


# I-69 Evansville to Indianapolis, Indiana Project Section 6: Martinsville to Indianapolis, Indiana

## Tier 2

### Final Environmental Impact Statement and Section 4(f) Evaluation

Submitted Pursuant to 42 U.S.C. 4332(2)(c), 9 U.S.C. 303 (c)

U.S. Department of Transportation (USDOT)  
Federal Highway Administration (FHWA)  
And  
Indiana Department of Transportation (INDOT)

  
\_\_\_\_\_  
Joe McGuinness  
Commissioner  
Indiana Department of Transportation

  
\_\_\_\_\_  
Mayela Sosa  
Division Administrator  
Federal Highway Administration  
Indiana Division

February 1, 2018

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

Laura Hilden  
Director, Environmental Services  
Indiana Department of Transportation  
100 North Senate Avenue, Room N642  
Indianapolis, Indiana 46204  
317-232-5018

Michelle Allen, Indiana Division  
Federal Highway Administration  
575 North Pennsylvania Street, Room 254  
Indianapolis, Indiana 46204  
317-226-7344

This is a Tier 2 Final Environmental Impact Statement (EIS) for Section 6 of the I-69 Evansville to Indianapolis project. Section 6 begins on SR 37 at Indian Creek near SR 39 in Martinsville and follows existing SR 37 for approximately 26 miles to I-465 in Indianapolis. The project upgrades existing SR 37 to interstate standards and travels through Morgan, Johnson, and Marion Counties. Improvements to I-465 will also be made from Mann Road to U.S. 31 in Marion County. Alternatives have been analyzed and evaluated for environmental, social, and economic benefits and impacts. Access along the interstate will be provided through the use of interchanges, grade separations, and a network of local service roads. The preferred alternative is the Refined Preferred Alternative.



# **FINAL ENVIRONMENTAL IMPACT STATEMENT**

**I-69 Section 6**

**Martinsville to Indianapolis**

February 2018



FINAL ENVIRONMENTAL IMPACT STATEMENT TABLE OF CONTENTS

Summary

SUMMARY ..... 1
S.1 INTRODUCTION ..... 4
S.2 TIER 1 NEPA STUDY ..... 5
S.3 PROJECT PURPOSE AND NEED..... 7
S.3.1 Tier 1 Purpose and Need for I-69 from Evansville to Indianapolis ..... 7
S.3.2 Statement of I-69 Section 6 Tier 2 Purpose and Need ..... 8
S.4 ALTERNATIVES DEFINITION ..... 9
S.4.1 Project Scoping..... 9
S.4.2 Conceptual Alternatives ..... 11
S.4.3 Preliminary Alternatives ..... 12
S.4.4 Alternatives Considered in the DEIS..... 14
S.4.4.1 I-69 Mainline ..... 15
S.4.4.2 Interchanges and Local Service Roads ..... 18
S.4.4.3 Components of Alternatives C1, C2, C3, and C4 ..... 18
S.4.5 Evaluation of Alternatives C1 through C4 ..... 23
S.4.5.1 Evaluation of Mainline Options M1 through M3 ..... 23
S.4.5.2 Interchanges and Local Service Roads, Alternatives C1 – C4 ..... 25
S.4.5.3 Section 4(f) Evaluation ..... 44
S.4.5.4 Overall Impacts and Costs of Alternatives C1 through C4 (DEIS) ..... 45
S.4.5.5 DEIS Preferred Alternative ..... 48
S.5 REFINED PREFERRED ALTERNATIVE (RPA) DEFINITION AND EVALUATION ..... 49
S.5.1 Definition and Impacts of the RPA ..... 49
S.5.1.1 Subsection 1: Indian Creek to SR 39..... 50
S.5.1.2 Subsection 2 - SR 39 to Morgan Street ..... 51
S.5.1.3 Subsection 3: Morgan Street to Henderson Ford Road..... 53
S.5.1.4 Subsection 4: Henderson Ford Road to Banta Road..... 54
S.5.1.5 Subsection 5: Banta Road to Fairview Road ..... 55
S.5.1.6 Subsection 6: Fairview Road to Wicker Road..... 58
S.5.1.7 Subsection 7: Wicker Road to Banta Road (Marion Co)..... 58
S.5.1.8 Subsection 8: Banta Road to and including I-465..... 60
S.5.2 Overall RPA Costs and Impacts Compared with Alternative C4 ..... 61
S.5.3 Title VI / Environmental Justice Review ..... 65
S.5.4 RPA Wetland and Stream Impact Summary ..... 66
S.5.5 RPA Costs and Impacts Compared with Tier 1 ..... 67
S.5.5.1 Project Cost ..... 68
S.5.5.2 Right of Way and Relocations ..... 68
S.5.5.3 Farmland and Forest ..... 69



S.5.5.4 Wetlands and Floodplains ..... 69

**S.6 OTHER MAJOR GOVERNMENTAL ACTIONS IN STUDY AREA ..... 69**

**S.7 MAJOR ISSUES RAISED BY AGENCIES AND THE PUBLIC ..... 70**

**S.8 MITIGATION..... 71**

**S.9 REGULATORY ACTIONS AND APPROVALS ASSOCIATED WITH THIS PROJECT ..... 72**

S.9.1 Section 106 Consultation ..... 74

S.9.2 Section 7 Consultation ..... 75

S.9.3 Section 4(f) Resources – Individual Section 4(f) Evaluation ..... 76

**SUMMARY LIST OF TABLES**

Table S-1: I-69 Section 6 Goals and Performance Measures ..... 10

Table S-2: I-69 Mainline Lanes assumed in the DEIS ..... 15

Table S-3: Dimensions of Mainline Options ..... 16

Table S-4: Summary of Alternatives C1 through C4 ..... 19

Table S-5: Right of Way, Relocations, and Impacts of Mainline Options ..... 24

Table S-6: Environmental Impacts, Subsection 1 - Indian Creek to SR 39 ..... 27

Table S-7: Environmental Impacts, Subsection 2 - SR 39 to Morgan St/Twin Branch Rd..... 30

Table S-8: Environmental Impacts, Subsection 3 - Morgan St to Henderson Ford Rd..... 32

Table S-9: Environmental Impacts, Subsection 4 - Henderson Ford Rd to Banta Rd ..... 34

Table S-10: Environmental Impacts, Subsection 5 - Banta Road to Fairview Road..... 37

Table S-11: Environmental Impacts, Subsection 6 - Fairview Rd to Wicker Rd ..... 40

Table S-12: Environmental Impacts, Subsection 7 - Wicker Road to Banta Road ..... 41

Table S-13: Environmental Impacts, Subsection 8 - Banta Road to I-465 ..... 43

Table S-14: Total End-to-End Impacts by Alternative1 ..... 46

Table S-15: Estimated Project Cost by Cost Item (\$ Millions)\* for Alternatives (DEIS) ..... 47

Table S-16: Estimated Project Cost by Subsection (\$ Millions)\* for Alternatives (DEIS)..... 48

Table S-17: Environmental Impacts, Subsection 1 - Indian Creek to SR 39 ..... 50

Table S-18: Environmental Impacts, Subsection 2 - SR 39 to Morgan Street..... 52

Table S-19: Environmental Impacts, Subsection 3 - Morgan St to Henderson Ford Rd..... 53

Table S-20: Environmental Impacts, Subsection 4 - Henderson Ford Rd to Banta Rd ..... 55

Table S-21: Environmental Impacts, Subsection 5 - Banta Rd to Fairview Rd..... 57

Table S-22: Environmental Impacts, Subsection 6 - Fairview Road to Wicker Road ..... 58

Table S-23: Environmental Impacts, Subsection 7 - Wicker Road to Banta Road ..... 59

Table S-24: Environmental Impacts, Subsection 8 - Banta Road to I-465 ..... 61

Table S-25: Estimated Cost by Cost Item (\$ Millions) for Alternative C4 and the RPA ..... 62

Table S-26: Estimated Cost by Subsection (\$ Millions) for Alternative C4 and the RPA..... 62

Table S-27: Total End-to-End Impacts of Alternative C4 and the RPA ..... 63

Table S-28: Comparison of I-69 Section 6 Tier 1 and RPA Impacts ..... 67

Table S-29: Major Mitigation Initiatives ..... 72

**SUMMARY LIST OF FIGURES**

Figure S 1: I-69 Section 6 Four-County Study Area ..... 2

Figure S-2: Preferred Alternative 3C and Tier 2 Sections ..... 6

Figure S-3: Initial Conceptual Alternatives ..... 11

Figure S-4: Preliminary Alternatives..... 13

Figure S-5: Elevated Freeway with Underpass ..... 17

Figure S-6: Decision Area 1-1 ..... 26



Figure S-7: Decision Area 2-2 .....28

Figure S-8: Decision Area 2-3 .....28

Figure S-9: Decision Area 2-4 .....29

Figure S-10: Kristi Road Intersection .....29

Figure S-11: Decision Area 3-1 at Myra Lane .....31

Figure S-12: Decision Area 3-2 .....32

Figure S-13: Decision Area 4-2 Configuration .....33

Figure S-14: Decision Area 5-2 at Stones Crossing Road .....35

Figure S-15: Decision Area 5-2 Configuration .....35

Figure S-16: Decision Area 5-4 Configuration .....36

Figure S-17: Decision Area 6-1 Configuration .....38

Figure S-18: Decision Area 6-2 Configuration .....39

Figure S-19: Decision Area 7-1, Options C4A and C4B at Southport Road .....41

Figure S-20: Decision Area 8-1, I-69/I-465 Interchange .....43

Figure S-21: The RPA in Martinsville .....51

Figure S-22: The RPA from SR 144 to Stones Crossing Road .....56

Figure S-23: The RPA at Southport Road .....60

Chapter 1

**CHAPTER 1 – BACKGROUND.....1-1**

1.1 Introduction .....1-1

1.2 Tier 1 NEPA Study.....1-2

    1.2.1 Tier 1 DEIS .....1-6

    1.2.2 Tier 1 FEIS .....1-8

    1.2.3 Tier 1 ROD .....1-11

    1.2.4 Tier 1 Reevaluation .....1-12

    1.2.5 Tier 1 Legal Challenges.....1-13

1.3 Tier 2 NEPA Studies .....1-13

    1.3.1 Section 6 Notice of Intent to Prepare EIS .....1-14

    1.3.2 Section 6 Alternatives Screening Process.....1-14

1.4 Project Location and Description .....1-16

    1.4.1 Geographic Setting .....1-16

    1.4.2 Physiographic Setting.....1-17

CHAPTER 1 LIST OF TABLES

Table 1-1: Overall Methodologies for Tier 1 and Tier 2 Studies .....1-4

Table 1-2: Environmental Analysis for Tier 1 and Tier 2 .....1-5

CHAPTER 1 LIST OF FIGURES

Figure 1-1: I-69 Tier 1 Alternatives.....1-7

Figure 1-2: Preferred Alternative 3C and Tier 2 Sections.....1-9

Figure 1-3: Section 6 Corridor identified in Tier 1.....1-10

Figure 1-4: Section 6 Alternatives Screening Study Area .....1-15

Figure 1-5: Section 6 Topographic Features.....1-18



**Chapter 2**

**CHAPTER 2 – PURPOSE AND NEED.....2-1**

2.1 Statement of Purpose and Need.....2-1

    2.1.1 Tier 1 Purpose and Need for I-69 from Evansville to Indianapolis .....2-2

    2.1.2 Statement of I-69 Section 6 Tier 2 Purpose and Need .....2-4

2.2 Transportation Policies and Plans .....2-4

    2.2.1 Federal Legislation and Policies .....2-4

    2.2.2 State Legislation and Policies.....2-4

    2.2.3 Metropolitan Transportation Plans.....2-7

    2.2.4 Other Local Plans and Studies .....2-9

2.3 I-69 Section 6 Needs Assessment.....2-10

    2.3.1 Completing Section 6 of I-69 between Martinsville and Indianapolis .....2-10

    2.3.2 Highway Congestion.....2-11

    2.3.3 Highway Safety.....2-12

    2.3.4 Regional Economic Development.....2-14

2.4 Public and Agency Input .....2-15

2.5 I-69 Section 6 Goals and Performance Measures .....2-17

**CHAPTER 2 LIST OF TABLES**

Table 2-1: Crash Rate Comparison, Indiana Highways .....2-12

Table 2-2: I-69 Section 6 Goals and Performance Measures .....2-16

**CHAPTER 2 LIST OF FIGURES**

Figure 2-1: I-69 Section 6 Four-County Purpose and Need Study Area .....2-2

Figure 2-2: Statewide Mobility Corridors .....2-6

Figure 2-3: Forecasted 2045 Levels of Service.....2-13

Figure 2-4: I-69 Section 6 Intermodal Facilities .....2-20

**Chapter 3**

**CHAPTER 3 – ALTERNATIVES .....3-1**

3.1 Alternative Screening Process.....3-3

3.2 Project Scoping.....3-4

3.3 Conceptual Alternative Screening.....3-7

3.4 Preliminary Alternative Screening .....3-10

    3.4.1 Preliminary Alternative Descriptions .....3-10

    3.4.2 Preliminary Alternatives Evaluation .....3-11

    3.4.3 Preliminary Alternative Route Selection .....3-18

3.5 Components of Alternatives.....3-20

    3.5.1 Mainline Options.....3-21

    3.5.2 Interchanges.....3-28

    3.5.3 Local Service Road Configurations .....3-31

3.6 Alternatives C1, C2, and C3 (by Subsection).....3-33

    3.6.1 Subsection 1: Indian Creek to SR 39.....3-36



# I-69 EVANSVILLE TO INDIANAPOLIS TIER 2 STUDIES

## Section 6—Final Environmental Impact Statement

3.6.2	Subsection 2: SR 39 to Morgan Street/Twin Branch Road (Martinsville).....	3-38
3.6.3	Subsection 3: Morgan Street to Henderson Ford Road.....	3-44
3.6.4	Subsection 4: Henderson Ford Road to Banta Road (Morgan County Road 800W).....	3-47
3.6.5	Subsection 5: Banta Road (Morgan County Road 800W) to Fairview Road .....	3-50
3.6.6	Subsection 6: Fairview Road to Wicker Road.....	3-57
3.6.7	Subsection 7: Wicker Road to Banta Road (Marion County).....	3-59
3.6.8	Subsection 8: Banta Road to and including I-465.....	3-63
3.7	Alternative C4 (by Subsection) .....	3-66
3.7.1	Subsection 1: Indian Creek to SR 39.....	3-67
3.7.2	Subsection 2: SR 39 to Morgan Street/Twin Branch Road (Martinsville).....	3-67
3.7.3	Subsection 3: Morgan Street to Henderson Ford Road.....	3-71
3.7.4	Subsection 4: Henderson Ford Road to Banta Road (Morgan County Road 800W).....	3-72
3.7.5	Subsection 5: Banta Road (Morgan County Road 800W) to Fairview Road .....	3-72
3.7.6	Subsection 6: Fairview Road to Wicker Road.....	3-73
3.7.7	Subsection 7: Wicker Road to Banta Road (Marion County).....	3-73
3.7.8	Subsection 8: Banta Road to I-465.....	3-75
3.8	Refined Preferred Alternative.....	3-75
3.8.1	Subsection 1: Indian Creek to SR 39.....	3-78
3.8.2	Subsection 2: SR 39 to Morgan Street/Twin Branch Road (Martinsville).....	3-78
3.8.3	Subsection 3: Morgan Street to Henderson Ford Road.....	3-80
3.8.4	Subsection 4: Henderson Ford Road to Banta Road (Morgan County).....	3-82
3.8.5	Subsection 5: Banta Road to Fairview Road .....	3-82
3.8.6	Subsection 6: Fairview Road to Wicker Road.....	3-85
3.8.7	Subsection 7: Wicker Road to Banta Road (Marion County).....	3-85
3.8.8	Subsection 8: Banta Road to and including I-465.....	3-88
3.9	Summary of Alternatives.....	3-88

### CHAPTER 3 LIST OF TABLES

Table 3-1:	Preliminary Alternatives Performance Measures .....	3-13
Table 3-2:	Preliminary Alternatives Environmental Impact Measures .....	3-16
Table 3-3:	Preliminary I-69 Lane Requirements.....	3-22
Table 3-4:	Mainline Options shown with Alternatives C1, C2, and C3 .....	3-34
Table 3-5:	Interchange and Local Service Road Decision Areas by Subsection.....	3-35
Table 3-6:	Martinsville Access Options .....	3-40
Table 3-7:	Alternative C4 Mainline Elements .....	3-67
Table 3-8:	Summary of Alternative C4 Design Elements and Source (C1, C2, C3).....	3-68
Table 3-9:	Number of Lanes - Alternative C4 and RPA.....	3-78
Table 3-10:	Review Factors for Southport Road Options.....	3-86
Table 3-11:	Summary of I-69 Section 6 Alternatives .....	3-90

### CHAPTER 3 LIST OF FIGURES

Figure 3-1:	Alternative Evaluation and Screening Process .....	3-4
Figure 3-2:	I-69 Stakeholder Working Group .....	3-5
Figure 3-3:	Initial Conceptual Alternatives.....	3-6
Figure 3-4:	Conceptual Alternatives.....	3-8
Figure 3-5:	Preliminary Alternatives .....	3-9
Figure 3-6:	Public Meeting at Mooresville High School .....	3-12



Figure 3-7: Relative Cost of Preliminary Alternatives .....3-14

Figure 3-8: I-69 Mainline Typical Sections (4 Lanes) .....3-24

Figure 3-9: I-69 Mainline Typical Sections (6 Lanes) .....3-25

Figure 3-10: I-69 Mainline Typical Sections (8 Lanes) .....3-26

Figure 3-11: Proposed Interchange Types .....3-30

Figure 3-12: Alternatives C1, C2, and C3 from Indian Creek to Burton Lane.....3-37

Figure 3-13: Alternatives C1, C2, and C3 from Ohio Street to SR 252 .....3-39

Figure 3-14: Alternatives C1, C2, and C3 from SR 252 to Teeters Road .....3-43

Figure 3-15: Alternatives C1, C2, and C3 from Teeters Road to Egbert Road.....3-46

Figure 3-16: Alternatives C1, C2, and C3 from Henderson Ford Road to New Harmony Road .....3-48

Figure 3-17: Alternatives C1, C2, and C3 from Cragen Road to Perry Road .....3-51

Figure 3-18: Alternatives C1, C2, and C3 from Big Bend Road to Whiteland Road .....3-52

Figure 3-19: Alternatives C1, C2, and C3 from SR 144 to Olive Branch Road .....3-54

Figure 3-20: Alternatives C1, C2, and C3 from Olive Branch Road to Smith Valley Road .....3-55

Figure 3-21: Alternatives C1, C2, and C3 from Fairview Road to Wicker Road .....3-58

Figure 3-22: Alternatives C1, C2, and C3 from Wicker Road to Southport Road .....3-60

Figure 3-23: Alternatives C1, C2, and C3 from Southport Road to Thompson Road .....3-62

Figure 3-24: Alternatives C1, C2, and C3 - I-465 at I-69 and SR 37 .....3-64

Figure 3-25: Alternatives Review with a Local Homeowners Association .....3-66

Figure 3-26: Refined Preferred Alternative, Burton Lane to Grand Valley Boulevard.....3-79

Figure 3-27: Refined Preferred Alternative, Egbert Road to Big Bend Road.....3-81

Figure 3-28: Refined Preferred Alternative, SR 144 to Stones Crossing Road .....3-83

Figure 3-29: Refined Preferred Alternative, Olive Branch Road to Fairview Road .....3-84

Figure 3-30: Refined Preferred Alternative, Southport Road Interchange .....3-87

Figure 3-31: Refined Preferred Alternative, I-465 Interchange.....3-89

**Chapter 4**

**Section 4-1**

**CHAPTER 4 – AFFECTED ENVIRONMENT .....4.1-1**

4.1 Introduction .....4.1-1

**SECTION 4-1 LIST OF TABLES**

Table 4.1-1: Definition of Study Areas .....4.1-2

**Section 4-2**

4.2 Human Environment (Community Impact Assessment).....4.2-1

    4.2.1 Social Characteristics .....4.2-3

    4.2.2 Physical Characteristics .....4.2-34

    4.2.3 Farmland .....4.2-61

    4.2.4 Economic Characteristics .....4.2-64

**SECTION 4-2 LIST OF TABLES**

Table 4.2-1: Population Comparison, American Community Survey 5-Year Estimates .....4.2-3

Table 4.2-2: Johnson County Population Comparison, 5-Year Estimates.....4.2-3

Table 4.2-3: Marion County Population Comparison, 5-Year Estimates .....4.2-4

Table 4.2-4: Morgan County Population Comparison, 5-Year Estimates .....4.2-4





# I-69 EVANSVILLE TO INDIANAPOLIS TIER 2 STUDIES

## Section 6—Final Environmental Impact Statement

Table 4.2-5: Disabled Population Estimates Between 2010 and 2014.....	4.2-6
Table 4.2-6: Population Trends and Projections, 1990-2040 .....	4.2-10
Table 4.2-7: Comparative Population Characteristics by Age, 2014 .....	4.2-11
Table 4.2-8: Johnson County Population Characteristics by Age, 2014.....	4.2-11
Table 4.2-9: Marion County Population Characteristics by Age, 2014 .....	4.2-12
Table 4.2-10: Morgan County Population Characteristics by Age, 2014 .....	4.2-12
Table 4.2-11: Comparative Population Characteristics—Race and Ethnicity.....	4.2-15
Table 4.2-12: Johnson County Population Characteristics—Race and Ethnicity .....	4.2-16
Table 4.2-13: Marion County Population Characteristics—Race and Ethnicity.....	4.2-17
Table 4.2-14: Morgan County Population Characteristics—Race and Ethnicity.....	4.2-18
Table 4.2-15: Comparative Households and Housing Characteristics .....	4.2-20
Table 4.2-16: Johnson County Households and Housing Characteristics.....	4.2-21
Table 4.2-17: Marion County Households and Housing Characteristics .....	4.2-22
Table 4.2-18: Morgan County Households and Housing Characteristics .....	4.2-23
Table 4.2-19: Education Enrollment Characteristics 2010 to 2014 .....	4.2-24
Table 4.2-20: Educational Attainment Characteristics 2010 to 2014.....	4.2-25
Table 4.2-21: Percent Educational Attainment—Adults 25 Years or Older 2014 .....	4.2-26
Table 4.2-22: Median Household Income, Per Capita Income, and Percent Living Below Poverty Level .....	4.2-27
Table 4.2-23: Comparative Incomes - Johnson County .....	4.2-28
Table 4.2-24: Comparative Incomes - Marion County.....	4.2-29
Table 4.2-25: Comparative Incomes - Morgan County.....	4.2-29
Table 4.2-26: Housing Characteristics .....	4.2-31
Table 4.2-27: Neighborhoods, Apartments, and Mobile Home Parks in the I-69 Section 6 Study Area.....	4.2-31
Table 4.2-28: Existing Land Use within the I-69 Section 6 Field Survey Study Area.....	4.2-35
Table 4.2-29: Summary of Roads with Current Access to SR 37.....	4.2-42
Table 4.2-30: Schools Located Within or Near the I-69 Section 6 Study Area .....	4.2-47
Table 4.2-31: Religious Facilities Located Within or Near the I-69 Section 6 Study Area .....	4.2-49
Table 4.2-32: Emergency Service Providers in and Near I-69 Section 6 Study Area.....	4.2-52
Table 4.2-33: Agricultural Land Use.....	4.2-62
Table 4.2-34: Labor Force Characteristics .....	4.2-64
Table 4.2-35: Employment by Industry.....	4.2-66
Table 4.2-36: Employment Characteristics by Occupation.....	4.2-67
Table 4.2-37: Johnson County, Indiana, Work/Residence Patterns.....	4.2-68
Table 4.2-38: Marion County, Indiana, Work/Residence Patterns .....	4.2-69
Table 4.2-39: Morgan County, Indiana, Work/Residence Patterns .....	4.2-70
Table 4.2-40: Commuting Patterns—Indiana, Johnson, Marion and Morgan Counties* .....	4.2-71
Table 4.2-41: 2016 Property Tax Rates by Township within Study Area .....	4.2-72
Table 4.2-42: 2015 Gross Assessed Property Values (Pay 2015) .....	4.2-72
Table 4.2-43: Retail Sales in 2015 .....	4.2-73

### SECTION 4-2 LIST OF FIGURES

Figure 4.2-1: I-69 Section 6 Socioeconomic Study Area.....	4.2-2
Figure 4.2-2: Minority Populations in the Vicinity of I-69 Section 6.....	4.2-14
Figure 4.2-3: Indianapolis Metropolitan Planning Area.....	4.2-39
Figure 4.2-4: Existing Trails in the I-69 Section 6 Study Area .....	4.2-41
Figure 4.2-5: Schools, Religious Facilities, and Cemeteries in the I-69 Section 6 Study Area.....	4.2-46
Figure 4.2-6: Emergency Service Providers and Hospitals near I-69 Section 6 Study Area .....	4.2-53
Figure 4.2-7: I-69 Section 6, Prime Farmland .....	4.2-63



Figure 4.2-8: I-69 Section 6 Tax Increment Finance (TIF) Districts.....4.2-74

**Section 4-3**

4.3 Natural Environment .....4.3-1  
 4.3.1 Geology .....4.3-1  
 4.3.2 Water Resources.....4.3-12  
 4.3.3 Ecosystems .....4.3-30

**SECTION 4-3 LIST OF TABLES**

Table 4.3-1: Major Soil Associations within I-69 Section 6 .....4.3-5  
 Table 4.3-2: Summary of 100-Year Floodplains in I-69 Section 6 (from north to south).....4.3-30  
 Table 4.3-3: Summary of Managed Lands in or near I-69 Section 6 .....4.3-38

**SECTION 4-3 LIST OF FIGURES**

Figure 4.3-1: Natural Regions .....4.3-2  
 Figure 4.3-2: Physiographic Divisions .....4.3-4  
 Figure 4.3-3: Soil Associations.....4.3-7  
 Figure 4.3-4: Bedrock Geology .....4.3-9  
 Figure 4.3-5: Mineral Resources .....4.3-11  
 Figure 4.3-6: Aquifers and Groundwater Wells .....4.3-14  
 Figure 4.3-7: NWI Wetlands.....4.3-19  
 Figure 4.3-8: Lacustrine Wetland, I-69 Section 6 .....4.3-20  
 Figure 4.3-9: Emergent Wetland, I-69 Section 6 .....4.3-21  
 Figure 4.3-10: Forested Wetland, I-69 Section 6.....4.3-21  
 Figure 4.3-11: Pleasant Run Creek, I-69 Section 6.....4.3-24  
 Figure 4.3-12: Crooked Creek, I-69 Section 6.....4.3-24  
 Figure 4.3-13: HUC 8 Watersheds in I-69 Section 6 .....4.3-25  
 Figure 4.3-14: Types of Floodplain Encroachment.....4.3-28  
 Figure 4.3-15: I-69 Section 6 Floodplains .....4.3-29  
 Figure 4.3-16: Old Field .....4.3-31  
 Figure 4.3-17: Early- to Mid-Successional Forest .....4.3-31  
 Figure 4.3-18: Forest Fragment .....4.3-32  
 Figure 4.3-19: Mesic Upland Forest.....4.3-32  
 Figure 4.3-20: Managed Lands in I-69 Section 6 .....4.3-39

**Section 4-4**

4.4 Cultural Resources .....4.4-1  
 4.4.1 Cultural Overview .....4.4-1  
 4.4.2 Aboveground Properties .....4.4-2  
 4.4.3 Archaeological Resources.....4.4-12

**SECTION 4-4 LIST OF TABLES**

Table 4.4-1: NRHP-Listed and NHRP-Eligible Aboveground Properties within the APE.....4.4-7  
 Table 4.4-2: Previously Recorded Potentially Eligible Archaeological Sites in the I-69 Section 6 Study Area .....4.4-13

**SECTION 4-4 LIST OF FIGURES**

Figure 4.4-1: Map A of the APE showing NRHP-Listed and NRHP-Eligible Resources.....4.4-8  
 Figure 4.4-2: Map B of the APE showing NRHP-Listed and NRHP-Eligible Resources.....4.4-9  
 Figure 4.4-3: Map C of the APE showing NRHP-Listed and NRHP-Eligible Resources .....4.4-10



Figure 4.4-4: Map D of the APE showing NRHP-Listed and NRHP-Eligible Resources .....4.4-11

Section 4-5

4.5 Properties of Environmental Concern .....4.5-1
4.5.1 Introduction.....4.5-1
4.5.2 Methodology .....4.5-1
4.5.3 Properties with a REC .....4.5-4

SECTION 4-5 LIST OF TABLES

Table 4.5-1: I-69 Section 6 Properties of Environmental Concern within the Study Area.....4.5-4

SECTION 4-5 LIST OF FIGURES

Figure 4.5-1: Properties of Concern in I-69 Section 6 Corridor north of Stones Crossing .....4.5-9
Figure 4.5-2: Properties of Concern in I-69 Section 6 Corridor north of Henderson Ford Road.....4.5-10
Figure 4.5-3: Properties of Concern in I-69 Section 6 Corridor north of I-69 Section 5 .....4.5-11

Section 4-6

4.6 Air Quality .....4.6-1
4.6.1 Introduction.....4.6-1

Section 4-7

4.7 Highway Noise.....4.7-1

SECTION 4-7 LIST OF FIGURES

Figure 4.7-1: Common Outdoor and Indoor Sound Levels.....4.7-1
Figure 4.7-2: Noise Measurement Locations .....4.7-2

Chapter 5

Section 5-1

5.1 Introduction and Methodology.....5.1-1
5.1.1 Overview of Tier 1 Methodology .....5.1-1
5.1.2 Overview of Tier 2 Methodology .....5.1-3
5.1.3 Tier 1 and Tier 2 Impact Evaluation Comparison.....5.1-5

SECTION 5-1 LIST OF TABLES

Table 5.1-1: Tier 1 and Tier 2 Impact Evaluation Methodologies .....5.1-5

SECTION 5-1 LIST OF FIGURES

Figure 5.1-1: Study Band, Corridor, Working Alignment (Tier 1 .....5.1-2

Section 5-2

5.2 Social Impacts .....5.2-1
5.2.1 Introduction.....5.2-1
5.2.2 Methodology .....5.2-2
5.2.3 Potential Relocations.....5.2-4
5.2.4 Availability of Replacement Housing .....5.2-9
5.2.5 Availability of Commercial and Institutional Property .....5.2-11



**Section 6—Final Environmental Impact Statement**

5.2.6 Neighborhoods .....5.2-11  
 5.2.7 Community Cohesion .....5.2-12  
 5.2.8 Unique Relocation Situations.....5.2-13  
 5.2.9 Mitigation .....5.2-17  
 5.2.10 Summary .....5.2-18

**SECTION 5-2 LIST OF TABLES**

Table 5.2-1: Residential Relocations.....5.2-4  
 Table 5.2-2: Business and Institution Relocations.....5.2-7  
 Table 5.2-3: Residences Available for Sale and Lease in I-69 Section 6 Project Area .....5.2-10  
 Table 5.2-4: Martinsville Area Long-Term Care Facility Replacement Housing Options .....5.2-15  
 Table 5.2-5: Estimated Residential, Business, and Institutional Relocations by Alternative.....5.2-19

**SECTION 5-2 LIST OF FIGURES**

Figure 5.2-1: Aspen Lakes Apartments Community .....5.2-5  
 Figure 5.2-2: Grandview Health and Rehabilitation Center.....5.2-6  
 Figure 5.2-3: Martinsville Baptist Tabernacle Church and School .....5.2-8  
 Figure 5.2-4: Waverly Branch of Morgan County Public Library .....5.2-8  
 Figure 5.2-5: White River Township Fire Department Fire Station #53.....5.2-9  
 Figure 5.2-6: Martinsville Evening Lions Club.....5.2-9  
 Figure 5.2-7: Rainbow Child Care Center .....5.2-17

**Section 5-3**

5.3 Land Use and Community Impacts .....5.3-1  
 5.3.1 Introduction .....5.3-1  
 5.3.2 Methodology .....5.3-2  
 5.3.3 Land Use and Zoning .....5.3-3  
 5.3.4 Travel Patterns and Accessibility .....5.3-7  
 5.3.5 Community Facilities and Services .....5.3-7  
 5.3.6 Mitigation .....5.3-23  
 5.3.7 Summary .....5.3-25

**SECTION 5-3 LIST OF TABLES**

Table 5.3-1: Direct and Indirect Land Use Impacts by Alternative .....5.3-5

**Section 5-4**

5.4 Farmland.....5.4-1  
 5.4.1 Methodology .....5.4-2  
 5.4.2 Analysis .....5.4-6  
 5.4.3 Indirect Impacts .....5.4-11  
 5.4.4 Mitigation .....5.4-11  
 5.4.5 Summary .....5.4-11

**SECTION 5-4 LIST OF TABLES**

Table 5.4-1: Production of Principal Crops, 2013-2015 Averages by County .....5.4-5  
 Table 5.4-2: Farmland Conversion Impact Rating for I-69 Section 6 Alternatives .....5.4-7  
 Table 5.4-3: Agricultural Production by County .....5.4-8  
 Table 5.4-4: Estimated Crop Production and Production Loss for Alternatives by County (2010-2011, 2013) .....5.4-9  
 Table 5.4-5: Estimated Annual Crop Production Loss for I-69 Section 6 Alternatives.....5.4-10



Table 5.4-6: Direct Farmland Impacts with I-69 Section 6 Alternatives .....5.4-10  
 Table 5.4-7: Summary of Direct Farmland Impacts with I-69 Section 6 Alternatives .....5.4-13

**Section 5-5**

5.5 Economic Impacts .....5.5-1  
 5.5.1 Introduction .....5.5-1  
 5.5.2 Methodology .....5.5-2  
 5.5.3 Analysis .....5.5-5  
 5.5.4 Mitigation .....5.5-13  
 5.5.5 Summary .....5.5-14

**SECTION 5-5 LIST OF TABLES**

Table 5.5-1: Year 2045 Average Daily User Costs by Vehicle-Miles Traveled .....5.5-7  
 Table 5.5-2: Year 2045 Average Daily User Costs by Vehicle-Hours Traveled .....5.5-8  
 Table 5.5-3: Year 2045 Annual Crash Costs – Alternatives C1 through C4 and No-Build .....5.5-8  
 Table 5.5-4: Year 2045 Annual Crash Costs – RPA and No-Build .....5.5-9  
 Table 5.5-5: Impacts on Local Property Tax Base .....5.5-12

**Section 5-6**

5.6 Traffic Impacts .....5.6-1  
 5.6.1 Introduction .....5.6-1  
 5.6.2 Methodology .....5.6-3  
 5.6.3 Traffic Operation Analysis .....5.6-5  
 5.6.4 Traffic Safety Analysis .....5.6-16  
 5.6.5 Access Analysis .....5.6-18  
 5.6.6 Mitigation .....5.6-31  
 5.6.7 Summary .....5.6-32

**SECTION 5-6 LIST OF TABLES**

Table 5.6-1: Forecasted I-69 Section 6 Daily Traffic Volumes and LOS by Alternative .....5.6-8  
 Table 5.6-2: Forecasted I-465 Daily Traffic Volumes and LOS by Alternative .....5.6-9  
 Table 5.6-3: Forecasted Cross Road Daily Traffic Volumes and LOS by Alternative .....5.6-11  
 Table 5.6-4: Forecasted Parallel Road Daily Traffic Volumes and LOS by Alternative .....5.6-13  
 Table 5.6-5: 2045 Predicted Crashes for Alternatives C1-C4 .....5.6-16  
 Table 5.6-6: 2045 Predicted Crashes for the RPA .....5.6-17

**SECTION 5-6 LIST OF FIGURES**

Figure 5.6-1: Forecasted 2045 Traffic Volumes, SR 39 to Egbert Road .....5.6-34  
 Figure 5.6-2: Forecasted 2045 Traffic Volumes, Egbert Road to SR 144 .....5.6-35  
 Figure 5.6-3: Forecasted 2045 Traffic Volumes, SR 144 to Banta Road .....5.6-36  
 Figure 5.6-4: Forecasted 2045 Traffic Volumes, Banta Road to I-465 .....5.6-37

**Section 5-7**

5.7 Visual and Aesthetic Impacts .....5.7-1  
 5.7.1 Introduction .....5.7-1  
 5.7.2 Methodology .....5.7-1  
 5.7.3 Analysis .....5.7-2  
 5.7.4 Mitigation .....5.7-7



5.7.5 Summary ..... 5.7-8

**SECTION 5-7 LIST OF FIGURES**

Figure 5.7-1: View of White River within Study Area ..... 5.7-2  
 Figure 5.7-2: View of Urban Martinsville from SR 37 (South Region) ..... 5.7-3  
 Figure 5.7-3: View of Martinsville High School from SR 37 (South Region) ..... 5.7-3  
 Figure 5.7-4: Typical Agricultural Land along SR 37 (Central Region) ..... 5.7-4  
 Figure 5.7-5: Southern Dunes Apartments (North Region) ..... 5.7-4  
 Figure 5.7-6: View of Spring Valley Mobile Home Park from SR 37 (South Region) ..... 5.7-5  
 Figure 5.7-7: View of First United Methodist Church from SR 37 (Central Region) ..... 5.7-6  
 Figure 5.7-8: J&E Tire (North Region) ..... 5.7-6

**Section 5-8**

5.8 Title VI / Environmental Justice ..... 5.8-1  
 5.8.1 Introduction ..... 5.8-1  
 5.8.2 Methodology ..... 5.8-3  
 5.8.3 Minority and Low-Income Populations ..... 5.8-8  
 5.8.4 Targeted Outreach and Surveys ..... 5.8-29  
 5.8.5 Altered Travel Patterns and Community Cohesion ..... 5.8-54  
 5.8.6 Noise ..... 5.8-55  
 5.8.7 Air Quality ..... 5.8-57  
 5.8.8 Summary ..... 5.8-58

**SECTION 5-8 LIST OF TABLES**

Table 5.8-1: Socioeconomic Study Area Population Characteristics - Race (Not Hispanic or Latino) ..... 5.8-10  
 Table 5.8-2: Marion County Population Characteristics - Race (not Hispanic or Latino) ..... 5.8-11  
 Table 5.8-3: Johnson County Population Characteristics - Race (not Hispanic or Latino) ..... 5.8-13  
 Table 5.8-4: Morgan County Population Characteristics - Race (not Hispanic or Latino) ..... 5.8-14  
 Table 5.8-5: Socioeconomic Study Area Population Characteristics - Race (Hispanic or Latino) ..... 5.8-16  
 Table 5.8-6: Marion County Population Characteristics - Race (Hispanic or Latino) ..... 5.8-17  
 Table 5.8-7: Johnson County Population Characteristics - Race (Hispanic or Latino) ..... 5.8-19  
 Table 5.8-8: Morgan County Population Characteristics - Race (Hispanic or Latino) ..... 5.8-20  
 Table 5.8-9: Socioeconomic Study Area Population Characteristics - Low-Income ..... 5.8-22  
 Table 5.8-10: Marion County Population Characteristics - Low-Income ..... 5.8-23  
 Table 5.8-11: Johnson County Population Characteristics - Low-Income ..... 5.8-24  
 Table 5.8-12: Morgan County Population Characteristics – Low-Income ..... 5.8-25  
 Table 5.8-13: Summary of Elevated Minority or Low-Income Populations ..... 5.8-28  
 Table 5.8-14: Respondent Home and Vehicle Ownership ..... 5.8-34  
 Table 5.8-15: Resident Survey Question 4-1 ..... 5.8-35  
 Table 5.8-16: Resident Survey Question 4-2 ..... 5.8-36  
 Table 5.8-17: Resident Survey Question 4-3 ..... 5.8-37  
 Table 5.8-18: Socioeconomic Study Area - Residential Relocations ..... 5.8-40  
 Table 5.8-19: Socioeconomic Study Area - Institutional Relocations ..... 5.8-41  
 Table 5.8-20: Socioeconomic Study Area - Business Relocations ..... 5.8-42  
 Table 5.8-21: Total Estimated South Corridor Area Relocations ..... 5.8-44  
 Table 5.8-22: Total Estimated Central Corridor Area Relocations ..... 5.8-47  
 Table 5.8-23: Total Estimated North Corridor Area Relocations ..... 5.8-48  
 Table 5.8-24: Socioeconomic Study Area – Noise Impacts ..... 5.8-56



SECTION 5-8 LIST OF FIGURES

Figure 5.8-1: Socioeconomic Study Area .....5.8-5
Figure 5.8-2: Elevated Minority and/or Low-Income Populations - South.....5.8-30
Figure 5.8-3: Elevated Minority and/or Low-Income Populations - Central .....5.8-31
Figure 5.8-4: Elevated Minority and/or Low-Income Populations - North .....5.8-32
Figure 5.8-5: Identified Communities in Martinsville.....5.8-45
Figure 5.8-6: Greenwood Mobile Home Park.....5.8-50
Figure 5.8-7: Sunshine Gardens Neighborhood.....5.8-51

Section 5-9

5.9 Air Quality .....5.9-1
5.9.1 Regulatory Setting .....5.9-1
5.9.2 Analysis .....5.9-4
5.9.3 Mitigation .....5.9-8
5.9.4 Summary .....5.9-8

SECTION 5-9 LIST OF TABLES

Table 5.9-1: Design Year 2045 Daily VMT .....5.9-5

Section 5-10

5.10 Highway Noise .....5.10-1
5.10.1 Regulatory Policy.....5.10-2
5.10.2 Methodology .....5.10-3
5.10.3 Noise Evaluation of Alternatives C1 through C4.....5.10-7
5.10.4 Noise Evaluation of the Refined Preferred Alternative (RPA) .....5.10-12
5.10.5 Undeveloped Lands.....5.10-14
5.10.6 Construction Noise .....5.10-14
5.10.7 Summary .....5.10-17

SECTION 5-10 LIST OF TABLES

Table 5.10-1: FHWA Noise Abatement Criteria.....5.10-3
Table 5.10-2: Comparison of Measured and Modeled Noise Levels.....5.10-5
Table 5.10-3: Noise Level Impacts by Land Use, Alternatives C1 through C4.....5.10-8
Table 5.10-4: Noise Barrier Analysis Summary, Alternatives C1 through C4.....5.10-10
Table 5.10-5: Noise Level Impacts by Land Use, RPA .....5.10-12
Table 5.10-6: Noise Barrier Analysis Summary, RPA .....5.10-15

SECTION 5-10 LIST OF FIGURES

Figure 5.10-1: Feasible and Reasonable Noise Barriers, RPA Map 1 .....5.10-18
Figure 5.10-2: Feasible and Reasonable Noise Barriers, RPA Map 2 .....5.10-19
Figure 5.10-3: Feasible and Reasonable Noise Barriers, RPA Map 3 .....5.10-20
Figure 5.10-4: Feasible and Reasonable Noise Barriers, RPA Map 4 .....5.10-21
Figure 5.10-5: Feasible and Reasonable Noise Barriers, RPA Map 5 .....5.10-22
Figure 5.10-6: Feasible and Reasonable Noise Barriers, RPA Map 6 .....5.10-23
Figure 5.10-7: Feasible and Reasonable Noise Barriers, RPA Map 7 .....5.10-24
Figure 5.10-8: Reasonable and Feasible Noise Barriers, RPA Map 8 .....5.10-25
Figure 5.10-9: Feasible and Reasonable Noise Barriers, RPA Map 9 .....5.10-26
Figure 5.10-10: Feasible and Reasonable Noise Barriers, RPA Map 10 .....5.10-27



Figure 5.10-11: Feasible and Reasonable Noise Barriers, RPA Map 11 .....5.10-28  
 Figure 5.10-12: Feasible and Reasonable Noise Barriers, RPA Map 12 .....5.10-29  
 Figure 5.10-13: Feasible and Reasonable Noise Barriers, RPA Map 13 .....5.10-30  
 Figure 5.10-14: Feasible and Reasonable Noise Barriers, RPA Map 14 .....5.10-31

**Section 5-11**

5.11 Wild and Scenic Rivers .....5.11-1  
 5.11.1 Introduction .....5.11-1  
 5.11.2 Methodology .....5.11-2  
 5.11.3 Analysis .....5.11-2  
 5.11.4 Mitigation .....5.11-3  
 5.11.5 Summary .....5.11-3

**SECTION 5-11 LIST OF FIGURES**

Figure 5.11-1: White River and SR 37 .....5.11-4  
 Figure 5.11-2: White River and I-465 .....5.11-5

**Section 5-12**

5.12 Construction Impacts .....5.12-1  
 5.12.1 Introduction .....5.12-1  
 5.12.2 Analysis .....5.12-1  
 5.12.3 Mitigation .....5.12-6  
 5.12.4 Summary .....5.12-10

**SECTION 5-12 LIST OF FIGURES**

Figure 5.12-1: Typical Sediment Basin .....5.12-3

**Section 5-13**

5.13 Aboveground Historic Resource Impacts .....5.13-1  
 5.13.1 Introduction .....5.13-1  
 5.13.2 Methodology .....5.13-2  
 5.13.3 Identification and Evaluation of Aboveground Historic Resources .....5.13-14  
 5.13.4 Effects Evaluation .....5.13-17  
 5.13.5 Consultation with the ACHP .....5.13-22  
 5.13.6 Resolution of Adverse Effects – Mitigation .....5.13-23  
 5.13.7 Summary .....5.13-23

**SECTION 5-13 LIST OF TABLES**

Table 5.13-1: Modeled Noise Levels for Historic Properties .....5.13-20  
 Table 5.13-2: Eligibility and Effects on NRHP Listed or Eligible Aboveground Properties .....5.13-21

**Section 5-14**

5.14 Archaeology Impacts .....5.14-1  
 5.14.1 Introduction .....5.14-1  
 5.14.2 Methodology .....5.14-2  
 5.14.3 Summary of Archaeological Resources .....5.14-6  
 5.14.4 Mitigation .....5.14-16  
 5.14.5 Summary .....5.14-17





**SECTION 5-14 LIST OF TABLES**

Table 5.14-1: Phases of Archaeological Research in Section 6.....5.14-4

Table 5.14-2: Summary of Archaeological Sites Investigated.....5.14-8

**Section 5-15**

5.15 Mineral Resource Impacts .....5.15-1

    5.15.1 Methodology.....5.15-1

    5.15.2 Analysis.....5.15-2

    5.15.3 Mitigation.....5.15-10

    5.15.4 Summary.....5.15-11

**SECTION 5-15 LIST OF TABLES**

Table 5.15-1: Mineral Resources Potentially in Right of Way of Alternatives.....5.15-12

**SECTION 5-15 LIST OF FIGURES**

Figure 5.15-1: Mineral Resources in the I-69 Section 6 Project Area.....5.15-3

Figure 5.15-2: Entrance to Hanson Aggregates Harding Street Quarry .....5.15-4

Figure 5.15-3: I-69 Section 6 Mineral Resources near I-465.....5.15-5

Figure 5.15-4: Entrance to Martin Marietta Aggregates .....5.15-7

Figure 5.15-5: Irving Materials and Riverdale Farms Sand and Gravel Operations .....5.15-9

Figure 5.15-6: JW Jones Gravel Pit .....5.15-10

**Section 5-16**

5.16 Properties of Environmental Concern .....5.16-1

    5.16.1 Introduction.....5.16-1

    5.16.2 Analysis.....5.16-2

    5.16.3 Recommendations.....5.16-58

    5.16.4 Summary.....5.16-61

**SECTION 5-16 LIST OF TABLES**

Table 5.16-1: Summary of Properties of Environmental Concern .....5.16-61

**SECTION 5-16 LIST OF FIGURES**

Figure 5.16-1: Property of Concern No. 4 – Stoops / Overland Express.....5.16-4

Figure 5.16-2: Property of Concern No. 5 – Marathon Bulk #2734 .....5.16-6

Figure 5.16-3: Property of Concern No. 6 – Flying J Travel Plaza .....5.16-8

Figure 5.16-4: Property of Concern No. 7 – Bud’s Service / Mr. Fuel .....5.16-10

Figure 5.16-5: Property of Concern No. 8 – Pilot Travel Center.....5.16-11

Figure 5.16-6: Property of Concern No. 9 – Dollar Inn / Berns Transportation.....5.16-13

Figure 5.16-7: Property of Concern No. 14 – Venture Logistics / Oliver Trucking / Penske Truck Leasing.....5.16-14

Figure 5.16-8: Property of Concern No. 15 – Linde / BOC Gases.....5.16-16

Figure 5.16-9: Property of Concern No. 18 – RH Marlin .....5.16-18

Figure 5.16-10: Property of Concern No. 21 – Ricker’s 876 / Amoco.....5.16-20

Figure 5.16-11: Property of Concern No. 22 – Tuchman Cleaners / Marathon .....5.16-22

Figure 5.16-12: Property of Concern No. 23 - Speedway .....5.16-23

Figure 5.16-13: Property of Concern No. 24 - Amoco .....5.16-25

Figure 5.16-14: Property of Concern No. 25 – Johnson Oil Bigfoot / Shell / Circle K.....5.16-27

Figure 5.16-15: Property of Concern No. 27 – Marathon Gas.....5.16-28

Figure 5.16-16: Property of Concern No. 32 – Bigfoot 16 .....5.16-30



Figure 5.16-17: Property of Concern No.28 – Tim Wilson Chevrolet Buick.....5.16-31  
 Figure 5.16-18: Property of Concern No. 33 – Village Pantry #404 .....5.16-33  
 Figure 5.16-19: Property of Concern No. 35 – Martinsville Citgo .....5.16-34  
 Figure 5.16-20: Property of Concern No. 36 – Murphy USA .....5.16-36  
 Figure 5.16-21: Property of Concern No. 38 – Turkey Hill #600 .....5.16-37  
 Figure 5.16-22: Property of Concern No. 39 – Garry’s Marathon.....5.16-39  
 Figure 5.16-23: Property of Concern No. 41 – K-Mart #3790.....5.16-41  
 Figure 5.16-24: Property of Concern No. 46 – Tim Wilson Chevrolet Buick.....5.16-42  
 Figure 5.16-25: Property of Concern No. 48 – Circle K #54 .....5.16-44  
 Figure 5.16-26: Property of Concern No. 2 – Hanson Aggregates / Milestone / E&B Paving .....5.16-46  
 Figure 5.16-27: Property of Concern No. 16 – Circle City Tank Wash / Smith Tank Cleaning.....5.16-48  
 Figure 5.16-28: Property of Concern No. 20 – L & E Engineering .....5.16-49  
 Figure 5.16-29: Property Concern No. 31 – IU Health Morgan County Hospital .....5.16-51  
 Figure 5.16-30: Property of Concern No. 1 – WR Beach / Affordable Auto & Towing.....5.16-53  
 Figure 5.16-31: Property of Concern No. 3 – Swift Auto Service / Motsinger Auto .....5.16-54  
 Figure 5.16-32: Property of Concern No. 17 – Thompson Road Dump .....5.16-56  
 Figure 5.16-33: Property of Concern No. 44 – Laundry Basket and Tanning Center.....5.16-57

**Section 5-17**

5.17 Bald Eagles, Federal and State Threatened and Endangered Species .....5.17-1  
 5.17.1 Introduction.....5.17-1  
 5.17.2 Methodology.....5.17-8  
 5.17.3 Analysis .....5.17-11  
 5.17.4 Mitigation .....5.17-25  
 5.17.5 Summary .....5.17-36

**SECTION 5-17 LIST OF FIGURES**

Figure 5.17-1: Indiana Bat (*Myotis sodalis*) .....5.17-15  
 Figure 5.17-2: Northern long-eared bat (*Myotis septentrionalis*) .....5.17-17  
 Figure 5.17-3: Rusty Patched Bumble Bee (*Bombus affinis*). Photo from Caroline Hlohowskyj .....5.17-18  
 Figure 5.17-4: Eastern Fanshell Mussel (*Cyprogenia stegaria*) .....5.17-19  
 Figure 5.17-5: Bald Eagle (*Haliaeetus leucocephalus*) .....5.17-20

**Section 5-18**

5.18 Wildlife Considerations .....5.18-1  
 5.18.1 Introduction.....5.18-1  
 5.18.2 Methodology.....5.18-3  
 5.18.3 Analysis .....5.18-9  
 5.18.4 Mitigation .....5.18-15  
 5.18.5 Summary .....5.18-16

**SECTION 5-18 LIST OF TABLES**

Table 5.18-1: Potential Wildlife Habitat Impacts, by Alternative .....5.18-10

**Section 5-19**

5.19 Water Resources .....5.19-1  
 5.19.1 Surface Water Types.....5.19-1  
 5.19.2 Surface Water Resource Methodology.....5.19-3



5.19.3 Surface Water Analysis .....5.19-6

5.19.4 Groundwater.....5.19-34

5.19.5 Mitigation .....5.19-38

5.19.6 Summary .....5.19-45

**SECTION 5-19 LIST OF TABLES**

Table 5.19-1: Wetlands in I-69 Section 6 Field Survey Study Area.....5.19-7

Table 5.19-2: Wetland Impacts by Wetland Type and Alternative.....5.19-10

Table 5.19-3: Emergent Wetlands within the Right of Way of Alternatives C1 through C4 and the RPA .....5.19-11

Table 5.19-4: Scrub-Shrub Wetlands within the Right of Way of Alternatives C1 through C4 and the RPA .....5.19-12

Table 5.19-5: Forested Wetlands within the Right of Way of Alternatives C1 through C4 and the RPA .....5.19-13

Table 5.19-6: Open Waters within the Right of Way of Alternatives C1 through C4 and the RPA .....5.19-13

Table 5.19-7: InWRAP Evaluation Ratings .....5.19-15

Table 5.19-8: Stream and Riparian Corridor Impacts.....5.19-18

Table 5.19-9: Stream Impacts by Type .....5.19-20

Table 5.19-10: Stream Impacts by Stream Hydrologic Regime.....5.19-22

Table 5.19-11: Stream Impacts by Weighted Habitat Evaluation Score.....5.19-22

Table 5.19-12: Stream Relocations by Type .....5.19-23

Table 5.19-13: Riparian Habitat Impacts (Acres) by Alternative.....5.19-24

Table 5.19-14: Floodplain Impacts .....5.19-31

Table 5.19-15: Groundwater Wells, Water Withdraw Facilities, and Wellhead Protection Areas .....5.19-37

Table 5.19-16: Acres of Wetland Mitigation .....5.19-39

Table 5.19-17: Open Water Impacts .....5.19-40

Table 5.19-18: Mitigation for Stream Impacts .....5.19-41

Table 5.19-19: Summary of Impacts to Surface Waters, by Alternative .....5.19-47

**Section 5-20**

5.20 Forest Impacts.....5.20-1

5.20.1 Introduction.....5.20-1

5.20.2 Methodology .....5.20-1

5.20.3 Analysis .....5.20-4

5.20.4 Mitigation .....5.20-18

5.20.5 Summary .....5.20-20

**SECTION 5-20 LIST OF TABLES**

Table 5.20-1: Forest Types and Associated Plant Species in the I-69 Section 6 Corridor .....5.20-5

Table 5.20-2: Potential Direct Impacts to Forested Areas, by Alternative .....5.20-7

Table 5.20-3: Wetland Impacts in Forested Areas (Forested Wetlands).....5.20-16

Table 5.20-4: Summary of Impacts to Core Forest Habitat .....5.20-17

Table 5.20-5: Summary of Forest Impacts and Potential Mitigation, by Forest Classification and Alternative .....5.20-20

**SECTION 5-20 LIST OF FIGURES**

Figure 5.20-1: Forest Fragmentation.....5.20-2

Figure 5.20-2: Diagram of Core Forest Habitat .....5.20-3

Figure 5.20-3: Impacts to Core Forest F020 .....5.20-21

Figure 5.20-4: Impacts to Core Forest F042 .....5.20-22

Figure 5.20-5: Impacts to Core Forest F058 .....5.20-23

Figure 5.20-6: Impacts to Core Forest F065 .....5.20-24



Figure 5.20-7: Impacts to Core Forest F076 .....5.20-25

**Section 5-21**

5.21 Karst Impacts .....5.21-1  
 5.21.1 Introduction .....5.21-1  
 5.21.2 Methodology .....5.21-1  
 5.21.3 Analysis .....5.21-1  
 5.21.4 Mitigation .....5.21-1  
 5.21.5 Summary .....5.21-2

**Section 5-22**

5.22 Managed Lands and Natural Areas .....5.22-1  
 5.22.1 Introduction .....5.22-1  
 5.22.2 Methodology .....5.22-2  
 5.22.3 Analysis .....5.22-2  
 5.22.4 Mitigation .....5.22-6  
 5.22.5 Summary .....5.22-6

**SECTION 5-22 LIST OF TABLES**

Table 5.22-1: Summary of Managed Land Impacts within I-69 Section 6 .....5.22-3

**SECTION 5-22 LIST OF FIGURES**

Figure 5.22-1: I-69 Section 6 Alternatives and Cikana State Fish Hatchery .....5.22-4

**Section 5-23**

5.23 Permits .....5.23-1  
 5.23.1 Introduction .....5.23-1  
 5.23.2 Section 404 Permit .....5.23-2  
 5.23.3 Section 9 and 10 of the Rivers and Harbors Act .....5.23-3  
 5.23.4 Section 401 Water Quality Certification .....5.23-4  
 5.23.5 Isolated Wetlands .....5.23-4  
 5.23.6 Construction in a Floodway Permit .....5.23-5  
 5.23.7 National Pollution Discharge Elimination System Permit .....5.23-6  
 5.23.8 Tall-Structure Permit/FAA Permit .....5.23-7

**SECTION 5-23 LIST OF FIGURES**

Figure 5.23-1: Typical Wetland Subject to Regulation .....5.23-3

**Section 5-24**

5.24 Indirect and Cumulative Impacts .....5.24-1  
 5.24.1 Introduction .....5.24-1  
 5.24.2 Methodology .....5.24-2  
 5.24.3 Analysis .....5.24-5  
 5.24.4 Summary .....5.24-59

**SECTION 5-24 LIST OF TABLES**

Table 5.24-1: Percentages to Apply Growth to Non-Developed Land .....5.24-5  
 Table 5.24-2: Amount of Land Cover Types in Induced Growth TAZs .....5.24-6



Table 5.24-3: Acres of Land Use Type Potentially Converted with I-69 Section 6 Induced Growth, by Alternative 5.24-7

Table 5.24-4: Induced Land Use Changes by Alternative .....5.24-17

Table 5.24-5: Other Projected Growth in I-69 Section 6 Geographic Scope (No-Build Scenario).....5.24-24

Table 5.24-6: Land Use Changes by 2045 for the No-Build Scenario.....5.24-25

Table 5.24-7: INWRAP Evaluation Ratings for the 67 Wetland Polygons .....5.24-36

Table 5.24-8: Impacts of I-69 Section 6 and Other Major Projects, by Alternative .....5.24-42

Table 5.24-9: Acres of Cumulative Land Use Changes to Agricultural Land.....5.24-44

Table 5.24-10: Acres of Cumulative Land Use Changes to Upland Forest .....5.24-50

**SECTION 5-24 LIST OF FIGURES**

Figure 5.24-1: Land Use Changes Year 2045 No-Build Growth - Hendricks and Morgan Counties .....5.24-10

Figure 5.24-2: Land Use Changes Year 2045 No-Build Growth - Marion and Johnson Counties.....5.24-11

Figure 5.24-3: Indirect Land Use Changes 2045 Growth, C1, C3, C4, RPA - Hendricks and Morgan Counties..5.24-12

Figure 5.24-4: Indirect Land Use Changes 2045 Growth, C1, C3, C4, RPA - Marion and Johnson Counties .....5.24-13

Figure 5.24-5: Indirect Land Use Changes 2045 Growth, C2 – Hendricks and Morgan Counties .....5.24-14

Figure 5.24-6: Indirect Land Use Changes 2045 Growth, C2 – Marion and Johnson Counties .....5.24-15

Figure 5.24-7: Land in Farms by County - History and Trends.....5.24-29

Figure 5.24-8: Land in Forest - Hendricks, Johnson, Marion, and Morgan Counties .....5.24-31

**Section 5-25**

5.25 Energy Impacts.....5.25-1

5.25.1 Introduction.....5.25-1

5.25.2 Methodology.....5.25-1

5.25.3 Analysis .....5.25-2

5.25.4 Summary.....5.25-4

**SECTION 5-25 LIST OF TABLES**

Table 5.25-1: Energy Consumption in the Year 2045 by County .....5.25-3

**Section 5-26**

5.26 Short-Term Uses versus Long-Term Productivity .....5.26-1

**Section 5-27**

5.27 Irreversible or Irretrievable Commitment of Resources.....5.27-1

**Chapter 6**

**CHAPTER 6 – COMPARISON OF ALTERNATIVES.....6-1**

6.1 Introduction .....6-2

6.1.1 Process for Evaluating Alternatives .....6-2

6.1.2 Subsections and Decision Areas .....6-3

6.2 Alternatives Descriptions .....6-5

6.2.1 Mainline Options.....6-6

6.2.2 Interchanges and Local Service Roads .....6-9

6.3 Alternatives Evaluation (DEIS).....6-9

6.3.1 Evaluation of Mainline Options .....6-10

6.3.2 Evaluation of Interchanges and Local Service Roads .....6-21



**Section 6—Final Environmental Impact Statement**

6.3.3	Overall Impacts of Alternatives .....	6-100
6.3.4	Overall Cost of Alternatives .....	6-103
6.3.5	DEIS Preferred Alternative (Alternative C4) .....	6-105
6.4	Refined Preferred Alternative (RPA) Evaluation .....	6-108
6.4.1	RPA Impact Changes by Subsection.....	6-108
6.4.2	Overall Impacts of the RPA compared with Alternative C4.....	6-121
6.4.3	Overall Cost of the RPA compared with Alternative C4.....	6-124
6.4.4	FEIS Preferred Alternative (The RPA).....	6-126
6.5	RPA Costs and Impacts Compared with Tier 1 Estimates .....	6-126
6.5.1	Project Cost.....	6-127
6.5.2	Right of Way and Relocations .....	6-128
6.5.3	Environmental Impacts .....	6-129
6.6	Summary .....	6-130

**CHAPTER 6 LIST OF TABLES**

Table 6-1:	Mainline Impacts, Subsection 1: Indian Creek to SR 39 .....	6-13
Table 6-2:	Mainline Options, Subsection 2: SR 39 to Morgan St/Twin Branch Rd.....	6-14
Table 6-3:	Mainline Options, Subsection 3: Morgan St to Henderson Ford Rd.....	6-15
Table 6-4:	Mainline Options, Subsection 4: Henderson Ford Road to Banta Road .....	6-16
Table 6-5:	Mainline Options, Subsection 5: Banta Road to Fairview Road .....	6-17
Table 6-6:	Mainline Options, Subsection 6: Fairview Road to Wicker Road .....	6-17
Table 6-7:	Subsection 7: Mainline Options, Wicker Road to Banta Road (Marion Co).....	6-19
Table 6-8:	Subsection 8: Banta Road to and including I-465 .....	6-19
Table 6-9:	Right of Way and Relocations of Mainline Options .....	6-20
Table 6-10:	Environmental Impacts of Mainline Options .....	6-21
Table 6-11:	Environmental Impacts, Decision Area 1-1: SR 39 Interchange .....	6-24
Table 6-12:	Environmental Impacts, Decision Area 1-2: Jordan Road.....	6-26
Table 6-13:	Environmental Impacts, Decision Area 1-3: Rogers Road .....	6-28
Table 6-14:	Environmental Impacts, Subsection 1: Indian Creek to SR 39 (DEIS) .....	6-29
Table 6-15:	Environmental Impacts, Decision Area 2-1: Burton Lane.....	6-32
Table 6-16:	Environmental Impacts, Decision Area 2-2: Ohio Street .....	6-34
Table 6-17:	Environmental Impacts, Decision Area 2-3: Grand Valley Boulevard .....	6-37
Table 6-18:	Environmental Impacts, Decision Area 2-4: SR 252 and SR 44 Interchange.....	6-40
Table 6-19:	Environmental Impacts, Decision Area 2-5: Twin Branch Rd/Cikana State Fish Hatchery .....	6-43
Table 6-20:	Environmental Impacts, Subsection 2; SR 39 to Morgan Street (DEIS).....	6-44
Table 6-21:	Environmental Impacts, Decision Area 3-1: Morgan Street and Myra Lane.....	6-48
Table 6-22:	Environmental Impacts, Decision Area 3-2: Egbert Road Grade Separation .....	6-50
Table 6-23:	Environmental Impacts, Subsection 3: Morgan Street to Henderson Ford Road (DEIS) .....	6-51
Table 6-24:	Environmental Impacts, Decision Area 4-1: Henderson Ford Road Interchange .....	6-56
Table 6-25:	Environmental Impacts, Decision Area 4-2: New Harmony Road.....	6-59
Table 6-26:	Environmental Impacts, Decision Area 4-3: Perry Road .....	6-61
Table 6-27:	Environmental Impacts, Decision Area 4-4: Waverly Road or Whiteland Road .....	6-62
Table 6-28:	Environmental Impacts, Subsection 4: Henderson Ford Road to Banta Road (DEIS) .....	6-63
Table 6-29:	Environmental Impacts, Decision Area 5-1: SR 144 Interchange .....	6-67
Table 6-30:	Environmental Impacts, Decision Area 5-2: West Local Service Road/Olive Branch Rd .....	6-70
Table 6-31:	Environmental Impacts, Decision Area 5-3/5-5: Smith Valley Rd + Wakefield Rd .....	6-73
Table 6-32:	Environmental Impacts, Decision Area 5-4: West Local Service Rd/Fairview Rd .....	6-75



# I-69 EVANSVILLE TO INDIANAPOLIS TIER 2 STUDIES

## Section 6—Final Environmental Impact Statement

Table 6-33: Environmental Impacts, Subsection 5: Banta Road to Fairview Road (DEIS).....	6-77
Table 6-34: Environmental Impacts, Decision Area 6-1: County Line Road Interchange .....	6-81
Table 6-35: Environmental Impacts, Decision Area 6-2: West Local Service Road .....	6-83
Table 6-36: Environmental Impacts, Subsection 6: Fairview Road to Wicker Road (DEIS) .....	6-84
Table 6-37: Environmental Impacts, Decision Area 7-1: Southport Road Interchange Layout.....	6-90
Table 6-38: Environmental Impacts, Subsection 7: Wicker Road to Banta Road (DEIS) .....	6-91
Table 6-39: Environmental Impacts, Decision Area 8-1: I-69/I-465 Interchange Layout .....	6-98
Table 6-40: Environmental Impacts, Subsection 8: Banta Road to I-465 (DEIS) .....	6-101
Table 6-41: Total End-to-End Impacts by Alternative (DEIS) <sup>1</sup> .....	6-102
Table 6-42: Estimated Cost by Cost Item (\$ Millions)* for Alternatives C1 through C4 (DEIS) .....	6-104
Table 6-43: Estimated Cost by Subsection (\$ Millions)* for Alternatives C1 through C4 (DEIS).....	6-104
Table 6-44: Environmental Impacts, Subsection 1: Indian Creek to SR 39.....	6-109
Table 6-45: Environmental Impacts, Subsection 2: SR 39 to Morgan Street .....	6-111
Table 6-46: Environmental Impacts, Subsection 3: Morgan St to Henderson Ford Rd .....	6-112
Table 6-47: Environmental Impacts, Subsection 4: Henderson Ford Rd to Banta Rd.....	6-114
Table 6-48: Environmental Impacts, Subsection 5: Banta Rd to Fairview Rd .....	6-116
Table 6-49: Environmental Impacts, Subsection 6: Fairview Road to Wicker Road.....	6-118
Table 6-50: Environmental Impacts, Subsection 7: Wicker Road to Banta Road.....	6-120
Table 6-51: Environmental Impacts, Subsection 8: Banta Road to I-465 .....	6-121
Table 6-52: Total End-to-End Impacts of Alternative C4 and the RPA.....	6-122
Table 6-53: Estimated Cost by Cost Item (\$ Millions) for Alternative C4 and the RPA.....	6-124
Table 6-54: Estimated Cost by Subsection (\$ Millions) for Alternative C4 and the RPA .....	6-125
Table 6-55: Comparison of I-69 Section 6 Tier 1 and RPA Impacts.....	6-127

### CHAPTER 6 LIST OF FIGURES

Figure 6-1: Typical Freeway Retaining Wall.....	6-8
Figure 6-2: Elevated Freeway with Local Underpass – Mainline Option M1 .....	6-8
Figure 6-3: Decision Area 1-1 Configurations .....	6-22
Figure 6-4: Decision Area Locations - Subsections 1 and 2.....	6-23
Figure 6-5: Decision Area 1-2 Configurations .....	6-26
Figure 6-6: Decision Area 1-3 Configurations .....	6-28
Figure 6-7: Decision Area Locations - Subsection 2 .....	6-31
Figure 6-8: Decision Area 2-1 Configurations .....	6-32
Figure 6-9: Decision Area 2-2 Configurations .....	6-34
Figure 6-10: Decision Area 2-3 Configurations .....	6-36
Figure 6-11: Decision Area 2-4 Configurations .....	6-39
Figure 6-12: Kristi Road Intersection.....	6-40
Figure 6-13: Decision Area 2-5 Configurations .....	6-42
Figure 6-14: Decision Area Locations - Subsection 3 .....	6-45
Figure 6-15: Decision Area 3-1 Configurations at Morgan Street.....	6-46
Figure 6-16: Decision Area 3-1 Configurations at Myra Lane .....	6-47
Figure 6-17: Decision Area 3-2 Configurations .....	6-49
Figure 6-18: Decision Area 4-1 Configurations .....	6-52
Figure 6-19: Decision Area Locations - Subsection 4 (Part 1) .....	6-53
Figure 6-20: Decision Area Locations - Subsection 4 (Part 2) .....	6-54
Figure 6-21: Decision Area Locations - Subsections 4 and 5.....	6-55
Figure 6-22: Decision Area 4-2 Configurations .....	6-58
Figure 6-23: Decision Area 4-3 Configurations .....	6-60



Figure 6-24: Decision Area 4-4 Configurations .....6-62

Figure 6-25: Decision Area Locations - Subsection 5 .....6-65

Figure 6-26: Decision Area Locations - Subsections 5 and 6.....6-66

Figure 6-27: Decision Area 5-1 Configurations .....6-67

Figure 6-28: Decision Area 5-2 Configurations .....6-69

Figure 6-29: Decision Area 5-2 at Stones Crossing Road.....6-70

Figure 6-30: Decision Areas 5-3 and 5-5 Configurations – C1, C2 .....6-72

Figure 6-31: Decision Areas 5-3 and 5-5 Configurations – C3, C4 .....6-73

Figure 6-32: Decision Area 5-4 Configurations .....6-76

Figure 6-33: Decision Area Locations - Subsections 5 and 6.....6-79

Figure 6-34: Decision Area 6-1 Configurations .....6-80

Figure 6-35: Decision Area 6-2 Configurations .....6-82

Figure 6-36: Decision Area Locations - Subsections 7 and 8.....6-85

Figure 6-37: Decision Area 7-1 Configurations .....6-87

Figure 6-38: Decision Area Locations - Subsection 8 (Part 1) .....6-93

Figure 6-39: Decision Area Locations - Subsection 8 (Part 2) .....6-94

Figure 6-40: Decision Area Locations - Subsection 8 (Part 3) .....6-95

Figure 6-41: Decision Area 8-1 Configurations .....6-96

Figure 6-42: Decision Area 8-1 Near Southside German Market Gardeners District .....6-97

Figure 6-43: The RPA in Martinsville.....6-110

Figure 6-44: The RPA from SR 144 to Stones Crossing Road .....6-115

Figure 6-45: The RPA at Southport Road .....6-119

**Chapter 7**

**CHAPTER 7 – MITIGATION AND COMMITMENTS .....7-1**

7.1 Introduction .....7-1

7.2 Major Mitigation Initiatives.....7-2

    7.2.1 Context Sensitive Solutions (CSS)/Community Advisory Committees (CAC). .....7-2

    7.2.2 Indiana Bat Hibernacula .....7-4

    7.2.3 Wetland Mitigation .....7-5

    7.2.4 Forest Mitigation .....7-7

    7.2.5 I-69 Community Planning Program.....7-7

    7.2.6 Update of Aboveground Surveys of Historic Resources .....7-8

    7.2.7 Biological Surveys on Wildlife and Plants .....7-9

    7.2.8 Southwest Indiana Geographic Information System (GIS) .....7-11

    7.2.9 Distance Learning.....7-12

7.3 I-69 Section 6 Mitigation Measures and Commitments.....7-12

    7.3.1 Land Use .....7-13

    7.3.2 Social and Neighborhood .....7-15

    7.3.3 Relocations.....7-19

    7.3.4 Cemeteries .....7-19

    7.3.5 Noise .....7-20

    7.3.6 Construction .....7-21

    7.3.7 Historic and Archaeological Resources .....7-25

    7.3.8 Visual Impacts .....7-28





- 7.3.9 Hazardous Material Impacts ..... 7-29
- 7.3.10 Floodplain Impacts ..... 7-29
- 7.3.11 Wetland Impacts ..... 7-29
- 7.3.12 Farmland Impacts ..... 7-31
- 7.3.13 Forest Impacts ..... 7-31
- 7.3.14 Stream and Water Body Modification Impacts ..... 7-32
- 7.3.15 Ecosystems Impacts ..... 7-34
- 7.3.16 Water Quality Impacts ..... 7-35
- 7.3.17 Managed Lands ..... 7-36
- 7.3.18 Threatened and Endangered Species ..... 7-37
- 7.4 Environmental Mitigation Costs ..... 7-46

**CHAPTER 7 LIST OF TABLES**

- Table 7-1: Major Mitigation Initiatives ..... 7-3
- Table 7-2: Locations and Types of Bicycle and Pedestrian Accommodations ..... 7-17
- Table 7-3: Estimated Cost for I-69 Section 6 Mitigation ..... 7-48

**Chapter 8**

- CHAPTER 8 – SECTION 4(F) ..... 8-1**
- 8.1 Introduction ..... 8-1
- 8.2 Purpose and Need ..... 8-3
  - 8.2.1 Tier 1 ..... 8-4
  - 8.2.2 Tier 2 ..... 8-5
- 8.3 Identification of 4(f) Resources ..... 8-5
  - 8.3.1 Parks and Recreation ..... 8-5
  - 8.3.2 Historic Resources ..... 8-8
  - 8.3.3 Properties Not Eligible for Section 4(f) Protection ..... 8-11
- 8.4 Section 4(f) Use ..... 8-13
  - 8.4.1 Parks and Recreation ..... 8-13
  - 8.4.2 Historic Resources ..... 8-17
  - 8.4.3 Identification of Alternatives ..... 8-19
  - 8.4.4 Consideration of Alternatives ..... 8-20
- 8.5 Development and Evolution of Alternatives Considered ..... 8-21
  - 8.5.1 Conceptual Alternatives ..... 8-21
  - 8.5.2 Preliminary Alternatives ..... 8-23
  - 8.5.3 Reasonable Alternatives ..... 8-25
  - 8.5.4 Development of Individual Section 4(f) Evaluation Alternatives ..... 8-29
- 8.6 Comparison of Alternatives ..... 8-37
  - 8.6.1 Feasibility and Prudence of Avoidance Alternatives ..... 8-37
  - 8.6.2 Use of Section 4(f) Properties by Remaining Alternatives ..... 8-38
- 8.7 Assessment of Least Overall Harm to Section 4(f) Properties ..... 8-39
  - 8.7.1 Mitigate Adverse Impacts ..... 8-39
  - 8.7.2 Relative Severity of the Remaining Harm ..... 8-41
  - 8.7.3 Relative Significance of each Section 4(f) property ..... 8-41



**Section 6—Final Environmental Impact Statement**

8.7.4 Views of the Officials with Jurisdiction .....8-42

8.7.5 Purpose and Need.....8-44

8.7.6 Resources not Protected by Section 4(f) .....8-44

8.7.7 Costs .....8-45

8.7.8 Summary of Least Overall Harm .....8-45

8.8 Measures to Minimize Harm .....8-46

8.9 Coordination .....8-47

8.10 Section 6(f) Resources .....8-50

8.11 Summary .....8-50

**CHAPTER 8 LIST OF TABLES**

Table 8-1: Parks and Recreation Facilities .....8-14

Table 8-2: Avoidance Alternatives Developed .....8-30

Table 8-3: Least Overall Harm Alternatives .....8-32

Table 8-4: Section 4(f) Direct Impacts by Remaining Least Harm Alternatives .....8-38

Table 8-5: Section 4(f) Impacts by Remaining Alternative .....8-46

**CHAPTER 8 LIST OF FIGURES**

Figure 8-1: Section 4(f) Properties .....8-6

Figure 8-2: Views of 4401 Bluff Road with I-465 in Background .....8-18

Figure 8-3: Initial Conceptual Alternatives.....8-22

Figure 8-4: Preliminary Alternatives .....8-24

Figure 8-5: Alternatives C1, C2, and C3 - I-465 at I-69 and SR 37 .....8-27

Figure 8-6: Retaining Wall on South Side of I-465, Southside German Market Gardeners Historic District.....8-35

Figure 8-7: Retaining Wall on North Side of I-465, Southside German Market Gardeners Historic District .....8-35

Figure 8-8: Earthen Slope and Retaining Walls at Southside German Market Gardeners District identified in Alternative C4 and the RPA .....8-37

**Chapter 9..... 9-1**

**Chapter 10..... 10-1**

**Chapter 11**

**CHAPTER 11 – COMMENTS, COORDINATION, AND PUBLIC INVOLVEMENT ..... 11-1**

11.1 Introduction ..... 11-2

11.2 Summary of Comments ..... 11-4

    11.2.1 Comments Prior to the DEIS ..... 11-4

    11.2.2 Comments on the DEIS ..... 11-8

    11.2.3 Comments on the Refined Preferred Alternative ..... 11-11

11.3 Public and Community Outreach ..... 11-12

    11.3.1 Outreach Activities..... 11-13

    11.3.2 Community Advisory Committees (CACs)..... 11-19

    11.3.3 Stakeholder Working Group ..... 11-22



# I-69 EVANSVILLE TO INDIANAPOLIS TIER 2 STUDIES

## Section 6—Final Environmental Impact Statement

11.3.4	Public Information Meetings and Public Hearings .....	11-22
11.3.5	Public Information Communication Tools .....	11-25
11.3.6	Social Media .....	11-26
11.3.7	Project Office .....	11-27
11.4	Agency Review and Coordination .....	11-28
11.4.1	Notice of Intent (NOI).....	11-28
11.4.2	Agency Coordination .....	11-28
11.5	Summary .....	11-35

### CHAPTER 11 LIST OF TABLES

Table 11-1:	I-69 Section 6 Outreach Activities (as of September 15, 2017).....	11-14
Table 11-2:	I-69 Section 6 Project Office Visits and Public Comments (as of August 31, 2017) .....	11-27
Table 11-3:	I-69 Section 6 Meetings with Resource Agencies .....	11-30

### CHAPTER 11 LIST OF FIGURES

Figure 11-1:	Land Use Panel Meeting.....	11-13
Figure 11-2:	Community Advisory Meeting .....	11-20
Figure 11-3:	INDOT Briefing Local Media .....	11-23
Figure 11-4:	Public Information Meeting at Martinsville High School .....	11-23
Figure 11-5:	Image of I-69 Section 6 Website.....	11-24
Figure 11-6:	Example of I-69 Section 6 Newsletter .....	11-26
Figure 11-7:	Resource Agency Bus Tour .....	11-31

## Chapter 12..... 12-1

## Chapter 13

### CHAPTER 13 – GLOSSARY, ACRONYMS, AND INDEX ..... 13-1

13.1	Glossary of Terms .....	13-1
13.2	Acronyms.....	13-20
13.2.1	Terms .....	13-20
13.2.2	Agencies and Organizations.....	13-26
13.3	Index.....	13-28



## LIST OF APPENDICES

Appendix A, Business Needs and Church Survey
Appendix B, Community Advisory Committee (CAC)/ Stakeholder Working Group (SWG) Meeting Summaries
Appendix C, Agency Coordination Correspondence
Appendix D, Cost Estimation Methodology
Appendix E, Final Wetland Technical Report
Appendix F, Historical Outreach to Resource Agencies (2004 – 2014)
Appendix G, Hazardous Materials Report
Appendix H, Air Quality Technical Report
Appendix I, Outreach to Schools
Appendix J, NRCS Forms
Appendix K, USDOT Air Quality Guidance
Appendix L, Final Stream Assessment Report
Appendix M, Section 106 Documentation
Appendix N, Indiana Bat Surveys
Appendix O, Correspondence - Government Other Than Resource Agencies
Appendix P, Environmental Justice (EJ)
Appendix Q, Revised Tier 1 Conceptual Forest and Wetland Mitigation Plan and Comparison of Tier 1 Plans
Appendix R, I-69 Planning Grant Program Update
Appendix S, Wetlands Memorandum of Understanding
Appendix T, Final Noise Technical Report
Appendix U, Emergency Responder Coordination
Appendix V, Indirect Impact Analysis
Appendix W, Revised Tier 1 Biological Opinion and Amendments
Appendix X, Public Information Meeting Summaries
Appendix Y, Travel Demand Forecasting
Appendix Z, Fish, Unionid, and Crayfish Report
Appendix AA, Wildlife Corridors Information
Appendix BB, Intentionally Left Blank
Appendix CC, I-69 Tier 2, Section 6 Conceptual Alternatives Evaluation Report, May 18, 2015
Appendix DD, I-69 Tier 2, Section 6 Preliminary Alternatives Selection Report, June 30, 2015
Appendix EE, I-69 Tier 2, Section 6 Preliminary Alternatives Screening Report, March 29, 2016
Appendix FF, Section 4(f) Documentation
Appendix GG1, Redacted Section 6 Tier 2 Biological Assessment

# **I-69 EVANSVILLE TO INDIANAPOLIS TIER 2 STUDIES**

## **Section 6 – Final Environmental Impact Statement**



Appendix GG2, Redacted Section 6 Tier 2 Biological Opinion
Appendix HH, Tier 1 - Tier 2 Impact Comparison
Appendix II, Refined Preferred Alternative Plan & Profile Drawings
Appendix JJ, Level 1 & 2 Design Exceptions (as needed)
Appendix KK, Construction Sequencing/Prioritization