and their relation to the Northeast Corridor project.

IndyGo Comprehensive Operations Analysis

The AA/EIS will discuss the findings and conclusions of the Comprehensive Operations Analysis, including alternatives evaluated as part of the study and their relation to the Northeast Corridor project.

Central Indiana Transit Task Force (CITTF) Study

The AA/EIS will discuss the findings and conclusions of the CITTF Study, including the recommended regional transit system and how elements of the system relate to the Northeast Corridor project.

Indianapolis MPO Long-Range Transportation Plan

The AA/EIS will discuss the findings and conclusions of the MPO LRTP, including the regional transit element and how it relates to the Northeast Corridor project.

“The AA/EIS will discuss the findings and recommendations of the Central Indiana Transit Task Force Study.”

ALTERNATIVES REFINED DURING SCOPING PROCESS

The AA/EIS will discuss any modifications or revisions to alternatives, if any, resulting from the comments received during the agency/public scoping process.

ENVIRONMENTAL IMPACT STATEMENT ALTERNATIVES

No-Build

Guiding regulations: 40 CFR 1502.14

The AA/EIS will identify, develop, and describe the No-Build alternative that would represent the current and committed transportation system improvements in the Northeast Corridor. Committed transportation improvements include projects in the Indianapolis MPO and Indiana Department of Transportation (INDOT) Transportation Improvement Program (TIP). Examples of committed projects include added travel lanes and interchange improvements on I-69 and I-465.

This alternative will serve as the basis for comparison of environmental impacts resulting from the build alternatives, as well as the cost-effectiveness of the Transportation System Management (TSM) alternative as required by Council on Environmental Quality's (CEQ) Regulations for Implementing NEPA (40 CFR 1500 through 1508).



MASSACHUSETTS STREETCAR - AFTER

Transportation System Management (TSM)

The AA/EIS will identify, develop, and describe a New Starts Baseline alternative pursuant to FTA requirements to be used for comparison with the build alternatives. This alternative would reflect the best operational performance that can be expected for mobility without constructing a new transit guideway. The TSM alternative would include operational enhancements in bus transit service throughout the study corridor that would operate on existing streets outside of the Hoosier Heritage Port Authority (HHPA) right-of-way. This service would operate in mixed traffic along I-69, Binford Boulevard, Fall Creek Parkway, and the Capitol Avenue/Illinois Street one-way pair between Noblesville and South Street in Indianapolis.

Bus Rapid Transit (BRT)

The AA/EIS will identify, develop, and describe a Bus Rapid Transit (BRT) alternative that would consist of a dedicated busway with on-line stations and other related capital improvements constructed in the Hoosier Heritage Port Authority (HHPA) Railroad right-of-way between Noblesville and approximately 10th Street in Indianapolis. From this point to the southern terminus, BRT operations would occur on-street in mixed traffic via the Capitol Avenue/Illinois Street one-way pair to South Street.

Commuter Rail Transit (CRT)

The AA/EIS will identify, develop, and describe a Commuter Rail Transit (CRT) alternative that would consist of Federal Railroad Administration (FRA) compliant vehicles that could operate in mixed traffic with freight trains. These vehicles would operate on improved tracks in the HHPA Railroad right-of-way between Noblesville and approximately 10th Street in Indianapolis, then in the CSX railroad right-of-way to Union Station.

Diesel Multiple Unit (DMU) Light Rail Transit (LRT)

The AA/EIS will identify, develop, and describe a Light Rail Transit (LRT) alternative that would consist of non-FRA compliant diesel multiple unit (DMU) light rail vehicles that would operate on improved tracks in the HHPA Railroad right-of-way between Noblesville and approximately 10th Street in Indianapolis, then in the CSX railroad right-of-way to Union Station.

CAPITAL, OPERATING, & MAINTENANCE COSTS

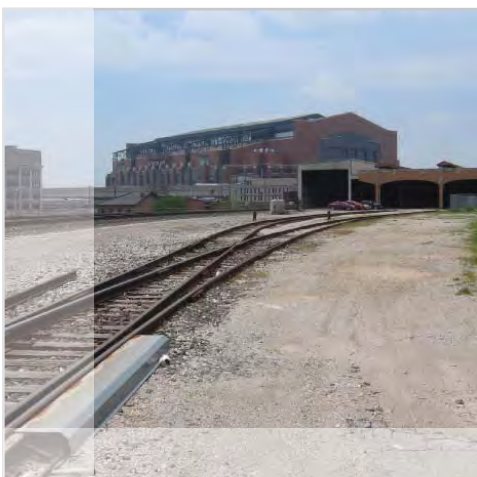
This section will summarize the information contained in the **Cost Estimating Methodology Technical Memorandum, Fleet Management Plan, and Cost Estimate Technical Report**.

Methodology

The AA/EIS will discuss the methods and data that were used to develop capital, operating, and maintenance cost estimates for each of the EIS alternatives. Capital cost estimates will be developed using FTA Standard Cost Categories (SCC) to allow for comparison with other transit projects seeking New Starts funds.

Capital Cost Estimates

The AA/EIS will summarize and compare the capital costs of each EIS alternative. Unit costs for capital items will be updated from the DiRecTionS Final Evaluation of Alternatives Report dated September 30, 2008 based on the refinement of alternatives and updates to construction costs. National rail and transit construction costs and local transportation construction costs will be referenced in the development of estimated costs. Local right-of-way acquisition specialists and licensed real estate appraisal staff will assist in identifying appropriate Indianapolis land values.



ENTERING UNION STATION

Operating & Maintenance (O&M) Cost Estimates

The AA/EIS will summarize and compare the operating and maintenance costs of each EIS alternative. These costs will be based upon the operating plan that is developed for each alternative and unit costs which will be developed from national and local operating cost data. The O&M cost estimates will include 20-year forecasts of O&M expenses for use in the financial plan.

Chapter

3.0 Affected Environment & Environmental Consequences

Guiding regulations: 40 CFR 1502.15, 1502.16, and 1508.8; FTA Guidelines and Standards for Assessing Transit-Supportive Land Use



This chapter will discuss the existing social, economic, and environmental setting for the Northeast Corridor project that would be affected (both positively and negatively) by the alternatives presented in the AA/EIS. The intent will be to provide the reader with the context necessary to understand how the alternatives under consideration would interact with community and natural resources. Impacts or effects (both positive and negative) to these resources will be discussed by alternative to provide the reader with a relative comparison. Potential measures to avoid or mitigate adverse direct impacts (where applicable and practicable) will also be discussed.

For the purposes of the direct impact analysis, the affected environment will encompass the right-of-way (ROW) footprint of the build alternatives which will primarily consist of the existing right-of-way of the Hoosier Heritage Port Authority (HHPA) railroad corridor. The geographic boundaries of the affected environment may expand in certain areas to consider the effects of proposed transit stations or exclusive bus facilities, such as on existing surface streets.

Indirect effects, which are caused by the proposed action and are later in time or farther removed in distance, but are still considered reasonably foreseeable, will also be discussed in this chapter.

The following provides an outline and summary of key methodologies to be used as part of the **Affected Environment, Environmental Consequences, and Mitigation Measures** chapter of the EIS.

LAND USE & SOCIO-ECONOMIC CONDITIONS

Methodology

The AA/EIS will review adopted transportation and land use plans and zoning classifications to determine consistency with the proposed project alternatives.

The AA/EIS will identify a community impact study area that incorporates and considers the demographic characteristics of communities expected to be affected by the proposed project alternatives. This study area will be determined based upon scoping, public involvement, interagency coordination, and professional judgment. U.S. Census data will be presented to identify and discuss community characteristics. Areas for examination will include, population, race, age, educational attainment, household income and poverty status, disabled persons, transit dependency, household size, housing value, housing rental rates, housing tenure, and other demographic data as appropriate.

Context

The AA/EIS will include a summary of adopted transportation and land use plans encompassing the study corridor. The summary will note whether the proposed project is generally consistent with the adopted plans. Potential areas of inconsistency will be noted. The AA/EIS will also include relevant demographic data from the U.S. Census in tabular format to provide socioeconomic context of the study corridor.



COLLEGE AVE BRIDGE LOOKING SOUTHBOUND

NEIGHBORHOODS, COMMUNITY SERVICES & FACILITIES

Methodology

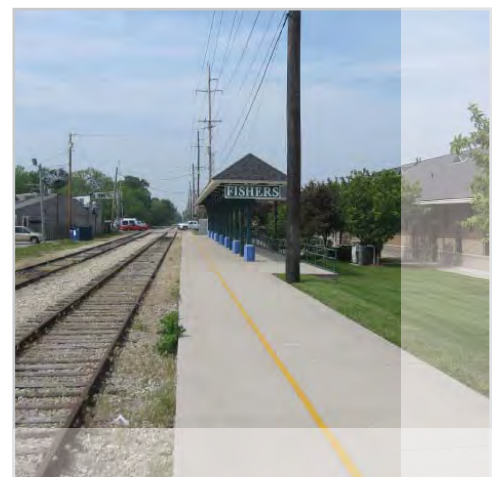
The AA/EIS will identify community boundaries, neighborhood boundaries, subdivision boundaries, activity centers, existing public infrastructure (transit, roadways, sidewalks, bicycle facilities, greenways, parks and recreation areas, water lines, and sewer lines), community facilities and resources such as hospitals, churches, fire stations, police stations, emergency service providers, daycares, libraries, schools, and other historic areas to provide a complete community profile and understanding of existing social interactions.

The AA/EIS will assess impacts to these facilities to determine if community services and facilities, public service buildings, and/or public services would be disrupted or changed as a result of the long-term operation of the proposed project. Other areas for consideration as part of the community impact analysis include the following:



FALL CREEK TRACK CONDITION

- Changes in the neighborhoods or community cohesion for the various social groups as a result of the proposed action. These changes may be beneficial or adverse, and may include splitting neighborhoods, isolating a portion of a neighborhood or an ethnic group, generating new development, changing property values, separating residents from community facilities, quality of life considerations, etc.
- Changes in travel patterns and accessibility (e.g., vehicular, commuter, bicycle, or pedestrian).
- Impacts (direct and indirect) on school districts, recreation areas, churches, businesses, police and fire protection, etc.
- Impacts of alternatives on transportation system safety, as well as overall public safety.
- General social groups specially benefitted or harmed by the proposed project. The effects of a project on the elderly, handicapped, non-drivers, transit-dependent, and minority and ethnic groups are of particular concern and will be described to the extent these effects can be reasonably predicted.
- Effects to low-income, minority and other special populations (elderly,



FISHERS STATION



FIELD NOTES

“The AA/EIS will evaluate the potential for disproportionately high and adverse impacts to minority and low-income populations.”

disabled, etc.) will be identified for further discussion in the Environmental Justice section of the AA/EIS.

The AA/EIS will identify and discuss opportunities for avoidance, minimization, and mitigation of community impacts.

Context

The AA/EIS will summarize key community characteristics, key potential direct impacts, and potential avoidance, minimization, and mitigation measures.

ACQUISITIONS & DISPLACEMENTS/RELOCATIONS

Guiding regulations: 42 USC 4601 and 49 CFR 24 (Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs)

Methodology

The AA/EIS will determine right-of-way (ROW) effects on residential, commercial and other properties associated with the build alternatives. During the early stages of alternative development, effects associated with residential or businesses relocations will be recognized in an effort to avoid and minimize adverse impacts resulting from displacements. The AA/EIS will estimate anticipated ROW costs related to the potential acquisition of properties associated with the build alternatives based on Marion and Hamilton County Auditor information and will include the potential business and residential relocation costs.

Context

The AA/EIS will include a summary of the acreage of right-of-way required for each build alternative, the number of parcels to be acquired, the type of acquisition (partial or full), the type of uses affected, and the number of dwelling units and businesses to be relocated. An analysis of the real estate market will be conducted to determine whether an adequate supply of replacement property exists.

ENVIRONMENTAL JUSTICE

Guiding regulations: Title VI of the Civil Rights Act of 1964 (42 USC 2000d); Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations); U.S. Department of Transportation Order 5610.2 (DOT Order to Address Environmental Justice in Minority Populations and Low-Income Populations)

Methodology

The AA/EIS will evaluate the potential for disproportionately high and adverse impacts to minority populations, low-income populations, and Indian tribes within the affected area of the proposed Northeast Corridor project area. The AA/EIS will describe what is considered a “disproportionately high and adverse effect,” using the *U.S. Department of Transportation’s Final Order on Environmental Justice* (April 1997). Under this DOT Order, “disproportionately high and adverse effects” are defined as adverse effects that are predominantly borne by a minority and/or low-income population or effects that are suffered by the minority and/or low-income population that are appreciably more severe or greater in magnitude than the adverse effects that would be suffered by the non-minority or non-low-income population.

The environmental justice (EJ) analysis will be focused on responding to the three fundamental EJ principles:

- Avoidance, minimization, or mitigation of disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- Ensuring the full and fair participation by all potentially affected communities in the transportation decision-making process.
- Preventing the denial of, reduction in, or significant delay in the receipt

of benefits by minority and low-income populations (i.e., transportation equity).

Demographic information, using the most current U.S. Census information, in conjunction with public involvement and targeted community outreach will be the primary tools for this assessment. The demographic information will be used to describe the racial, ethnic, and income characteristics at the Block Group level.

As set forth by the Council on Environmental Quality (CEQ) guidance, minority populations will be identified using the following criteria:

- The minority population of the affected area exceeds more than 50 percent; or
- The minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

In general, the AA/EIS will use County and State level demographic information as a means of relative comparison to the project corridor. Consideration will be given to using City/Town level data; however, the geographic extents of the entities are much more likely to change and therefore do not always provide a consistent comparison.

Low-income households will be identified through the use of the most current national poverty guidelines issued by the U.S. Department of Health and Human Services. In addition, the AA/EIS will consider traditionally underserved populations, such as elderly, disabled or handicapped persons who are non-low-income and non-minority, but would not typically be considered among environmental justice populations.

Context

The AA/EIS will include tabular data from the U.S. Census, as well as a matrix that will summarize the impact analysis for identified EJ populations within the study corridor. Information and results presented in other sections of the AA/EIS (e.g., land use, noise, roadway impacts, transit impacts, socioeconomics, etc.) will also be incorporated in this EJ discussion where appropriate. The AA/EIS will include the impact determinations regarding the likelihood that disproportionately high and adverse effects would be experienced by EJ populations, as well as discuss the potential measures to avoid, minimize, and mitigate those impacts to EJ populations. Specific outreach efforts to engage the EJ populations as part of the transportation decision-making process will also be discussed.

Results of the preliminary impact evaluation will be presented, as appropriate, to community stakeholders during public and neighborhood meetings to obtain their comments with regard to the findings. Public involvement will also be used to identify potential mitigation opportunities for unavoidable adverse impacts.

VISUAL & AESTHETIC RESOURCES

Methodology

The AA/EIS will include a preliminary Visual Impact Assessment (VIA), which is an analytical tool for determining potential impacts to community visual resources associated with the proposed transportation project. Generally, the VIA will consist of the following methodology:

- Establish the affected environment (i.e., the viewshed)
- Identify the affected visual resources
- Identify the affected population of neighborhoods and travelers
- Define existing visual quality of the project area as perceived by the affected population

“The AA/EIS will discuss how the proposed project would affect cultural resources and structures within the Area of Potential Effect.”

- Analyze impacts of the proposed project would have on the visual quality of the existing community
- Summarize the visual impacts by alternative
- Identify mitigation measures to address visual impacts and associated benefits

Context

The AA/EIS will include a comparative summary of impacts to visual resources by alternative. The assessment will identify areas of concern based on input from local neighborhoods and communities. The assessment will evaluate opportunities and constraints associated with the following:

- Enhancing views to/from proposed alternatives;
- Identifying specific areas of concern from local neighborhoods and communities; and
- Identifying visual features which may warrant protection, enhancement, or incorporation into the project as design elements.

Potential mitigation concepts will be developed and presented, as appropriate, using sketches, site plans, sections, and perspectives for unavoidable visual impacts.

CULTURAL, HISTORIC, & ARCHAEOLOGICAL RESOURCES

Guiding regulations: Section 106 of the National Historic Preservation Act (16 USC 470; 36 CFR 800); National Register Criteria for Evaluation (36 CFR 60); IC 14-21

Methodology

The identification and evaluation of cultural and historic resources will be accomplished through the following tasks:

- Review cultural resources identified in the 2001 study and databases for new entries since the previous study
- Verify the presence and condition of previously identified historic properties
- Initiate consulting party consultation and public involvement
- Establish the Area of Potential Effect (APE) in coordination with FTA and the State Historic Preservation Office (SHPO)
- Identify historic resources within the APE
- Assess the effect of alternatives on historic properties currently listed or eligible for listing in the National Register of Historic Places (NRHP)
- Develop list of historic properties impacted by alternatives and the effect of the alternatives upon these resources
- Involve SHPO and other consulting parties in discussion regarding adverse effects on historic properties resulting in Memorandum of Agreement (MOA)
- Submit the MOA to the Advisory Council on Historic Preservation
- Implement provisions of the MOA

Context

The discussion within this section will primarily consist of information contained in the Phase I History/Architecture Survey Report.

The AA/EIS will discuss how the proposed project would affect cultural resources and structures within the Area of Potential Effect (APE), as well as proposed mitigation to address those effects.

Archaeological Resources

Methodology

The methods and standards used to assess below-ground impacts to archaeological resources within the study corridor will follow the standards promulgated in the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. The assessment

“The AA/EIS will describe impacts to farmlands.”

of archaeological resources will generally consist of the following:

- Identify known archaeological and burial sites within one-mile of the study area
- Compile background information relevant to the identified cultural properties
- Identify areas within the project vicinity that have already been subjected to archaeological survey
- Identify areas of high probability for archaeological sites (both prehistoric and historic) and other cultural resources
- Identify and document areas that have been disturbed by historic and modern land use practices

Context

The discussion within this section will primarily consist of information from the **Phase I Archaeological Literature and Site Reconnaissance Report**.

The AA/EIS will describe impacts to cultural, historic, and archaeological resources. Discussion will include impacts to existing in the Area of Potential Effects (APE), as well as any potential avoidance, minimization, and mitigation measures considered in the alternatives development and evaluation process.

The AA/EIS will include discussion of the Section 106 consultation with consulting parties, the SHPO, and the Federal Advisory Council on Historic Preservation (ACHP). The AA/EIS will also identify actions to be completed during the FEIS to comply with Section 106.

GEOLOGY & SOILS

Methodology

This section of the AA/EIS will identify and discuss the existing geology and soils within the project corridor. These resources will be identified through a desktop review of existing information such as Natural Resource Conservation Service (NRCS) soils surveys and publications from the Indiana Geologic Survey (IGS).

Context

The AA/EIS will generally describe potential impacts, if any, to existing soils and geologic features.

FARMLANDS

Guiding regulations: 7 CFR 658 (Farmland Protection Policy Act of 1984)

Methodology

As part of the AA/EIS development process, coordination with National Resources Conservation Service (NRCS) will be conducted to complete the farmland conversion impact rating form (NRCS-CPA-106) for each build alternative. The partially completed form will be sent to NRCS along with appropriate maps and graphics. The NRCS will determine whether the site of the proposed project contains prime, unique, statewide, or locally important farmland.

Once the preferred alternatives has been selected, the farmland conversion impact rating form will be completed and returned to NRCS to determine whether the proposed conversion is consistent with the Farmland Protection Policy Act of 1981 (FPPA).

Should the proposed project receive a point value less than 160 on the NRCS-CPA-106 form, the following statement will be included in the environmental document:

Farmland Conversion Impacts: As is required by the Farmland Protection Policy Act, the NRCS has been coordinated with and the Form NRCS-CPA-106 has been completed. Since this project received a total point value of (include point total), which is less than 160 points, this site will receive no further consideration for farmland protection. No other alternatives other than those already discussed in this document will be considered without a re-evaluation of the project's potential impacts upon farmland. This project will not have a significant impact to farmland.

For projects that result in a CPA-106 score of 160 or greater, additional coordination with the NRCS will be completed in an attempt to avoid and minimize the farmland impacts. This coordination with NRCS will be documented in this section of the AA/EIS.

Context

The AA/EIS will describe impacts to farmlands. Discussion will include impacts to existing farmland resources in the project, the project's direct and indirect impacts on farmland, and any potential mitigation and minimization measures considered relative to farmland.

Discussion will include acreages of farmland to be converted both directly and indirectly to non-farm uses, as well as total acreages required for each alternative.

WATER RESOURCES

This section will discuss potential impacts to water resources contained within the project study area. Guiding regulations are listed below for sub-sections covering hydrology, aquatic resources, water quality, wetlands, and floodplains.

The discussion within this section will primarily consist of information contained in the **Ecological Baseline Technical Report for AA/DEIS**.

The following outlines possible sub-sections within Section 3.9. These may vary based on extent of the water resources identified within the project study area.

Hydrology, Aquatic Resources, & Water Quality

Guiding regulations: 16 USC 661-667 (Fish and Wildlife Coordination Act); 33 USC 1251 (Federal Water Pollution Control Act); 327 IAC 1 through 18; 42 USC 300; 327 IAC 8.4-1

Methodology

The AA/EIS will identify and assess potential impacts to surface waters (e.g., rivers, streams, lakes, ponds, etc.). This will include an assessment of stream function/value. Perennial and intermittent streams will be identified using U.S.G.S maps, aerial photography, and field observations. Potential impacts to waterways, including intermittent and perennial streams, will be quantified to the extent practicable for each of the build alternatives.

Coordination will be conducted with the U.S. Environmental Protection Agency (USEPA) to determine whether the proposed project is located within a sole source aquifer. The AA/EIS will also identify whether the proposed project is located within a wellhead protection area (WHPA).

The discussion within this section will primarily consist of information contained in the **Ecological Baseline Technical Report for AA/DEIS**.

Context

The AA/EIS will identify the watershed basin(s) encompassing the project, the major surface and ground water features found within the project corridor, as well as the potential impacts, if any, to these resources. Any required permits will also be identified in the AA/EIS.

Wetlands

Guiding regulations: Clean Water Act of 1972 (33 USC 1251); Executive Order 11990 (Protection of Wetlands); US DOT Order 5660.1A (Preservation of the Nation's Wetlands); 33 CFR 328.3; 40 CFR 230.3; 327 IAC 2-1.5-4

Methodology

The AA/EIS will identify existing wetland resources using National Wetland Inventory map, U.S.G.S hydrological and topographical maps, U.S.D.A Soils Surveys, NRCS wetland maps, aerial photography, and field determinations conducted utilizing methodology outlined in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual. The AA/EIS will assess wetland functions using the Ohio Rapid Assessment Method (ORAM).

The AA/EIS will assess potential impacts to wetland resources and will summarize efforts to avoid and minimize impacts to existing wetland resources. Coordination with U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Indiana Department of Environmental Management and Indiana Department of Natural Resources will be conducted to reach consensus on feasible measures to permit and, if necessary, mitigate wetland losses will also be included in the AA/EIS.

The discussion within this section will primarily consist of information contained in the **Ecological Baseline Technical Report for AA/DEIS**.

Context

The AA/EIS will include a tabular summary of wetland acreages affected by each build alternative. The AA/EIS will also provide an overview of the resource and regulatory agency coordination regarding the potential impacts to identified wetland resources.

Floodplains

Guiding regulations: Executive Order 11988 (Floodplain Management), US Department of Transportation Order 5650.2 (Floodplain Management and Protection); 312 IAC 10

Methodology

Floodplains will be identified through a review of Federal Emergency Management Agency floodplain and floodway mapping.

The discussion within this section will primarily consist of information contained in the **Ecological Baseline Technical Report for AA/DEIS**.

Context

The AA/EIS will identify and discuss potential encroachments and corresponding impacts to 100-year floodplains that would result from the proposed project.

ECOSYSTEMS

Guiding regulations: 16 USC 661-667 (Fish and Wildlife Coordination Act); 16 USC 1604 (National Forest Management Act); Executive Order 13112 (Invasive Species); 16 USC 700-19 (Migratory Bird Treaty Act); IC 14-22-34 (Nongame and Endangered Species Conservation); IC 13-12-4 (Indiana Environmental Policy Act); IC 14-22-25-2 (Exotic Animal Species)

Methodology

The AA/EIS will identify and assess impacts to vegetation (flora) and wildlife (fauna) within the project corridor. The assessment will include reviewing existing studies, consulting with resource and regulatory agencies, and conducting field surveys.

Context

The discussion within this section will primarily consist of information contained in the **Ecological Baseline Technical Report for AA/DEIS**. The AA/EIS will contain a summary of the flora and fauna communities found within the project corridor, as well as the estimated impacts to these communities.

THREATENED & ENDANGERED SPECIES

Guiding regulations: 7 USC 136, 16 USC 1531, 50 CFR 402 (Endangered Species Act of 1973, as amended); 50 CFR 13 through 22 (Bald and Golden Eagle Protection Act); IC 14-22-34

Methodology

The AA/EIS will identify and discuss potential impacts to all currently listed threatened and endangered species, both federal and state, as well as those species proposed for listing, and candidate species. This assessment will include the following general work tasks:

- Identify “critical habitat” through research and field investigations;
- Identify known, recorded occurrences through research and field investigations;
- Conduct a concentrated field search of high probability areas for habitation;
- Evaluate potential impacts such as destruction or isolation of habitat, displacement, or degradation of food resources, etc.;
- Initiate consultant with U.S. Fish and Wildlife Service; and
- If necessary, identify opportunities for mitigation and a feasible mitigation plan for wildlife impacts.

Context

The discussion within this section will primarily consist of information contained in the **Ecological Baseline Technical Report for AA/DEIS**.

The AA/EIS will include a summary of the effect determination(s) for each identified threatened and endangered species in the project corridor. The AA/EIS will also discuss the coordination process with the U.S. Fish and Wildlife Service.

AIR QUALITY

Guiding regulations: 42 USC 7401, 42 USC 7506, and 40 CFR 50 through 96 (Clean Air Act); 40 CFR 93 (Final Transportation Conformity Rule)

Methodology

The AA/EIS will summarize the air quality analysis completed as part of the environmental study process. The majority of the project corridor is in a carbon monoxide (CO) and Ozone (O₃) maintenance area and particulate (PM_{2.5}) non-attainment area. Therefore, the air quality analysis will utilize the Indianapolis Metropolitan Planning Organization’s (MPO) traffic network for each alternative in conjunction with MOBILE6.2 (on-road vehicles) emission factor model or, if the final model has been released, EPA’s new MOVES



AREA BROWNFIELDS

(Motor Vehicle Emissions Simulator) model to develop pollutant burden analysis for CO and the precursors of O₃, HC, and NO_x.

The on-road mobile source burden analysis will be supplemented with rail emissions developed from EPA's NONROAD 2008 model (non-road engines, equipment, and vehicles) or if available EPA's NMIM2008 (National Mobile Inventory Model) for the various technologies. The results of the burden analysis will be compared to the emission budgets established for the study area. Air quality data for the study area will be tabulated from the Indiana Department of Environmental Management's (IDEM) monitoring network and EPA's Air Data website.

The air quality analysis will evaluate Existing Conditions, No-Build, TSM, selected build alternatives, and potential construction impacts.

Context

The discussion within this section will primarily consist of information contained in the **Noise, Vibration and Air Quality Technical Memorandum**.

The AA/EIS will introduce the National Ambient Air Quality Standards (NAAQS) and the concepts of attainment, non-attainment, and maintenance areas. The AA/EIS will present the results of the air quality analysis and will provide interpretation of the analytical results.

NOISE AND VIBRATION

Guiding regulations: 23 CFR 771; 49 CFR 222 and 229; 49 CFR 611

Methodology

The noise and vibration impact assessment will follow the guidelines presented in the FTA's Transit Noise and Vibration Impact Assessment Manual (FTA-VA-90-1003-06, May 2006). Sensitive receptors within the study area will be identified using the Screening Procedures for noise and vibration. Potential transit impacts on these sensitive receptors will be quantified using the General Assessment Procedures.

Noise

A noise measurement protocol will be prepared based upon the guidelines presented in Appendix D of the FTA Manual referred to in the previous paragraph. The protocol will consider population density, existing noise sources, potential routes and technologies, and will include 24-hour long-term measurements and a series of short term measurements.

Future noise levels will be developed using the General Transit Noise Assessment model developed in concert with the FTA Manual, the FRA Hornmodel, the CREATE Rail Noise Model and the FHWA's TNM@2.5. The CREATE Rail Noise Model is based upon the FRA's General Transit Noise Assessment model with added noise source data for freight trains. This model will also be used to project future noise levels adjacent to maintenance shops, transit centers and other support facilities. The results of the modeling will be compared to the FTA's Noise Impact Criteria to determine impacts and areas for potential noise mitigation.

Noise mitigation will address treating the source, altering the path and treating the receiver. Specific measures to be addressed will be a function of the routes and technologies. Supplemental Safety Measures and Alternative Safety Measures, as outlined in 49 CFR 222 and 229, Use of Locomotive Horns at Highway-Rail Grade Crossings: Final Rule, will be reviewed for potential applicability to reduce potential impacts from train horn/whistle noise through the creation of Quiet Zones. The concepts presented in the AA/DEIS will be the starting point for a cooperative effort by all agencies involved with the intent that the process outlined in 49

“The air quality analysis will evaluate Existing Conditions, No-Build, TSM, selected build alternatives and potential construction impacts.”

CFR 222 and 229 can be completed prior to project startup.

Vibration

The FTA Manual has developed criteria and procedures for assessing potential vibration impacts related to transit projects. The criteria are based on human response to building vibration and the potential for adverse effects on vibration-sensitive activities and processes. The vibration levels created by the various transit technologies are a function of vibratory energy created by the transit vehicle as function of speed, transit technology, track system, distance to the receiver, geological conditions, and the receiving structure. The technologies carried through the DEIS will establish the source vibration levels. Historical geological data will be used to determine vibration propagation efficiencies and field reviews will determine structure vibration factors.

The projected vibration levels will be compared against the FTA's vibration criteria to identify potential impacts. Vibration mitigation measures presented in the FTA Manual will be discussed as appropriate for the technology and projected impact. No vibration measurements will be completed as part of the analysis contained in the AA/DEIS. However, vibration impacts and mitigation measures identified as part of the AA/DEIS stage may require vibration measurements during preparation of the FEIS, preliminary engineering phase, or eventually during final design of the selected alternative.

The noise and vibration analysis will evaluate Existing Conditions, the No-Build, TSM, selected build alternatives and associated construction impacts.

Context

The discussion within this section will primarily consist of information contained in the **Noise, Vibration and Air Quality Technical Memorandum**.

The AA/EIS will present the results of the noise and vibration analyses and will provide interpretation of the analytical results.

The noise and vibration analysis will evaluate Existing Conditions, the No-Build, TSM, selected build alternatives and associated construction impacts.

“The projected vibration levels will be compared against the FTA’s vibration criteria to identify potential impacts.”

HAZARDOUS/REGULATED MATERIALS

Guiding regulations: 42 USC 9601 (CERCLA); 42 USC 6901 (RCRA)

Methodology

The majority of the proposed improvements are anticipated to be contained with the existing HHPA right-of-way. Therefore, the hazardous materials assessment will be confined to station areas, maintenance and layover facilities, and locations where additional right-of-way is required to construct the alternatives. The reconnaissance will consist of the following general work tasks:

- Check federal, state, and tribal regulatory agency databases within 1/8 mile of the project corridor
- Interview local officials regarding potential contamination
- Conduct limited visual survey (i.e., windshield survey) to investigate obvious environmental concerns

The following regulatory databases will be searched as part of the assessment process:

- Federal National Priority Listings (NPL);
- De-listed NPL sites;
- Comprehensive Environment Response Compensation and Liability Act

(CERCLA);

- CERCLA No Further Remedial Action Planned (NFRAP);
- Resource Conservation and Recovery Act (RCRA) corrective action;
- RCRA transport, stabilization, and disposal (TSD) facilities;
- RCRA generators and institutional and engineering control registries; and
- Emergency Response Notification System (ERNS).

The following state and tribal environmental databases will also be reviewed as part of the assessment:

- NPL and CERCLA equivalent sites;
- Solid waste disposal sites;
- Leaking underground storage tank (LUST) sites;
- Registered storage tank sites;
- Institutional and engineering control registries;
- Voluntary clean-up sites; and
- Brownfield sites.

Context

The discussion within this section will primarily consist of information contained in the **Hazardous Materials Screening Technical Report**.

The AA/EIS will contain discussion of the hazardous materials found within the proposed right-of-way for the build alternatives.

The AA/EIS will identify Phase I and II Hazardous Materials Assessments (HMA) for completion during development of the Final Environmental Impact Statement. These recommendations will be based upon the results of environmental regulatory database queries.

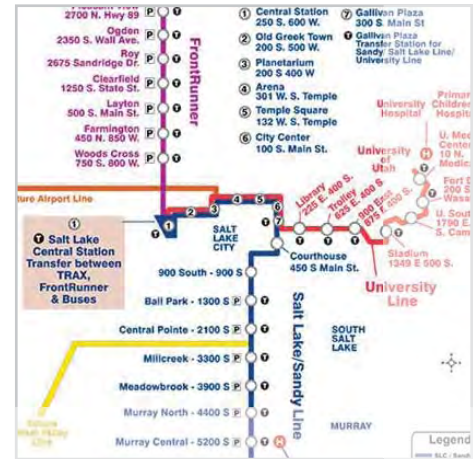


COLLEGE AVE BRIDGE LOOKING SOUTHBOUND

Chapter

4.0 Transportation System Impacts

Guiding regulations: 40 CFR 1502.16; 49 CFR 611; 49 USC 5309 (FTA New Starts Regulations)



This chapter will provide an analysis of the transportation impacts of the proposed project alternatives as described in Chapter 2 of this document. Evaluation of these alternatives will be based upon projected ridership, transportation network capacity, transportation system performance measures, traffic impacts to the roadway network, and anticipated construction impacts on these facilities.

The discussion within this chapter will primarily consist of adopted transportation plans, as well as information contained in the:

- Final Definition of Alternatives Report
- Alternatives Evaluation Summary Report
- Cost Estimating Methodology Technical Memorandum
- Cost Estimate Technical Report
- Final Operations Plan
- Final Bus System Plan

The following provides an outline and summary of key methodologies to be used as part of the Transportation System Impacts chapter of the AA/EIS.

EXISTING TRANSPORTATION NETWORK

The AA/EIS will provide an overview of the existing and planned transportation system in the vicinity of the project study area. This will include the roadway, transit, and freight networks, as well as the aviation facilities within the study area.

ROADWAY OPERATIONS

Guiding regulations: 49 CFR 611 and 49 USC 5309 (FTA New Starts Regulations)

Methodology

The AA/EIS will identify and assess potential impacts to existing and planned roadway operations using systems-level performance measures such as Vehicle-Miles of Travel (VMT), Vehicle-Hours of Travel (VHT) and Volume to Capacity Ratios (VOC). This information will be prepared using a validated travel demand model that has been developed by the Indianapolis MPO and is acceptable by the Federal Transit Administration (FTA).

The impacts of street running transit segments on other adjacent travel modes will be described, including loss of capacity for other modes, restrictions on access to adjacent properties, and increased crash exposure. This will include the following work tasks:

- Identify impacted roadway segments;
- Identify extent of impacts to lane capacity and access from aerial photography and field investigation;
- Identify typical signal treatment of transit vehicles and impacts on signal operation; and
- Conduct capacity analyses for typical sections and intersections on impacts roadway segments using actual or modeled traffic volume data.

The AA/EIS will evaluate grade crossing safety and, if necessary, will identify options for enhanced protection or grade separation of crossings. The will include the following work tasks:

- Identify or estimate traffic volumes at grade crossings under No-Build and Build conditions;
- Identify number, estimated speed, and length of transit vehicle under each alternative;
- Use FHWA Rail-Grade Crossing Handbook or similar method to recommend treatment for each crossing;
- Estimate vehicle delays at grade crossings due to transit vehicles
- Identify and analyze locations where vehicles queued at grade crossings could cause safety or operational problems; and
- Recommend mitigation measures for potential safety or operational problems caused by grade crossings.

The AA/EIS will assess transportation impacts at proposed station areas to determine how each proposed station can be accessed by all travel modes. This will include the following work tasks:

- Estimate AM/PM peak hour entering and exiting traffic under each alternative based on travel demand model outputs;
- Review possible locations/configurations for potential stations and identify tentative locations for ingress/egress;
- Identify anticipated traffic volumes on adjacent roads at each potential station location area using available information; and
- Conduct a preliminary assessment of required traffic control and road improvements for station access from adjacent roads, including a consideration of impacts to adjacent intersections.



REGIONAL FREIGHT VOLUME

“The AA/EIS will assess transportation impacts at proposed station areas to determine how each can be accessed by all travel modes.”

“The AA/EIS will discuss the coordination process with CSX and the possibility of accommodating passenger service and freight operations on the NE Corridor.”



CSX TRAIN

Context

The discussion within this section will primarily consist of information contained in the **Traffic Analysis Methodology Technical Memorandum** and the **Traffic Analysis Report**.

The AA/EIS will summarize the results of the capacity analyses, grade crossing safety evaluation, and station area roadway network assessment.

TRANSIT OPERATIONS

Guiding regulations: 49 CFR 611 and 49 USC 5309 (FTA New Starts Regulations)

Methodology

The AA/EIS will identify and assess potential impacts to existing and planned transit operations resulting from the proposed project. This will include a review of the final Comprehensive Operations Analysis (COA) that is currently under development by IndyGo to ensure complementary bus service is provided to the proposed Northeast Corridor project.

Context

The discussion within this section will primarily consist of information contained in the **Final Operations Plan** and **Final Bus System Plan**.

The AA/EIS will identify which bus routes, if any, would be modified or eliminated to provide complementary service as part of an improved transit solution with the Northeast Corridor project.

FREIGHT OPERATIONS

Guiding regulations: 64 FR 28545 (FRA Environmental Procedures)

Methodology

The AA/EIS will discuss the coordination process with CSX and the corresponding conclusions regarding feasible options to accommodate passenger service and freight operations in the Northeast Corridor. Currently, there are no freight operations north of 10th Street in the Northeast Corridor. Consequently, this assessment will focus on the portion of the corridor south of 10th Street.

Context

The discussion within this section will be provided from the **Final Operations Plan**.

The AA/EIS will identify and assess potential impacts to existing and planned freight rail operations resulting from the proposed project. This will include an overall assessment regarding shared-use issues such as potential operational costs and service impacts in relation to the CSX line near downtown Indianapolis.

PARKING IMPACTS

Guiding regulations: 49 CFR 611 and 49 USC 5309 (FTA New Starts Regulations)

Methodology

The AA/EIS will identify existing parking facilities and assess potential impacts to parking resulting from the proposed project. This assessment will be conducted using aerial photography and field investigation. This evaluation will be qualitative in nature and will include consideration of street-running transit options, as well as potential impacts to parking garages.

Context

The discussion within this section will primarily consist of information contained in the **Traffic Analysis Methodology Technical Memorandum** and the **Traffic Analysis Report**.

The AA/EIS will contain a summary of impacts, if any, to existing parking resulting from the proposed project. Opportunities for avoidance and minimization of impacts will also be discussed.

PEDESTRIAN/BICYCLE ACCESS

Methodology

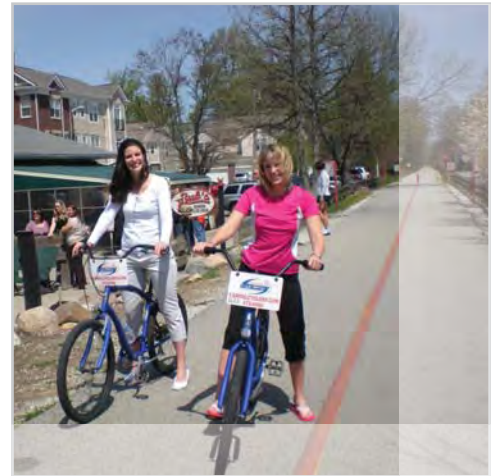
The AA/EIS will identify and assess interactions between the proposed project and the existing and planned pedestrian/bicycle network. This will include the following work tasks:

- Review existing aerial photography and conduct field investigations to identify and inventory existing pedestrian and bicycle facilities in the area of each potential transit station location;
- Review adopted transportation plans to identify planned pedestrian and bicycle facilities at each potential station location; and
- Identify sidewalk and/or bicycle facility infrastructure required at each potential station location to provide connectivity to the surrounding network.

Context

The discussion within this section will primarily consist of information contained in the **Traffic Analysis Methodology Technical Memorandum** and the **Traffic Analysis Report**.

The AA/EIS will summarize impacts, if any, to the existing pedestrian and bicycle networks within the Northeast Corridor. If impacts are anticipated, potential mitigation options will be identified and evaluated in the AA/EIS. The AA/EIS will also give consideration to planned pedestrian and bicycle facilities so as to avoid precluding their implementation in the future.



MONON TRAIL

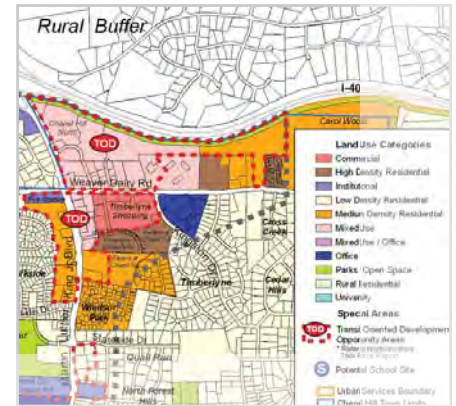


CULTURAL TRAIL

Chapter

5.0 Indirect & Cumulative Impacts

Guiding regulations: 40 CFR 1508.7 and 1508.8



The AA/EIS will include a qualitative indirect and cumulative impacts analysis. Indirect impacts are environmental impacts caused by the proposed action that occur later in time or are farther removed in distance, but are still considered reasonably foreseeable (40 CFR 1508.8 (b)). Cumulative effects are defined as the impact on the environment that results from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions regardless of which agency (federal or non-federal; public or private) or person undertakes such other actions (40 CFR 1508.7).

The indirect and cumulative effects analysis will include the following general work tasks:

- Define the study area
- Identify the study area's directions and goals
- Inventory notable features
- Identify impact-causing activities
- Identify and analyze indirect and cumulative impacts (positive and negative)
- Assess the consequences; and
- Develop appropriate mitigation and enhancement strategies

The AA/EIS will introduce the concepts of indirect and cumulative impacts, establish the spatial and temporal boundaries of the indirect and cumulative impacts assessment, identify existing conditions and development trends, and provide an analysis of indirect and cumulative impacts that could occur with implementation of the Northeast Corridor project in combination with other past, present, and reasonably foreseeable future actions.

The AA/EIS will also identify and establish the spatial and temporal boundaries of the indirect and cumulative impacts assessment, existing conditions and development trends, anticipated actions, and conclusions of the assessment.

This page intentionally left blank.

Chapter

6.0 Comparison of Alternatives/ Identification of LPA

Guiding regulations: 40 CFR 1502.14; 40 CFR 1502.23; 49 CFR 611 and 49 USC 5309 (FTA New Starts Regulations)



This chapter of the AA/EIS will present the results of the evaluation conducted for each alternative identified in Chapter 2. The purpose of this evaluation process will be to compile the qualitative and quantitative information contained in previous chapters so that anticipated benefits, costs, and environmental consequences can be evaluated against the stated goals of the proposed project contained in Chapter 1. This chapter will also discuss how well each alternative is projected to meet the Project's Purpose and Need. The intent of this comparative analysis is to facilitate identification of a Locally Preferred Alternative (LPA).

This chapter will use measures of effectiveness that reflect local goals for the Project, as well as Federal Transit Administration (FTA) criteria for evaluating projects for proposed funding under the Section 5309 New Starts program.

The following provides an outline and summary of key methodologies to be used as part of the Evaluation of Alternatives chapter of the AA/EIS.

EFFECTIVENESS IN MEETING PURPOSE & NEED

The AA/EIS will provide a comparative evaluation of each alternative's ability to meet the stated Purpose and Need using identified measures of effectiveness.

EVALUATION RELATIVE TO PROJECT GOALS & OBJECTIVES

The AA/EIS will provide a comparative evaluation of each alternative's ability to meet the stated project goals and objectives using identified measures of effectiveness.

TRANSPORTATION & ENVIRONMENTAL CONSEQUENCES

The AA/EIS will discuss the effect of the "Build Alternatives" on the transportation system and the environment. The anticipated impacts will be summarized in an impact matrix to allow for comparison between the proposed alternatives. The impact matrix will be populated using information contained in Chapters 3 and 4.

COST-EFFECTIVENESS

Guiding regulations: 40 CFR 1502.23; 49 CFR 611 and 49 USC 5309 (FTA New Starts Regulations)

The AA/EIS will contain a summary of the relative benefits that are expected for the proposed Build alternative using FTA's SUMMIT software program. The primary purpose of this analysis will be to provide a comparative summary of the anticipated costs and user benefits for each alternative considered in the AA/EIS. This information will be presented in the form of a cost effectiveness index that summarizes the relative "worth" of a proposed transportation investment in a single metric. This measure will be used by the Federal Transit Administration (FTA) to compare the proposed project with other projects around the nation that are seeking Federal New Starts program funding.

User benefits will be summarized by purpose, time of day, and market segment. These results will be shown on appropriate mapping to help identify the relative attractiveness of the alternatives.

"The AA/EIS will provide a comparative evaluation of each alternative's ability to meet the stated Purpose and Need using identified measures of effectiveness."

FINANCIAL FEASIBILITY

Guiding regulations: 40 CFR 1502.23; 49 CFR 611 and 49 USC 5309 (FTA New Starts Regulations)

The AA/EIS will present a project financing strategy that will adhere to FTA requirements for a New Starts Request to Initiate Preliminary Engineering (RIPE). The financial plan will include the following basic components:

- Capital cost estimates for each alternative
- Operating and maintenance cost estimates
- Projected farebox revenues and other income projections
- Evaluation of revenue stream required for capital costs
- Evaluation of revenue stream required for operating costs
- Evaluation of potential funding sources from federal, state, and local governments

The discussion within this section will primarily consist of information contained in the **Financial Analysis Technical Memorandum**.

“The AA/EIS will explain that the transportation decision-making process under NEPA is not concluded until the Record of Decision, if appropriate, is issued by the FTA.”

LOCALLY PREFERRED ALTERNATIVE (LPA)

Using information presented in previous chapters and sections, the AA/EIS will identify the Locally Preferred Alternative (LPA). The AA/EIS will explain that identification of the LPA as part of the AA/EIS does not indicate the end of the planning and decision-making process. The AA/EIS will indicate that a Final Environmental Impact Statement (FEIS) will be prepared to address any outstanding issues, as well as to respond to questions and comments received from interested parties during the AA/EIS review process and the public hearing.

The AA/EIS will also explain that the transportation decision-making process under NEPA is not concluded until the Record of Decision (ROD), if appropriate, is issued by FTA.

This page intentionally left blank.

Chapter

7.0 Public/Agency Coordination

Guiding regulations: 23 CFR 771.111; Executive Order 13166 (Improving Access to Services for Persons with Limited English Proficiency); Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations); Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU); 40 CFR 1506.2 and 1506.6

This chapter will identify the public outreach and agency coordination efforts undertaken during the development of the AA/EIS. Specific methods to identify Limited English Proficiency (LEP) persons will be discussed, as well as corresponding methodologies to improve access to these persons (if necessary). Additional discussion will be provided regarding methods to engage low-income, minority, and traditionally underserved populations.

The following provides an outline and summary of key methodologies to be used as part of the Public and Agency Coordination chapter of the AA/EIS.



PUBLIC INVOLVEMENT PROGRAM

The AA/EIS will discuss the purpose of the public involvement program and the techniques employed to develop and implement the program. This will include introduction of Executive Order 13166, as well as the four-factor analysis that will be used to assess language needs and to decide what steps should be taken to provide meaningful access for LEP persons. The four-factor analysis will include the following parameters:

1. The number or proportion of LEP persons eligible to be served or likely to be encountered by a program, activity, or service of the recipient or grantee.
2. The frequency with which LEP individuals come in contact with the program.
3. The nature and importance of the program, activity, or service provided by the recipient to people's lives.
4. The resources available to the recipient and costs.

The AA/EIS will identify the criteria or “thresholds” that will be used when considering translation of vital project documents.

The AA/EIS will discuss Executive Order 12898 and its role in the development of the public involvement program for the Northeast Corridor. The AA/EIS will discuss the methods used to ensure engagement of low-income, minority and traditionally underserved populations as part of the planning and transportation decision-making process.

This section will also identify the key audiences and stakeholders that were considered in the development of the public involvement plan. The AA/EIS will identify the specific tools, such as newsletters, fact sheets, Frequently Asked Questions (FAQ) hand-outs, project website, etc. When appropriate and applicable, project-specific examples of these public involvement tools will be provided in an Appendix of the AA/EIS.

OUTREACH DURING AA/EIS SCOPING PROCESS

The AA/EIS will explain the purpose of the formal scoping process and indicate that all comments received from the Notice of Intent (NOI), issued on March 9, 2010, public scoping meetings held on March 17, 2010 and March 24, 2010, and the resource agency scoping meeting held on April 7, 2010 were incorporated into the development of the AA/EIS.

The AA/EIS will discuss the techniques for soliciting participation from both the public and the resource and regulatory agencies during the scoping process. This will include discussion of the project initiation package and scoping information booklet. The AA/EIS will provide a general summary of the public and agency scoping meetings, including number of attendees as well as number and type of comments received.

OUTREACH DURING AA/EIS PROCESS

The AA/EIS will discuss the public outreach activities undertaken as part of the development of the Alternatives Analysis/Environmental Impact Statement.

The following are possible sub-sections for this particular AA/EIS section:

Stakeholder meetings

The AA/EIS will summarize stakeholder meetings conducted during development of the AA/EIS. The purpose of the stakeholder meetings will be to provide information on the conceptual alternatives, alternative evaluation process, and anticipated benefits/impacts of proposed alternatives.



PUBLIC SCOPING MEETING #1: MEET & GREET

“The AA/EIS will discuss the public outreach activities undertaken as part of the AA/EIS process.”



PUBLIC SCOPING MEETING #1: AUDIENCE



PUBLIC SCOPING MEETING #1: PUBLIC INPUT

Stakeholders may include, but may not be limited to, the following entities:

- Marion County
- Hamilton County
- CSX Railroad
- Other local organizations and interest groups such as business owners, elected officials, schools, churches, universities, community organizations, homeowner's/neighborhood associations, economic development groups, and metropolitan airport authority.

Citizen workshops

The AA/EIS will summarize the citizen workshops conducted during the development of the AA/EIS. A minimum of four workshops are planned as part of the AA/EIS process. Two workshops will be held in Marion County and two workshops will be held in Hamilton County. The workshops will be conducted as informal open houses. The Project Management Team and its consultant(s) will be available to answer questions from the public during the workshop. Workshop materials will include informational handouts regarding the proposed project, appropriate mapping and exhibits to communicate the project status and alternatives under consideration, and comment forms.

The AA/EIS will include a summary of the citizen workshops, including number of attendees as well as number and type of comments received.

Project mailing list

The AA/EIS will describe the development of the project mailing list. Initially, the mailing list will be populated using tax records. As the study progresses, the project mailing list will be updated and expanded to include those with an interest in project. This interest will be identified through several methods, including stakeholder meetings, citizen workshops, and project website inquiries.

Project website

The AA/EIS will describe the project website maintained by the Project Management Team (www.indyconnect.org) and used throughout the development of the AA/EIS to ensure availability of project-related information to the public.

Newsletters

The AA/EIS will describe any newsletters associated with the project. In general, the newsletters will be used to provide schedule updates, summarize work progress and findings of analyses, and to keep the public generally apprised of the project.

AGENCY COORDINATION

Guiding regulations: 40 CFR 1503.2

The AA/EIS will identify and summarize additional federal, state, local agencies, and interested parties that were coordinated with during development of the AA/EIS. The following are possible sub-sections for this particular AA/EIS section:

Additional Agency Coordination

The AA/EIS will describe the resource and regulatory agency coordination and communication that have taken place throughout the development of the AA/EIS. This will include a brief summary of agency coordination meetings and correspondence from the AA/EIS process.

Section 106 and Consulting Party Coordination

The AA/EIS will summarize the coordination and consultation with the State Historic Preservation Officer (SHPO), the Advisory Council on Historic

“The AA/EIS will identify and summarize additional federal, state, local agencies, and interested parties that were coordinated with during the development of the AA/EIS.”

Preservation (ACHP), and other consulting parties. The AA/EIS will discuss the process for identifying and engaging consulting parties to participate in the Section 106 review process.

The AA/EIS will include a summary of the coordination activities associated with establishing of the Area of Potential Effects (APE), Section 106 effects determinations, and development of the Memorandum of Agreement (MOA), if needed.

SUMMARY OF COMMENTS & RESPONSES

Guiding regulations: 40 CFR 1503.4

The AA/EIS will describe the public hearing held as part of the NEPA process to disclose the potential effects of the alternatives under consideration and to provide an opportunity to comment on the AA/EIS. The timeline of the public hearing will be included in the AA/EIS. The general format of the public hearing will also be discussed, including the process for submission of comments regarding the proposed project at the public hearing.

The AA/EIS will state that responses to all comments (public and agency) received will be prepared and included in the Final Environmental Impact Statement. The Final EIS will identify how comments received influenced the project outcome.

AA/DEIS DISTRIBUTION LIST

Guiding regulations: 40 CFR 1502.19

The AA/EIS will identify the federal, state, local agencies, and interested parties that will receive a complete copy of the AA/EIS.

Chapter

8.0 Section 4(f) & 6(f) Evaluation

Guiding regulations: 23 CFR 771.135 and 774; 49 USC 303; 49 USC 1653; 16 USC 460; 36 CFR 59.1; 36 CFR 800



If needed, the AA/EIS will include a Section 4(f) and Section 6(f) Evaluation. The Section 4(f) and Section 6(f) evaluation will include the following general work tasks:

- Describe proposed action including purpose and need;
- Identify and describe Section 4(f) resources using tax records, aerial photography, existing databases (NPS LWCF database), IDNR – Division of Outdoor Recreation records, and field investigations;
- Identify and evaluate impacts and use of Section 4(f) resources;
- Identify and evaluate avoidance alternatives;
- Discuss all possible measures to minimize harm to Section 4(f) resource;
- Coordinate with agency having jurisdiction over the affected resource (Section 6(f) would also include the State LWCF Administrator); and
- Discuss results of coordination efforts.

The information contained within this is chapter will provide documentation necessary to support determinations required to comply with provisions of Section 4(f) of the U.S. Department of Transportation Act of 1966 (commonly referred to as Section 4(f)) and Section 6(f) of the Land and Water Conservation Fund (LWCF) Act.

The following provides a proposed outline and additional context of the Section 4(f) and 6(f) Evaluation chapter of the AA/EIS.

BACKGROUND & REGULATORY CONTEXT

Section 4(f) Overview and “Use” Definitions

The AA/EIS will define Section 4(f) “use” definitions, including Direct Use, Temporary Use, Constructive Use, and De Minimis Impacts.

Section 6(f) Overview

The AA/EIS will provide an overview of Section 6(f) of the Land and Water Conservation Fund Act, as well as the intent of the program. This section will note that the program is administered by the National Park Service, U.S. Department of the Interior.

DESCRIPTION OF THE PROPOSED PROJECT

Using information presented in Chapters 1 and 2, this section will provide a brief overview of the proposed project, including its purpose and need.

DESCRIPTION OF SECTION 4(F) PROPERTIES

The AA/EIS will analyze all archaeological and historic sites within the Section 106 area of potential effects (APE) and all parks, recreational facilities, and wildlife refuges within approximately one-half mile of any of the project alternatives to determine whether they are protected Section 4(f) resources. If the project would use a Section 4(f) resource, then a Section 4(f) Evaluation will be included in the AA/EIS.

This section will also note the current status of Section 106 evaluation and consultation process.

Determination of Section 4(f) Use

The AA/EIS will present a matrix summarizing the Section 4(f) use determinations and the Section 106 affects findings for any historic properties.

Avoidance Alternatives

This section will describe the alternative or options developed to avoid impacts to the Section 4(f) resources identified for which there was not a de minimis finding. The AA/EIS will define the terms reasonable and prudent in the context of avoidance alternatives.

Measures to Minimize Harm

The AA/EIS will identify and discuss potential measures to minimize harm, including design modifications that would lessen the impact to Section 4(f) resources and mitigation measures that compensate for impacts. These measures would be determined in coordination with the officials with jurisdiction over the resources.

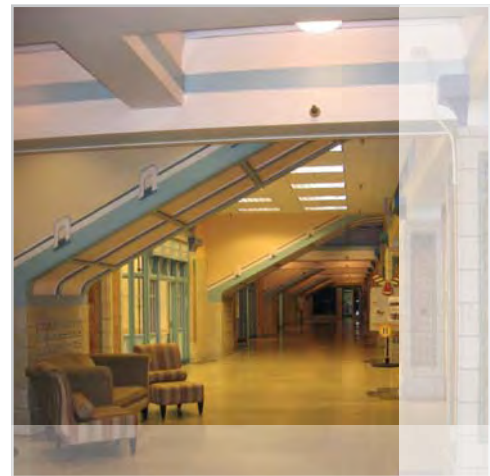
DESCRIPTION OF SECTION 6(F) PROPERTIES

The AA/EIS will identify park and recreational properties subject to protection under Section 6(f) of the Land and Water Conservation Fund Act. If no Section 6(f) properties are found within the study area, the AA/EIS will contain a statement to this effect and will conclude that a Section 6(f) evaluation is not required.

Should impacts to Section 6(f) resources be anticipated, the AA/EIS will include the following sub-sections to discuss potential impacts to this resource:

Impacts to Section 6(f) Resources

The AA/EIS will describe impacts to any Section 6(f) resources resulting from the proposed alternatives. This discussion will include consideration of the ability of the remaining Section 6(f) resource to function as a recreational facility.



UNION STATION



UNION STATION



NATIONAL MOTOR VEHICLE

Section 6(f) Conversion Requirements

Should a Section 6(f) resource be identified for conversion to a transportation use, the proposed project's status and response to the conversion requirements specified at 36 CFR 59.3 will be discussed in this section. This discussion will include the following points:

- Alternatives Evaluation
- Appraisals of Fair Market Value
- Identification and Evaluation of Replacement Property
- Eligibility Determination
- Partial Impact Consideration
- Agency Coordination/Section 4(f)
- Environmental Evaluation
- Statewide Intergovernmental Review
- Statewide Outdoor Recreation Plan Consistency

COORDINATION

The AA/EIS will include summaries of the coordination with officials having jurisdiction over the Section 4(f) resources, as well as the National Park Service for Section 6(f) resources.

This page intentionally left blank.



REFERENCES

Guiding regulations: 40 CFR 1502.21

This page intentionally left blank.



LIST OF PREPARERS

Guiding regulations: 40 CFR 1502.10; 40 CFR 1502.17

This page intentionally left blank.



LIST OF RECIPIENTS

Guiding regulations: 40 CFR 1502.10; 40 CFR 1502.19; 40 CFR 1506.9; 23 CFR 771.123

This page intentionally left blank.



INDEX

Guiding regulations: 40 CFR 1502.10; 40 CFR 1502.10

This page intentionally left blank.



APPENDIX A

Guiding regulations: 40 CFR 1502.18

This page intentionally left blank.



HNTB