

HAM-75-10.10



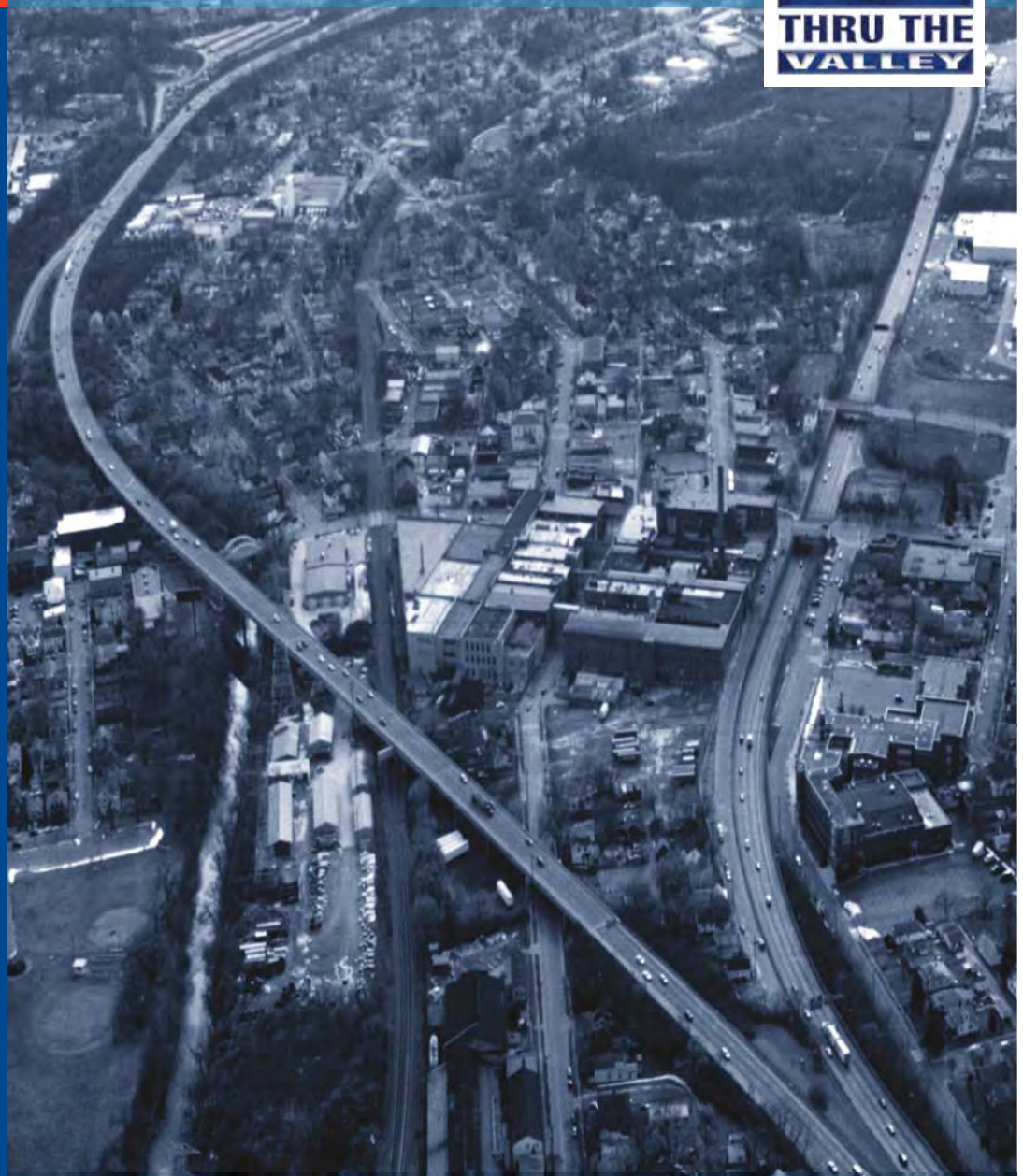
ENVIRONMENTAL ASSESSMENT

Prepared for:

The Ohio Department
of Transportation



District 8



Submitted by:



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Environmental Assessment



**HAM-75-10.10 (PID: 76256)
Thru the Valley**

Prepared for:



**The Ohio Department of
Transportation, District 8**

505 State Route 741
Lebanon, OH 45036

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EXECUTIVE SUMMARY

This document summarizes impacts and consequences of the improvements to I-75 between Paddock Road and Kemper Road within Hamilton County, Ohio, referred to as the *I-75 Thru the Valley Project*. Furthermore, the document presents the appropriate measures to reduce adverse effects and augment the positive benefits of the project. This report details the preliminary development and alternatives evaluation process conducted to carry forward the Preferred Alternative, identified as the alternative that best satisfies the purpose and need for the project. A summary of the expected environmental impacts by the Preferred Alternative includes:

- The project is estimated to require residential relocations of 46 buildings/61 households. Commercial/industrial relocations are anticipated to 10 properties. No substantial concerns are associated with relocations.
- The recommended preferred alternative will impact the Village of Lockland Veterans Memorial Park. Construction of the Preferred Alternative will require approximately 0.04 acre of temporary right-of-way for construction of a retaining wall along existing I-75.
- No adverse effects are anticipated on cultural resources. Minor property impacts are required in the GE parking lot.
- Stream impacts consisting of approximately 932 linear feet, with the area of work to be determined during structure studies.
- Approximately 9.6 acres of Mixed Deciduous Forest habitat will be impacted (8.3% of the total present in the study area) and 261.1 acres of the Residential/Commercial/Disturbed habitat (13.6% of the total present in the study area) will be needed for construction.
- Noise impacts are predicted on adjacent sensitive receivers. Noise mitigation measures are recommended at twenty-three locations. Based on this, all necessary public involvement meetings will be conducted after Stage 1 plans have been developed by construction Phase.
- Construction plan notes (for management of contaminated soils) are recommended for three properties evaluated in the Phase II Environmental Site Assessment in subsequent steps. One property will require authorization from Ohio EPA under a Rule 27-13 permit prior to any excavation or drilling activities.

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PROJECT INFORMATION

PROJECT DESCRIPTION

The *I-75 Thru the Valley Project* involves adding one additional through lane in each direction on I-75 from the Paddock Road interchange to I-275. The project includes improvements to the interchanges on I-75 at Galbraith Road, SR 126, Shepherd Lane, Glendale-Milford Road and Sharon Road. Interchange ramps with I-75 at Davis Street, Cooper Avenue, Mangham Drive and General Electric (GE) are removed by the project. New interchange ramps are included and would connect to Anthony Wayne Avenue and GE. In addition the collector-distributor (C-D) system between Glendale-Milford Road and Shepherd Lane will be eliminated in both directions. The project also includes adding auxiliary lanes, where needed, along I-75 to achieve interchange spacing requirements. The project length is approximately 7.3 miles. The proposed project is illustrated on Exhibit A.

PROJECT LOCATION

The project is located in Hamilton County, Ohio, within the Cincinnati metro area. The project limits are within the City of Cincinnati and communities of Arlington Heights, Evendale, Glendale, Lincoln Heights, Lockland, Reading and Sharonville. Project location, study area and neighborhood maps are included as Exhibit B.

PROJECT TERMINI

For this project, the southern terminus is the I-75/Paddock Road interchange; however Paddock Road and its associated ramps will not be studied because they are part of a different study (*HAM-75-2.30, PID: 76257*). The northern terminus for this project is near I-275; however, I-275 and its associated ramps will not be studied as part of this project because they are part of a different study (*HAM-75-15.39, PID: 77278*). These interchanges were selected as the logical termini for the project because they are existing interchanges that serve as points of access to the regional and interstate highway system in the area. The western limit of the project is Anthony Wayne Avenue/Chester Road and the eastern limit is Reading Road. These roadways were selected as project limits because they are adjacent, parallel roadways to I-75 that accommodate through movements for local traffic and achieve a seamless connection with the existing transportation system without creating additional new access points to the I-75 mainline. A document explaining the project termini, and how these relate to other projects on the I-75 corridor, was prepared and approved by the Federal Highway Administration (FHWA). A copy of the termini discussion is included in Appendix A.

COST

The total final construction cost for the project is \$472.6 million while the final year of expenditure cost is \$585 million. Costs for the anticipated construction year, by phase, is further detailed on Table 9, found on page 31.



PURPOSE AND NEED

The purpose of the project is to improve traffic flow and increase traffic safety along I-75 from Paddock Road to I-275 and enhance the regional transportation network. Detailed studies identified poor existing physical conditions, substandard design features, high accident rates, and pervasive congestion within the project limits. The *Purpose and Need* was circulated to agencies within the *Conceptual Alternatives Study (CAS)* and *Assessment of Feasible Alternatives Study (AFA)*. It was made available to the public through the project website and public meetings. A copy of this document is included in Appendix A.

DEVELOPMENT OF THE PREFERRED ALTERNATIVE

The *I-75 Thru the Valley Project* falls within an area of I-75, which is part of a broader transportation study titled the “*North South Transportation Initiative*” (NSTI). This study was completed in 2003 by members of the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) and the Miami Valley Regional Planning Commission to analyze the I-75 multimodal transportation system. This initiative formed an agreement between the two regions to improve the safety, efficiency and reliability of the transportation system.

In 2004, as a result of the NSTI, the *I-75 Thru the Valley Project* originated from a preferred program of improvement projects. Following the Ohio Department of Transportation’s (ODOT) Project Development Process (PDP), several documents were produced to support the development of alternatives for the *I-75 Thru the Valley Project*. These previously produced documents are listed below and a copy of each can found in Appendix A.

- **PDP Step 1 - *Public Involvement Plan, June 2004***: The Plan described the ways that the project team would solicit public input to identify problems and establish project objectives, provide the public with information on the progress of the study, provide information on the potential impacts and benefits of each alternative under consideration, and solicit input for an eventual Preferred Alternative.
- **PDP Step 2 - *Existing and Future Conditions Report, July 2004***: Documented a broad range of transportation and environmental conditions within the study area.
- **PDP Step 2 - *Purpose and Need, August 2004***: The document provided tangible, quantifiable data to support the needs for the project.
- **PDP Step 2 - *Red Flag Summary, August 2004***: Identified any potential concerns that could cause revisions to the anticipated design and construction scope of work, the proposed project development schedule, the estimated project budget, or the potential impacts of the project on the surrounding area.
- **PDP Step 4 - *Planning Study Report, November 2004***: Detailed the development of several concepts to address the identified needs of the project.
- **PDP Step 5 - *Conceptual Alternatives Study, October 2005***: Includes the refined and analyzed transportation improvements selected for further study in Step 4.
- **PDP Step 6 - *Assessment of Feasible Alternatives, September 2007***: Combines the environmental data, collected during Step 6 and in previous steps, with the design information to evaluate each alternative for its potential environmental consequences and design issues.
- **PDP Step 7 - *Aesthetics Final Report, October 2007***: Documents the aesthetic vision of the corridor.
- **PDP Step 7 - *Preferred Alternative Verification, June 2008***: A design submission that refines the project’s impact limits.

An extensive process of alternative identification, evaluation and development was conducted for the *I-75 Thru the Valley Project*. The development of the Preferred Alternative is summarized below.

CONCEPTUAL ALTERNATIVES

In the first half of 2004, the project team identified several Conceptual Alternatives based upon the broad project goals, the specific issues identified in the project area and the project objectives, as documented in the *Planning Study Report (PSR)*. These Conceptual Alternatives are shown in Table 1 and included the No-Build Alternative, five Mainline Alternatives, thirteen Interchange Alternatives and one Transit Alternative.

Table 1: Conceptual Alternatives

No-Build Alternative	Alternative Description	Recommendation
No-Build	The No-Build Alternative includes existing and committed projects currently included in the OKI Transportation Improvement Plan (TIP) or other local plans.	Advance
Mainline Alternatives	Alternative Description	Recommendation
M-1	Add capacity to I-75 with additional mainline lanes on I-75.	Advance in combination w/ M-2
M-2	Add capacity to I-75 with auxiliary lanes.	Advance in combination w/ M-1
M-3	Add capacity to I-75 by double-stacking northbound and southbound lanes.	Dismiss
M-4	Add capacity to I-75 by double stacking express lanes above the I-75 mainline.	Advance in combination w/ M-5
M-5	Add capacity to I-75 with separated express lanes. Add two express lanes in each direction in the median, to the left or to the right, as appropriate.	Advance in combination w/ M-4
Interchange Alternatives	Alternative Description	Recommendation
<i>Interchange Alternative #1: Evaluate Ronald Reagan Highway and Galbraith Road</i>		
I-1A	Create full movement interchange at Ronald Reagan.	Dismiss
I-1B	Eliminate left exit at Galbraith Road.	Combined w/ No-Build Alternative
I-1C	Enhance existing.	Combined w/ No-Build Alternative
I-1D	Create full movement interchange at Ronald Reagan Highway, combine northbound and southbound I-75 lanes through Lockland and convert southbound side to parkway with access to Davis Street.	Need Local Input
<i>Interchange Alternative #2: Evaluate Cooper Avenue/Davis Street</i>		
I-2A	Create full movement interchanges.	Dismiss
I-2B	Enhance existing.	Combined w/ No-Build Alternative
I-2C	Combine with Cooper Avenue and Davis Street movements.	Advance
<i>Interchange Alternative #3: Evaluate Shepherd Lane/Mangham Drive</i>		
I-3A	Combine Mangham Drive and Shepherd Lane movements into full interchange.	Advance
I-3B	Enhance existing interchange.	Dismiss

Interchange Alternatives	Alternative Description	Recommendation
<i>Interchange Alternatives #4 and #5</i>		
I-4	Evaluate Glendale-Milford Road - Enhance existing interchange.	Advance in combination w/ No-Build
I-5	Evaluate Sharon Road Interchange - Enhance existing interchange.	Advance in combination w/ No-Build
<i>Interchange Alternative #6: Evaluate C-D Systems</i>		
I-6A	Shepherd Lane to I-275 (Neumann Way).	Advance
I-6B	Galbraith Road/Ronald Reagan Highway to Davis Street/Cooper Avenue.	Advance in combination w/ I-1 & I-2 Alternatives
<i>Interchange Alternative #7: Evaluate Local Connections</i>		
I-7A	Lockland and Lincoln Heights frontage roads.	Advance in combination w/ I-3A & M Alternatives
I-7B	Eliminate GE ramps and access points.	Advance - Add to No-Build
I-7C	Alternate route identification.	Advance
Transit Alternative	Alternative Description	Recommendation
T-1	Preserve Light Rail Corridor	Advance

In Step 4, the Conceptual Alternatives were rated based on each of the project goals and anticipated costs and were recommended for advancement, dismissal and/or combination with another alternative. The evaluation and advancement or dismissal of each of the Conceptual Alternatives can be found in the PSR.

RECOMMENDED CONCEPTUAL ALTERNATIVES

By November 2004, nine Conceptual Alternatives were developed to address the identified needs, as documented in the PSR. These Recommended Conceptual Alternatives were shown at the January 19, 2005 Public Meeting and are shown below in Table 2.

Table 2: Recommended Conceptual Alternatives

Alternative	Alternative Description
No-Build Alternative	The No-Build Alternative includes existing and committed projects currently included in the OKI TIP or other local plans.
No-Build Plus Minor Improvements	Existing and committed projects included in the TIP plus the following maintenance alternatives: <ul style="list-style-type: none"> ▪ I-1C ▪ I-2B ▪ I-4 ▪ I-5 ▪ I-7B
At-Grade Mainline Capacity-Adding Alternative	This combination of alternatives adds capacity to the interstate with mainline through lanes and/or auxiliary lanes constructed at-grade. It also includes a replacement local roadway system for Neumann Way. <ul style="list-style-type: none"> ▪ M-1 ▪ M-2 ▪ I-7A

Alternative	Alternative Description
Elevated Mainline Capacity-Adding Alternative	This combination of alternatives adds capacity to the mainline of the interstate with elevated through lanes and/or express lanes. It also includes a replacement local roadway system for Neumann Way. <ul style="list-style-type: none"> ▪ M-4 ▪ M-5 ▪ I-7A
Ronald Reagan/Galbraith Alternative	This combination of alternatives includes an improvement to the Ronald Reagan/Galbraith interchange and a C-D system. <ul style="list-style-type: none"> ▪ I-1B ▪ I-1D ▪ I-6B
Cooper/Davis Street Alternative	This combination of alternatives includes improvements to the Cooper/Davis Street interchanges and a C-D system. <ul style="list-style-type: none"> ▪ I-2C ▪ I-6B
Shepherd/Mangham Drive Alternative	This combination of alternatives includes improvements to the Shepherd Lane/Mangham Drive Alternatives and a replacement local roadway system for Neumann Way. <ul style="list-style-type: none"> ▪ I-3A ▪ I-7A
Shepherd to I-275 C-D System	<ul style="list-style-type: none"> ▪ I-6A
Transportation System Management/Transportation Demand Management	<ul style="list-style-type: none"> ▪ I-7C ▪ T-1

EVALUATED CONCEPTUAL ALTERNATIVES

In 2005, the Recommended Conceptual Alternatives were reorganized, in Step 5, to optimize the solutions to the issues identified within the study area, as documented in the CAS. The CAS was based on the information provided in the PSR, plus additional environmental and preliminary design information. Table 3 shows the renamed Conceptual Alternatives – from those recommended for advancement from Step 4 to those evaluated in Step 5.

Table 3: Conceptual Alternatives Reorganized

Recommended Conceptual Alternatives		Evaluated Conceptual Alternatives	
1	No-Build	1	Mainline Alt #1: No-Build
2	No-Build Plus Minor Improvements	2	Mainline Alternative #2: No-Build + Minor Improvements
3	At-Grade Mainline Capacity-Adding Alternative	3	Mainline Alternative #3: Four-Lane Continuity
4	Elevated Mainline Capacity-Adding Alternative	4	Mainline Alternative #4: Express Lanes
5	Ronald Reagan/Galbraith Alternative	5	Mainline Alternative #5: Parkway
6	Cooper/Davis Street Alternative	6	Mainline Alternative #6: Divided Interstate Alternative
		7	Project Option #1: Davis Street/Cooper Avenue Interchange
7	Shepherd/Mangham Drive Option	8	Project Option #2: Shepherd Lane/Mangham Drive Interchange
		9	Project Option #3: Load Roads
8	Shepherd to I-275 Collector-Distributor System	10	Project Option #4: Collector-Distributor Roads

Recommended Conceptual Alternatives		Evaluated Conceptual Alternatives	
9	Transportation System Management/ Transportation Demand Management	11	Transportation System Management Option: Transportation System Management/ Transportation Demand Management

This reorganization resulted in five Mainline Alternatives, plus the No-Build Alternative and four Project Options. The Project Options were viewed as additional items that could be added to any of the Mainline Alternative(s). The reorganized Mainline Conceptual Alternatives and Project Options, which were shown at the June 29, 2005 Public Meeting, are detailed below.

Mainline Alternative #1: No-Build – The No-Build Alternative includes existing and committed projects currently included in the OKI TIP or other local plans.

Conceptual Mainline Alternative #2: No-Build + Minor Improvements – This alternative would provide minor capacity improvements and safety upgrades. The following improvements are independent of each other and include 12 foot shoulders, the elimination of partial interchanges at Cooper Avenue, Mangham Drive and GE ramps, the elimination of Neumann Way in its current configuration, and the addition of auxiliary lanes where needed along I-75.

Conceptual Mainline Alternative #3: Four-Lane Continuity – This alternative would provide one additional at-grade mainline lane in each direction from I-275 to Paddock Road with auxiliary lanes where needed. This alternative would also include the improvements proposed by the No-Build + Minor Improvements Alternative (#2).

Conceptual Mainline Alternative #4: Express Lanes – This alternative would construct at-grade and/or elevated express lanes. Express lanes would be utilized only by through traffic and could be accessed at “system to system interchanges,” namely I-275 and SR 126. This alternative would also include the improvements proposed by the No-Build + Minor Improvements Alternative (#2). Three different configurations of this alternative were developed, all of which provided two express lanes in each direction from Paddock Road to I-275 and auxiliary lanes where necessary.

Conceptual Mainline Alternative #5: Parkway – The Parkway Alternative creates a full movement interchange at SR 126 and I-75 and separates local and through traffic movements. The existing southbound I-75 alignment between Shepherd Lane and SR 126 would become the I-75 mainline in both directions. The existing northbound I-75 alignment through Lockland would become a two-way parkway serving local traffic and connecting to I-75 at Shepherd Lane from the north and an exit from I-75 and Paddock Road from the south. Local connections at Paddock Road, Davis Street and Galbraith Road would be accessed from the parkway. This alternative would also include the improvements proposed by the No-Build + Minor Improvements Alternative (#2), and north of Shepherd Lane, it would include the improvements proposed by the Four-Lane Continuity Alternative (#3).

Conceptual Mainline Alternative #6: Divided Interstate Alternative – This alternative would convert both the I-75 northbound and I-75 southbound lanes to two-way interstate traffic with two lanes in each direction plus auxiliary lanes where necessary to meet spacing requirements. This change would provide the opportunity for full-access interchanges at Davis Street, Galbraith Road and SR 126. Davis Street would be accessed from the east side of I-75 with Galbraith Road accessed from the west side. A full-movement interchange at SR 126 would also be provided. This alternative would extend Davis Street to Anthony Wayne Drive to provide better east-west connectivity in Lockland as well as access to the Brownfield site for potential redevelopment. This alternative would also include the improvements proposed by the No-Build + Minor Improvements Alternative (#2), and north of Shepherd Lane, it would include the improvements proposed by the Four-Lane Continuity Alternative (#3).

Conceptual Project Option #1: Davis Street/Cooper Avenue Interchange – This option would provide a full-movement split-diamond interchange at Davis Street in Lockland. Davis Street would be extended to the west bridging over the I-75 southbound lanes. The second half of the interchange would be constructed on the southbound side of I-75.

Conceptual Project Option #2: Shepherd Lane/Mangham Drive Interchange – This option would create a full-movement interchange at Shepherd Lane. The Mangham Drive ramps would be closed and access relocated to the new interchange. Five different interchange configurations of this option were developed.

Conceptual Project Option #3: Load Roads – Any improvement to the interstate will more than likely include a modification of the access to and function of Neumann Way. To provide appropriate access for the communities, two new north-south local connectors between Glendale-Milford Road and Shepherd Lane could be utilized. These connectors would be local roadways—one on the west side of I-75 and one on the east side—without direct access to the interstate, but they would allow for two-way travel and appropriate development access.

Conceptual Project Option #4: Collector-Distributor Roads – This option would add capacity to the interstate with the construction of a two-lane C-D system between Shepherd Lane and I-275. This C-D system would replace and extend the outdated and deficient Neumann Way. The C-D system would separate local and through traffic on I-75.

Conceptual Transportation System Management Option – Based on the recommendations from the North-South Transportation Initiative, all future planning, design, right-of-way acquisition and construction will be undertaken so as to accommodate implementation of a full multi-modal system. The Transportation System Management/Transportation Demand Management option evaluated each Mainline Alternative and Project Option, so as to preserve the transit corridor and not preclude a high frequency light rail line or enhanced bus service.

Based upon the analyses in the CAS, Mainline Alternatives #2, #4A, #4B, #4C, #5 and #6 as well as Project Options #2A, #2C, #2D, #2E and #4 were eliminated from further consideration because they did not meet the goals of the study, they were too costly to

construct and because of substantial impacts to the community. Mainline Alternatives #1 (No-Build) and #3 (Four-Lane Continuity), as well as Project Options #1 (Davis Street/Cooper Avenue Interchange), #2B (Shepherd Lane/Mangham Drive) and #3 (Local Roads) were advanced for further study. The evaluation and advancement or dismissal of each of the Evaluated Conceptual Alternatives can be found in the CAS.

FEASIBLE ALTERNATIVES

The Mainline Alternative and Project Options were combined to produce three Feasible Alternatives to be evaluated in Step 6. In 2006 and 2007, the project team built upon the findings of the CAS to develop and compare Feasible Alternatives for the project in the AFA. A fourth alternative was developed in response to public input. These alternatives, which were shown at the July 19, 2006 Public Meeting, are shown below:

No-Build Alternative - The No-Build Alternative includes existing and committed projects currently included in the OKI TIP or other local plans.

Feasible Alternative A - This alternative adds one lane to the interstate in each direction with auxiliary lanes where interchange spacing guidelines warrant. Alternative A also corrects the safety problems that currently exist on the interstate. Improved access points are not included in Alternative A.

Feasible Alternative B - This alternative includes the capacity and safety improvements of Alternative A and additional access improvements. Interchanges would be improved at SR 126, Davis Street and at Shepherd Lane.

Feasible Alternative C - This alternative includes the capacity and safety improvements of Alternative A and additional access improvements. Interchanges would be improved at Galbraith Road, Anthony Wayne Avenue and Shepherd Lane.

Within Step 6, several local entities expressed great concern over the closure of the Galbraith Road left-exit and believe that closing the left exit would have a negative effect on their communities and businesses. In response to these concerns, the project team took a fresh look at an alternative to add a right-hand Galbraith Road exit from I-75 northbound. After considerable technical analysis, a feasible design for a right-hand exit was developed. The new ramp would exit the interstate just north of SR 126, go over existing I-75 northbound and access Galbraith Road at the same location as the current left-hand exit. The right-hand exit is now included in Feasible Alternative C.

Based on the analyses in the AFA, Feasible Alternative C was recommended by the project team as the Recommended Alternative because it best meets the project goals. The evaluation and advancement or dismissal of each of the Feasible Alternatives can be found in the AFA.

REFINED FEASIBLE ALTERNATIVE

Following a review of the AFA report by FHWA and the ODOT, it was determined that the Recommended Alternative for this project should be more closely aligned with FHWA

policy on interchanges. This additional analysis led to the development of the Refined Feasible Alternative.

The Refined Feasible Alternative marries the best of Feasible Alternative B and Feasible Alternative C. It allows for the improved local access of Feasible Alternative C at Anthony Wayne Avenue, Galbraith Road and Shepherd Lane, as well as the increased regional access of Feasible Alternative B at SR 126.

PREFERRED ALTERNATIVE

Following a revision of the AFA, in July of 2007, the Refined Feasible Alternative was carried forward for further development as the Preferred Alternative.

In June 2008, the project team submitted the Preferred Alternative Verification (PAV), a design review submission intended to confirm the project's impact limits. The documentation provided with the PAV plans includes a summary of the design changes that occurred subsequent to approval of the AFA and a description of potential design exceptions.

IMPACTS

Based upon the project setting and issues raised through public and agency involvement, several subject areas have been identified that have the potential for greatest impacts and/or concerns. These topics include:

- Air Quality
- Noise
- Community Impacts (including access changes)
- Property Impacts and Relocations
- Cultural Resources
- Parks and Recreation Areas
- Stream Impacts

These key issues will be discussed in detail within this Environmental Assessment. Other topics are summarized with a reference provided to available technical studies and documents.

AIR QUALITY

PM 2.5

In July 2008, a project level conformity analysis entitled Quantitative PM 2.5 Hot Spot Analysis was conducted to determine whether the HAM-75-10.10 project complied with statutory requirements. Coordination was conducted with the Ohio Environmental Protection Agency (OEPA) regarding the PM 2.5 analysis. They responded with comments concerning the length of time over which the phasing of construction was proposed and requested additional modeling be performed. ODOT-OES responded, stating that the scope of the project was being re-evaluated because currently construction funding was only available for the first phase of the project. A revised PM 2.5 Hot Spot Analysis report was submitted to OEPA to address their concerns. In an e-mailed dated September 14, 2009, OEPA stated the revised document was acceptable. Based on this, all necessary additional studies for PM2.5 will be conducted by construction Phase after Stage 1 plans have been developed. Based on the above discussed planned studies and coordination, it is anticipated that impacts from this project with regard to PM 2.5 will be minimal. A copy of the coordination is included in Appendix G.

MSAT

In June of 2008, a project level conformity analysis entitled Quantitative MSAT Analysis was conducted for the project (see Appendix B). Modeling for the project was prepared by the ODOT - Office of Technical Services using MOBILE 6.2 conformity analysis modeling software. The analysis determined minimal differences in regional MSAT contributions between the build and no build alternatives with the opening day build and design year build scenarios showing a reduction in MSATs over the 2000 base case levels. Given the overall decrease in total MSAT contribution, project construction will result in a negligible difference in MSAT effects. EPA regulations for vehicle engines and fuels will cause overall MSAT to decline significantly over the next 20 years. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

Based on the above, it is anticipated that impacts from this project with regard to MSAT's will be minimal. Coordination was conducted with OEPA regarding the MSAT analysis. Concurrence was received from OEPA on 8/1/08. Copies of their comments with responses are included as Appendix G.

Carbon Monoxide (CO) and Ozone (O3)

The constructed project will not result in an increase in the ADT of more than 10,000 vehicles within 10 years of project completion date. Also, the project does not involve a new project right-of-way that will have an ADT of more than 20,000 vehicles within 10 years of construction. Therefore, the project is exempt from project level conformity analysis for CO per the ODOT/OEPA Air Quality Agreement. Because the project is listed in the STIP/TIP, ozone is addressed. Based on the above, it is anticipated that impacts from this project with regard to CO and Ozone will be minimal.

NOISE

As part of the I-75 widening and improvement in Hamilton County, a noise analysis report was completed in June 2006 with preliminary noise barrier recommendations. A noise barrier analysis was completed in December 2008. These two reports can be found in Appendix B. The analysis determined that twenty three locations along the project corridor will experience sound level impacts under design year (2030) traffic conditions. A noise impact occurs when a predicted design year noise level meets or exceeds 66 decibels (dB) or if a substantial increase of 10 dB or greater is predicted for any noise sensitive site. When a noise impact is identified, noise abatement measures must be considered for the impacted areas.

The two relevant criteria that are considered when evaluating noise abatement measures are feasibility and reasonableness. Feasibility deals primarily with engineering considerations (i.e. can a substantial noise reduction be achieved given the conditions of a specific location). Per the ODOT noise policy, noise barriers shall be designed with a goal of protecting all receivers and obtaining an 8 dBA reduction for front row residences. Reasonableness is a more subjective criterion than feasibility. It implies that common sense and good judgment were applied in arriving at a decision. A determination of reasonableness for a noise barrier is based upon a number of factors including the number of benefited receptors and the average cost per benefited receptor. In this context, a benefit is defined as a 5 dB noise reduction after noise barrier construction (for first row receptors) or a 3 dB noise reduction after noise barrier construction (for second row receptors and beyond, up to 600 feet from the I-75 edge of pavement) and a reasonable cost being less than \$35,000 per benefited receptor.

The recommended noise barrier locations, shown on Exhibit C, are:

- Residence Inn - Located on the west side of I-75 from station (STA) 143+00 to STA 159+00 with an average height of 17.6 feet. This barrier overlaps with the Econolodge Barrier by 500 feet.
- Econolodge Barrier - Located on the west side of I-75 from STA 143+00 to STA 148+00 with an average height of 13.6 feet.

- Fairfield Inn Barrier - Located on the west side of I-75 from STA 405+00 to STA 411+00 with an average height of 11.5 feet.
- Sheraton Inn Barrier - Located on the west side of I-75 from STA 394+00 to STA 403+00 with an average height of 15.3 feet.
- Mangham Barrier - Located on the west side of I-75 from STA 283+00 to STA 293+00 with an average height of 18.7 feet.
- Lincoln Heights Barrier - Located on the west side of I-75 from STA 239+50 to STA 257+00 with an average height of 14.2 feet.
- G3 Barrier - Located on the west side of I-75 from STA 186+50 to STA 235+75 with an average height of 14.4 feet.
- Cooper Barrier (Village of Lockland Park) - Located on the west side of southbound I-75 from STA 180+50 to STA 185+50 with an average height of 12.8 feet.
- Arlington Heights West Barrier - Located in the Split on the east side of southbound I-75 from STA 167+25 to STA 179+00 with an average height of 12.8 feet.
- Anthony Wayne North - Located on the west side of I-75 from STA 131+50 to STA 151+00 with an average height of 14.6 feet.
- Crest Hill Barrier - Located in the Split on the east side of northbound I-75 from STA 120+50 to STA 136+50 with an average height of 18.9 feet.
- Travelodge Barrier - Located on the east side of I-75 from STA 381+70 to STA 393+70 with an average height of 10.2 feet.
- Hilton Garden Inn Barrier - Located on the east side of I-75 from STA 372+60 to STA 379+60 with an average height of 17.6 feet.
- LaQuinta Inn Barrier - Located on the east side of I-75 from STA 369+60 to STA 379+60 with an average height of 16.2 feet.
- Arlington Heights East Barrier - Located in the Split on the west side of northbound I-75 from STA 139+00 to STA 177+00 with an average height of 15.3 feet.
- Smalley Barrier - Located on the east side of I-75 from STA 220+00 to STA 229+00 with an average height of 18.5 feet.
- Elliot Barrier - Located in the Split on the east side of southbound I-75 from STA 130+50 to STA 137+50 with an average height of 8.4 feet.
- Reading North Barrier - Located on the east side of northbound I-75 from STA 166+00 to STA 200+00 with an average height of 16.5 feet.

Special land-use locations eligible for insulation or barrier, shown on Exhibit C, are:

- Mount Vernon Nazarene University Barrier - Located on the west side of I-75 from STA 388+00 to STA 399+00 with an average height of 9.2 feet.
- Princeton High School Barrier - Located on the west side of I-75 from STA 371+00 to STA 389+00 with an average height of 15.5 feet.

- St Rita's School Barrier - Located on the west side of I-75 from STA 309+00 to STA 317+00 with an average height of 18.3 feet.
- Three Lincoln Height Churches Barrier - Located on the west side of I-75 from STA 248+50 to STA 258+00 with an average height of 16.3 feet.
- Lockland Schools Barrier (overlaps G3 Barrier) - Located on the west side of southbound I-75 from STA 189+50 to STA 205+00 with an average height of 15.6 feet.

Twelve additional noise barriers were not recommended because their location did not achieve a 5 dBA noise reduction at any impacted receptor. These non-feasible barriers, shown on Exhibit C, include:

- | | |
|-------------------------------|-------------------------|
| ▪ East Sharon Road Barrier | ▪ Ronald Regan Barrier |
| ▪ Landmark Barrier | ▪ Longview Barrier |
| ▪ Adams Barrier | ▪ Sharonville Barrier |
| ▪ Split Barrier | ▪ Shepherd Barrier |
| ▪ Wyoming Barrier | ▪ Reading South Barrier |
| ▪ Anthony Wayne South Barrier | ▪ Summit Barrier |

The project in its entirety will be completed in Phases over several years. All necessary public involvement meetings will be conducted after Stage 1 plans have been developed by construction Phase. Based on the above discussed planned noise walls, public involvement and coordination, it is anticipated that impacts from this project with regard to noise will be minimal. A copy of the coordination letters is included in Appendix G. A final noise analysis will be prepared during design to confirm noise barrier heights, including line-of-sight analysis.

COMMUNITY IMPACTS

The study area is comprised of portions of the villages of Lockland, Lincoln Heights, Arlington Heights and the Cities of Evendale, Reading, Sharonville, Glendale, and Cincinnati. The Cities of Wyoming and Woodlawn are located outside of the study area, but gain primary access from I-75, therefore they have been included as project stakeholders. Descriptions of these areas are included in the *Existing and Future Conditions Report* (see Appendix A).

Village of Lockland

The Village of Lockland gains access to I-75 currently via the Davis Street ramp from I-75 northbound and from both the Shepherd Lane interchange and the Cooper Avenue ramp from I-75 southbound. The Preferred Alternative will close the Davis Street and the Cooper Avenue ramps. These closures will alter how the citizens of Lockland access their community. In the future, access to/from I-75 will be from an improved Shepherd Lane interchange to the north and a new Anthony Wayne interchange to the south. These changes will be an adjustment, but access to I-75 will be safer and more efficient.

Village of Lincoln Heights

The Village's access to I-75 is currently via the Mangham Drive ramps from a collector system parallel to I-75 southbound and the Shepherd Lane partial interchange from I-75 northbound. Due to the design deficiencies along this section of the corridor, particularly the safety concerns associated with the collector system, the Mangham Drive ramps will be relocated to form a full interchange at Shepherd Lane at the completion of the project. A portion of Mangham Drive will also be relocated to the west one block to accommodate the Limited Access requirements of the improved Shepherd Lane interchange. In addition, the deficient collector system will be removed and thus an at-grade stop controlled intersection along the corridor, Magnolia Street will also be removed. Those wishing to access Magnolia will now exit to the south at Shepherd Lane. While access to Lincoln Heights will be altered, the new full interchange at Shepherd Lane and the removal of the C-D system provides improved safety and efficiency to the residents.

Arlington Heights

Access to I-75 to/from Arlington Heights for the majority of residents is at the Galbraith Road interchange. The only change at the Galbraith access point will be the conversion of a left-hand exit ramp to a right-hand exit ramp. The residents of Arlington Heights will experience little impacts to their access.

Evendale

The impacts of the *I-75 Thru the Valley Project* in Evendale are associated with the changes in access to the GE industrial facility. Currently, GE is accessed from a collector system parallel to I-75 through a series of loop ramps and at-grade, stop-controlled intersections, the Glendale-Milford interchange and the Shepherd Lane interchange. I-75 in the vicinity of the collector system, has the highest accident rate in the study area, therefore the collector system will be eliminated. When the collector system is eliminated, access to the GE facility will be via an improved interchange at Glendale-Milford Road, an improved interchange at Shepherd Lane and an additional exit ramp from I-75 southbound directly to a newly constructed north-south public road, currently named "GE Parkway". GE Parkway will be a two-way public road which will serve as access to the GE facility parking lots, Glendale-Milford Road and Shepherd Lane. Extensive analysis was completed as part of the project to ensure appropriate future access to GE in Evendale and to analyze the affects of GE traffic on the interstate system. The Preferred Alternative incorporates the results of this analysis.

Reading

The City of Reading gains access to I-75 via the Galbraith Road interchange and the Davis Street ramps. Improvements will be made to the Galbraith Road interchange and the access "touchdown" points will not be altered, therefore there is not affect to the City of Reading. The closure of the Davis Street ramps will be an impact to the City. Currently, Davis Street serves as the access to Reading's business district. While access to the business district can be adequately gained from Galbraith Road and Shepherd Lane, this will be a change to the business owners in the area.

Sharonville

Access to Sharonville from I-75 is via the Sharon Road interchange. As part of the Preferred Alternative, the Sharon Road interchange will be improved to accommodate future traffic;

therefore access to Sharonville after the completion of the project will be improved.

Glendale

The Village of Glendale also accesses I-75 from the Sharon Road interchange. As stated above access to Sharon Road will be improved, therefore future access to the Village of Glendale will be improved.

Cincinnati

The only change to the Galbraith Road interchange will be relocating a left-hand exit to a right-hand exit from I-75 northbound, therefore access at this point will remain constant. The community of Hartwell will also gain additional access to/from I-75 southbound via the newly constructed Anthony Wayne ramps. Therefore, access to the community will be improved.

Wyoming

Access to the City of Wyoming from I-75 is via the Galbraith Road and Shepherd Lane interchange. As both of these interchanges will be improved to accommodate future traffic, access to Wyoming will also be improved.

Woodlawn

Access to Woodlawn from I-75 is from the Glendale-Milford Road interchange. As part of the Preferred Alternative, the Glendale-Milford Road interchange will be improved to accommodate future traffic; therefore access to Woodlawn will be improved after the completion of the project.

Based on the information provided through extensive public involvement activities and development of maintenance of traffic plan that will insure local access during construction, it is anticipated that impacts from this project with regard to the local communities will be minimal. The local communities will benefit from an improved facility with better traffic flow and access.

PROPERTY IMPACTS AND RELOCATIONS

Following is a summary of the anticipated property impacts of the project (see Exhibit D). Existing right-of-way used to estimate impacts for prior documents was based upon Hamilton County Auditor mapping obtained through CAGIS, the county GIS system. Existing right-of-way has been updated based upon surveyor data. There are 1.45 acres of temporary right-of-way needed, 58.56 acres of permanent right-of-way needed for a total of 60.01 acres needed. With regard to permanent right-of-way, there are seventy-eight parcels that are total takes and 420 parcels that are partial takes. With regard to temporary right-of-way, there are five parcels that are total takes and 60 parcels that are partial takes. Additional information can be found in the PAV in Appendix A.

Commercial Properties

The project is currently anticipated to involve the relocation of ten commercial/industrial properties (see Exhibit D), they are:

- 1-Vacant Store Front - 100 Home Avenue - Village of Lockland

- 2-Vacant Grocery Store- 101 Home Avenue – Village of Lockland
- 3-Vacant Commercially Zoned Property - 506 Forrer Street – Village of Lockland
- 4-Cook’s Garage – 733 Forrer Street – Village of Lockland
- 5-Wyoming Lodge - 800 Shepherd Avenue – Village of Lockland
- 6-Hensley Industries - 125 City Center Drive – Village of Lockland
- 7-Local Retail Store - 8471 Anthony Wayne Avenue – Village of Lockland
- 8-Stearns and Foster - Brown Street– Village of Lockland
- 9-Reading Storage - 325 Clark Road – City of Reading
- 10-Lewis Animal Hospital - 451 Galbraith Road – City of Reading

The majority of commercial relocations will be within the Village of Lockland, as are the majority of residential relocations. This is due to the fact that the interstate northbound and southbound interstate lanes are split in this area, and thus the Village is separated into two parts adjacent to the interstate. The two largest properties, Stearns and Foster and the Hensley Properties are currently abandoned industrial facilities. The project team has worked with both property owners during the *I-75 Thru the Valley Project* to ensure that the redevelopment opportunities for these properties remains after the completion of the interstate improvements. In fact, these properties will not be relocated, but instead redeveloped on the remaining parcels. Cook’s Garage is a locally owned family car repair shop. In discussions with the property owners, they are prepared to relocate when the interstate project begins. It is unknown whether a property is available in Lockland for relocation; therefore, it is possible that this business may be lost to the Village.

The City of Reading will have two relocations due to the project; Reading Storage and the Lewis Animal Hospital. Reading Storage will present a unique challenge with relocation, as the facilities are rented by individuals and contact will need to be made with all tenants. Lewis Animal Hospital is prominently located on Galbraith Road just off of the I-75 exit. According to the Conceptual Relocation Assistance Program Report, it is anticipated that there would be adequate retail space available for relocation of the Animal Hospital within Reading.

In coordination with the business owners, no substantial issues have been identified regarding relocation or acquisition of right of way for the *I-75 Thru the Valley Project*.

Residential Relocations

The project is currently anticipated to involve the relocation of 49 residential buildings including 37 single family residences and 12 multi-family residences, representing a total of 68 households. It should be noted that two parcels are zoned residential but are currently vacant with no structure. These buildings are either owner occupied (22), single tenant (9), multiple tenant (14), or owner/tenant mix (4) households.

A Relocation Assistance Program Conceptual Site Survey Report conducted by M•E companies was completed and included in the I-75 Thru The Valley Conceptual Site Survey

Reports, August 2006 (see Appendix A - CAS - Appendix E.) A survey of the project area was completed based on a visual survey of the project area and aerial photographs. The findings of the RAP Conceptual Survey were based upon the work limits as known during Step 5. At that time several mainline, interchange and local options alternatives were being considered. During the alternatives development process various components of these options were combined to develop three feasible alternatives. Eventually the preferred alternative was developed from a combination of elements from feasible alternatives B and C. The overall project footprint has been reduced considerably from Step 5 so it is reasonable to assume that the findings from the RAP remain valid.

Based upon the evaluation of available replacement housing in the study area, it is anticipated that the relocations can be made with no divisive or disruptive effect on the community or the separation of residences from community facilities. It is also expected that the relocates can be moved into decent, safe, and sanitary replacement housing within their financial means and without regard to race, color, religion, sex, national origin or handicap. "Housing of last resort" will not be an issue as there is adequate housing available on the market within the ranges of the impacted properties.

The acquisition and relocation for all residences displaced for new highway right-of-way is conducted in accordance with state and federal directives, in compliance with the Federal Uniform Relocation and Real Property Acquisition Policies Act of 1970, the Surface Transportation and Uniform Relocation Assistance Act and 49 CFR Part 24.

No substantial impacts to established neighborhoods are expected. The greatest number of residential relocations (16) are within the Village of Lockland along Shepherd Avenue, in the vicinity of West Forrer Street and along Central Avenue. Each of these locations borders the interstate. Coordination with affected property owners has not identified any concerns regarding community impacts of these relocations.

Overall, based on the information provided in the RAP, and extensive public involvement activities it is anticipated that impacts from this project with regard to relocations will be minor.

CULTURAL RESOURCES

This section discusses the identification of, and impacts on, properties within the project area that are eligible for, nominated to, or listed on the National Register of Historic Places (NRHP).

History/Architecture

A Phase 1 history/architectural survey was completed in 2004 (see Appendix C). Of the resources identified, five were recommended for further work to determine their eligibility for the NRHP if they are determined to be within the Area of Potential Effect (APE) of the proposed scope of work. After coordination with ODOT and the Ohio Historic Preservation Office (OHPO) an additional 10 properties/neighborhoods were also recommended for additional investigations. These findings were included in a letter from ODOT to the OHPO on February 16, 2005. OHPO indicated agreement with those findings on March 28, 2005.

In May of 2006 the ODOT - Office of Environmental Services (OES) and the OHPO conducted a field review of the Feasible Alternatives to determine the APE. These findings were included in a letter from ODOT to the OHPO on July 14, 2006. OHPO indicated agreement with those findings on August 21, 2006. Based on this review the following properties and/or areas, shown in Table 4, require additional consideration to determine National Register eligibility.

Table 4: Properties Requiring NRHP Determination

Resource Name	Location/Designation
Portions of the Lincoln Heights Neighborhood	South from Lindy Avenue to Shepherd Lane between Mangham Drive/Lockland Drive, including Lincoln Heights Elementary School.
GE Aircraft Engine Plant	HAM-7623-50
Lockland Memorial Bandstand	HAM-2607-60
The Sterns and Foster Complex	HAM-2608-60, 2622-60, and 7625-60
Six Tudor style residences on Eggerding Drive	102,105,106,107,108,111, and 112
Lockland High School	HAM-2534-60
North and south sides of Benson Street	From Benson Street bridge, to Mill Street. Include west side of Mill Street, north to vine Street and south to Bradley Street. Includes HAM-5989-40 through 5995-50
Mortimer Matthews House	HAM-7622-49
St. Rita’s School for the Deaf	HAM-7624-50
503 West Forrer	HAM-2535-60

In September of 2009 a Phase II Cultural Resources investigation of the listed properties in Table 4 was completed. Based on this evaluation, the following resources are recommended as eligible for inclusion on the NRHP: St. Rita’s School for the Deaf, GE Plant and a portion of the Sterns and Foster Complex (Office Building). Coordination with ODOT - OES and the OHPO included a boundary determination for each resource. ODOT - OES and OHPO concurred in this determination. These findings were included in a letter from ODOT - OES to the OHPO on 10-23-2009. OHPO indicated agreement with those findings on 11-05-2009.

A copy of the Phase II report can be found in Appendix C. A copy of the coordination letters is included in Appendix G.

Archaeology

A Literature Review was conducted for the proposed scope of work. This review did not identify any previously recorded archaeological site in the project area. Extensive mapping was also collected to determine previous land use in the project area. Based on this, eleven areas located outside existing right-of-way but within the APE were subject to a Disturbance Assessment. This assessment verified varying degrees of disturbance throughout the APE in those areas.

The disturbance assessment concluded that no significant archaeological sites are present within the project APE. This determination was provided to the OHPO by letter dated December 22, 2008. OHPO concurred on January 6, 2009. The complete Phase I Report can be found in Appendix C. A copy of the coordination letter is included in Appendix G.

Effects

For each property that was determined eligible for the National Register and within the APE, ODOT - OES evaluated the effects of the project with the following conclusions:

The proposed scope of work includes taking new right-of-way from within the NRHP boundaries of one property. Approximately 12.3 acres of permanent right-of-way and 0.24 acres of temporary right-of-way will be required from the GE Aircraft Engine Plant. The majority of this take is confined to the facility's existing parking lot. This take will not adversely affect the characteristics that qualify it for inclusion on the NRHP. Therefore, ODOT proposed a finding of "no adverse effect" for this property. By letter dated January 21, 2010, ODOT requested concurrence from the OHPO that the project as proposed, including mitigation, will not adversely affect the activities, features, and attributes that qualify the GE Aircraft Engine Plant for protection under Section 4(f). ODOT also stated their intent to request a *de minimis* Section 4(f) finding. OHPO concurred with this determination on February 8, 2010. A copy of the letter is included in Appendix G.

The remaining properties will not be impacted (no temporary or permanent right-of-way) and are proposed to have "no adverse effect" or "no historic properties affected." In addition, no known significant archaeological resources will be adversely affected. ODOT proposed a finding of "no historic properties affected" for the project by letter dated January 21, 2010. The OHPO concurred with the finding of "no historic properties affected" on February 8, 2010. A copy of the letter is included in Appendix G. By inclusion in this EA of the above mentioned coordination, FHWA has concurred that a *de minimis* Section 4(f) finding is applicable to the above property.

Based on the above discussed investigations and coordination with FHWA and the OHPO, it is anticipated that impacts from this project with regard to cultural resources will be minimal.

PARKS AND RECREATION AREAS

The literature reviews conducted for this project identified several public parks and recreation areas within the study area. Additional parks immediately adjacent to the project area include the following:

- Robert Flowers Civic Center
- Koenig Park
- New Morton Fields
- Gardner Park
- Centennial Park
- Vorhees Park
- Village of Lockland Veterans Memorial Park
- Richardson Park

The Preferred Alternative will impact the Village of Lockland Veterans Memorial Park. It is owned and administered by the Village of Lockland. The park is located on an irregularly shaped lot bounded by I-75, Williams Street and Wyoming Street and is .92 acre in size. The facility operates as a passive recreational facility and picnic area. It also contains a building that houses the Village Historical Society and meeting rooms. A take of 0.04 acre of temporary right-of-way for construction of a retaining wall along existing I-75 is proposed. Impacts to the other listed facilities are not anticipated. Based on consultation with the Village of Lockland and offered mitigation of impacts, it was determined that a *de minimis* finding would be appropriate. By inclusion in this EA of the above mentioned consultation, FHWA has concurred that a *de minimis* Section 4(f) finding is applicable to impacts at Veterans Memorial Park. In view of the coordination with the Village of Lockland, FHWA, and proposed mitigation of impacts, it is anticipated that impacts from this project with regard to Section 4(f)-Parks and Recreation Areas- will be minimal. A copy of the Section 4(f) coordination, dated October 7, 2009, is included in Appendix G.

ECOLOGICAL RESOURCES

An Ecological Survey Report was completed and reviewed by ODOT - OES (see Appendix E). ODOT - OES coordinated the report with the U.S. Army Corps of Engineers (USACE), the Ohio Department of Natural Resources (ODNR), the U.S. Fish and Wildlife Service (USFWS), OEPA, and the U.S. Environmental Protection Agency (USEPA). Copies of their comments with responses are included as Appendix G.

Streams

A total of six stream segments will be impacted by the preferred alternative. Table 5, shown below, contains a summary of each resource.

Table 5: Extent of Stream Impacts within the Preferred Alternative

Stream ID	Stream Name (14 Digit HUC)	Provisional (P) and Assigned (A) Aquatic Life Use Designations	QHEI/ HHEI Score	Length of Stream in Study Area (l.f.)	Preferred Alternative Impact (l.f.)
C	UT to Mill Creek (05090203010020)	Class I (P)	15	2,700	76
D	UT to Mill Creek (05090203010020)	Modified Class II (P)	58	2,908	526
E	UT to Mill Creek (05090203010020)	Class I (P)	76	1,762	330
F1	Mill Creek (05090203010020)	WWH (A)	54.5	14,282	295 Length of Area of Potential Impact
F2	Mill Creek (05090203010040)		52		
G	West Fork Mill Creek (05090203010030)	WWH (A)	58.5	7,919	110 Length of Area of Potential Impact
Total	---	---	---	29,571	932†

† Linear feet of impact for Stream F1, Stream F2, and Stream G were not included in the sum of total stream impacts since potential impacts would stem from possible piers below the ordinary high water mark and the designs for these structures have not been completed by the time of this report submittal. Impacts to Streams F1, F2, and G may or may not occur.

Impacts to the existing riparian zone habitat will be minimized to the maximum extent practicable. Areas disturbed by construction activities shall be seeded to prevent erosion of sediments into waters of the United States. All soil erosion and sediment control measures shall be in place prior to any excavation, grading or filling and shall remain in place until construction is completed and the area is stabilized. Based upon current information, ecological impacts are limited to a combined 932 liner ft of stream impacts, shown on Exhibit E, between streams C, D, E, F1 and F2 (Mill Creek and Stream G (West Fork Mill Creek)). Streams A and B are not impacted. Based upon the magnitude impacts, it is anticipated that an Individual Section 404 and Section 401 WQC will be obtained. Mitigation will be offsite, potentially through credits. During the preparation of the 404/401 permits, additional avoidance and minimization techniques will be identified to further lower impacts to these resources.

In a letter dated July 22, 2008 the USACE offered a jurisdictional determination for the preferred alternative. This information will be used to tabulate the final impacts for the permits. Impacts on regional water quality are expected to be relatively minor. Primary impacts will involve the removal of vegetation that will indirectly affect aquatic habitat. Secondary impacts will be limited to siltation during periods when soils in a stream's watershed are exposed during construction. These impacts can be minimized through the use of BMP's found in ODOT's *Construction and Material Specifications Manual*. The Level 1 Ecological Survey Report provides discussion on each impacted stream. In an e-mail dated October 12, 2007 OEPA stated that the provided information adequately addressed their concerns. Per the November 9, 2007 comments received from ODNR, no in-stream work will occur between April 15 and June 30. This includes streams F1/F2 (Mill Creek) and Stream G (West Fork Mill Creek).

The project will be built in eight separate construction phases over several years as funding becomes available. Each phase will be in compliance with the current applicable regulations at the time of construction. (See Appendix E - Level 1 ESR and Appendix G - Agency Coordination). Streams impacts are limited to low quality waters and are distributed throughout the project area with impacts to any one stream ranging from 76 lf to 526 lf. These impacts will be mitigated through the 404/401 permitting process including avoidance and minimization. In view of the coordination with the USACE, OEPA, USF&WS and proposed mitigation, it is anticipated that impacts from this project with regard to Streams will be minimal. Any and all necessary plan notes will be included in the final plans.

Wetlands

A total of four wetlands comprising approximately 0.82 acre were identified within the 7.27-mile long study area along IR 75. These resources will not be impacted by the preferred alternative. Table 6, shown below, contains a summary of each resource.

Table 6: Summary of Wetland Habitat Types, ORAM Scores, Adjacency, and Area

Wetland Identifier	Wetland Habitat Types ¹	ORAM Score (Category) ²	Isolated or Adjacent ³	Area (acre)
A	Palustrine Aquatic Bed/ Palustrine Emergent	26(1)	Adjacent	0.16
B	Palustrine Emergent/ Palustrine Scrub-Shrub	24(1)	Adjacent	0.43
C	Palustrine Emergent	16(1)	Isolated	0.12
D	Palustrine Emergent	15(1)	Adjacent	0.11
Total Approximate Wetland Acreage				0.82

¹ Based on Cowardin, *et al.* (1979) classification system

² ORAM version 5.0 utilized for determining wetland categories

³ Based on SWANCC *v.* USACE, *et al.*, 2001

Best management practices and practices for soil erosion control shall be fully complied with, as well as, all of the regulations and conditions associated with the required SWPPP and NPDES permit. The wetland areas will be delineated with construction fence or other similar fencing during construction and will not be used for the storage of equipment, materials or used as a staging area. Any and all necessary plan notes will be included in the final plans.

Other Waters

There are two ponds within the study area. Pond A is 0.72 acre in size and Pond B is 2.56 acres in size. The total area of ponds in the project area is approximately 3.28 acres. The ponds are typical man-made detention ponds with steep slopes and are void of aquatic vegetation around the perimeter. Pond A had a concrete wall lining the perimeter. Neither pond will be impacted by the preferred alternative.

It was determined that only one ditch was indentified that met the criteria of jurisdictional ditch. This resource will not be impacted by the preferred alternative. Table 7 contains a summary of this resource.

Table 7: Summary of Jurisdictional Ditches within the Study Area*

Ditch Identifier	Rationale	Ditch through Hydric Soil?	Photo #	Dominant Vegetation	Average width (feet)	Length (feet)
JD-A	Drains Wetland A to Stream A	No	16	Broad-leaf Cattail	3	233
Total Length of Jurisdictional Ditches within Study Area						233

*All other ditches within the study area that are not listed in this table were not determined to be jurisdictional based on the guidance provided by the U.S. Army Corps of Engineers (1999) for evaluating ditches.

(See Appendix E - Level 1 ESR and Appendix G - Agency Coordination).

Terrestrial

The preferred alternative will impact approximately 9.6 acres of Mixed Deciduous Forest and 261.1 acres of Residential/Commercial/Disturbed habitat. No high quality terrestrial habitat will be impacted by the preferred alternative. Any area disturbed by construction activities will be reseeded/ replanted with appropriate native species. Based on the Level 1

ESR and coordination with resources agencies, it is anticipated that impacts from this project with regard to terrestrial impacts will be minimal. Any and all necessary plan notes regarding re-vegetation of disturbed areas will be included in the final plans.

Threatened and Endangered Species

The federally listed species whose range includes Hamilton County are the endangered *Myotis sodalis* (Indiana Bat) and *Trifolium stoloniferum* (running buffalo clover) and candidate species *Plenthobasus cyhyus* (sheepnose mussel). With regard to the Indiana bat, a majority of this project falls within the urbanized area. In the non-urbanized area, eight roost trees will be removed for this project. This project falls under the PC1-a category for the Indiana bat programmatic and will not require the use of cutting date restrictions. This project May Affect, but is Not Likely to Adversely Affect this species. Concerning potential impacts to Running Buffalo Clover, although at one time, suitable habitat for this species may have existed in this study area, it is now overgrown with invasive honeysuckle and other species.

No habitat for this species exists within the project area; therefore this project will have No Effect on this species. The streams that will be impacted by this project are either too small or too degraded (Mill Creek) to offer suitable habitat for the sheepnose mussel, therefore this project will have No Effect on this species.

Natural Heritage maps were reviewed for the presence of state and federally listed endangered and threatened species located within 1 mile of the project area. A record for the Deam's Three-seeded Mercury (*Acalypha virginica* var. *deamii*, T) is located over ½ mile west of the southern terminus of the project area in Caldwell Park, a city park. This species is found in a variety of moist semi-shady conditions, such as wetlands, stream banks, roadsides, and thickets. Suitable habitat exists for this species within the project area, mostly near Mill Creek and West Fork Mill Creek. This species was not found during the ecological survey conducted during the middle of October 2004 and on April 27, 2006. No impacts to this species are expected. The project is also within the range of the state endangered *Cryptobranchus alleganiensis alleganiensis* (hellbender). This species has not been recorded from the project area. However since riparian corridor will be impacted a survey of the project area should be conducted by an approved herpetologist in advance of construction activities to determine the presence or absences of the species. (See Appendix E - Level 1 ESR and Appendix G - Agency Coordination).

Based on the Level 1 ESR, required herpetology survey for *Cryptobranchus alleganiensis alleganiensis* (hellbender) and coordination with resources agencies, it is anticipated that impacts from this project with regard to threatened and endangered will be minimal. If the *Cryptobranchus alleganiensis alleganiensis* (hellbender) is found in the project area additional coordination with the ODNR will be required.

HAZARDOUS WASTE

An Environmental Site Assessment (ESA) Screening, Phase I ESA, and Phase II ESA have been reviewed and accepted by ODOT - OES (see Appendix F). The Phase I ESA recommended Phase II ESA investigations at three sites within the project limits: GE, former Celotex Corporation Site and Celotex Dump Site. Subsequently, a separate Phase I was conducted using information provided by the new owners of the former Celotex Corporation site who had conducted their own ESA studies on the property. That report

recommended no further investigations. Phase II studies were conducted for the other two locations. ODOT - OES commented that that they concur with the recommendations that Plan Notes for asbestos containing materials and solid waste should be developed and incorporated into the plans for both of the former Celotex properties.

There is one former landfill area located within the project limits. Excavation, including drilling work within these areas, requires a permit from the OEPA under Rule 27-13. A plan note will be included in the contract plans that will govern contractor work in and near landfills in order to maintain compliance with applicable regulations. Coordination with OEPA will be on-going concerning the Rule 27-13 process. Copies of their comments with responses are included as Appendix G.

Based on the ESA investigations and coordination with ODOT and OEPA, it is anticipated that impacts from this project with regard to hazardous wastes will be minor.

ENVIRONMENTAL JUSTICE

During project development, the project team identified the presence of minority and low income populations within the study area that would be subject to the Executive Order on Environmental Justice. While the project's impacts are dispersed along the project length the project area contains a concentration of EJ communities throughout the corridor. These 'target populations' were included in the discussion of the Disadvantaged Population Analysis found in the Current Studies and Analysis section of the CAS (see Appendix A). Disproportionate effects tests were also conducted following the identification of target population areas. This discussion was included in Chapter 3 of the AFA, which can be found in Appendix A. The disproportionate effects tests concluded that while minor impacts are expected in regard to the Displacements of Persons, Businesses, Farms, or Nonprofit Organizations, no disproportionately high and adverse human health or environmental effects on minority and low income populations are expected as a result of the project. Environmental Justice issues have not been raised during public involvement activities and no Environmental Justice impacts are anticipated as a result of the project.

SECONDARY AND CUMULATIVE IMPACTS

It should be noted that there are two other projects planned along the I-75 Corridor. The first is the *I-75 Mill Creek Expressway Project (HAM-75-2.30 PID 76257)* located immediately south of the *HAM-75 10.10* project. Based on an approved *Environmental Assessment* that project will have impacts on residential and commercial business, parks, stream impacts/ terrestrial impacts, and may affect properties with contaminated soils. The principal impacts from the *I-75 Mill Creek Expressway Project* consist of right-of-way takes from seven parks. These impacts consist of 0.8 acres of permanent right-of-way and 1.64 acres of temporary right-of-way. Mt. Storm Park has the greatest total impacts with 0.28 acres of permanent right-of-way and 1.64 acres of temporary right-of-way. In comparison the *I-75 Thru the Valley Project* has 0.04 acres of temporary right-of-way at Veteran's Memorial Park. Therefore, the cumulative impacts are negligible. The principal impacts from the *I-75 Thru the Valley Project* include approximately 932 linear feet of stream impacts. This amount combined with the 39 feet of stream impacts from the *I-75 Mill Creek Expressway Project*, produces a total of 971 linear feet of impacts. Based on obtaining all necessary 404/401 permits and associated mitigation the cumulative impacts are negligible.

The second project, the *I-75 Brent Spence Bridge* (KYTC Project Item No. 6-17) is currently in preliminary development. The CAS for the project was completed in April of 2009. That document recommends carrying forward two feasible alternatives plus the no-build. Both build alternatives have very similar impacts to the natural and built environment. These include impacts to residential and commercial business, 4(f) resources (historic properties and parks), community resources, the Ohio River and may affect properties with contaminated soils.

Because the *Thru the Valley, Mill Creek and Brent Spence Bridge* projects are an upgrade of an existing interstate facility within a highly developed area, no noteworthy secondary or cumulative impacts are anticipated. For more information, please refer to the discussion included in Current Studies and Analyses of the CAS, and Environmental Summary of the AFA, included in Appendix A.

ENVIRONMENTAL IMPACT SUMMARY

The project is anticipated to have the following environmental impacts:

- The project is estimated to require residential relocations of 46 buildings/61 households. Commercial relocations are anticipated to 10 properties. No substantial concerns are associated with relocations.
- Park impacts are expected to include:
 - *Veterans Memorial Park* - a take of 0.04 acre of temporary right-of-way for construction for a retaining wall along existing I-75 is proposed. Grassy area and five trees impacted.
- Minor property impacts to GE. No adverse effects are anticipated on cultural resources.
- Stream impacts consisting of approximately 932 liner ft of stream impacts, between streams C, D, E, F1 and F2 (Mill Creek and Stream G (West Fork Mill Creek), with the area of work to be determined during bridge studies.
- A loss of 9.6 acres of mixed deciduous forest throughout the project area.
- Noise impacts are predicted on adjacent sensitive receivers. Noise mitigation measures are recommended at twenty-three locations. Based on this, all necessary public involvement meetings will be conducted after Stage 1 plans have been developed by construction Phase.
- Construction plan notes (for management of contaminated soils) are recommended for three properties evaluated in the Phase I Environmental ESA. Three properties were recommended for Phase II ESA in subsequent steps. Phase II ESA concluded that no further investigations are needed. One property will require authorization from OEPA under a Rule 13 permit prior to any excavation or drilling activities.

ENVIRONMENTAL COMMITMENTS AND MITIGATION

Following is a summary of currently anticipated environmental commitments for the project. Additional commitments are likely to be developed through ongoing coordination and permitting.

Wetlands/Streams – The project in its entirety will be completed in Phases over several years. Based on this, all necessary 404/401 water quality certification permits will be acquired prior to construction activity by construction Phase. Per the November 9, 2007 comments received from ODNR, no in-stream work will occur between April 15 and June 30. Identified wetlands will be fenced during construction to protect them from ancillary construction impacts. Any and all necessary plan notes will be included in the final plans.

Parks – In addition to compensation for impacted property, mitigation commitments developed through coordination with park officials include:

- *Veterans Memorial Park* – re-vegetation of impacted areas along the retaining wall according to agreed upon replacement ratio utilizing planting plan provided by the Village of Lockland and the restoration of impacted walking path. Fencing along the new retaining wall should match that provided on the west side of I-75 at Richardson Park.

Threatened and Endangered Species – The project will comply with ODOT OES Technical Guidance (TGECO0107) for Indiana bat habitat. Based on coordination with USF&WS no tree cutting restrictions are required. The project is also within the range of the state endangered *Cryptobranchus alleganiensis alleganiensis* (hellbender). A survey of the project area in advance of construction should be conducted by an approved herpetologist to determine the presence or absences of the species. If the *Cryptobranchus alleganiensis alleganiensis* (hellbender) is found in the project area additional coordination with the ODNR will be required.

Best Management Practices – Impacts to the existing riparian zone habitat will be minimized to the maximum extent practicable. Areas disturbed by construction activities shall be seeded to prevent erosion of sediments into waters of the United States. All soil erosion and sediment control measures shall be in place prior to any excavation, grading or filling and shall remain in place until construction is completed and the area is stabilized.

Noise – Install noise mitigation measures at twenty-three recommended locations as desired by affected property owners through public input meetings. Separate meetings will be held with affected stakeholders regarding noise walls in their communities. Investigate Mount Vernon Nazarene University, Princeton High School, St Rita’s School, Three Lincoln Height Churches (Mt. Moriah Baptist Church, Towns Chapel CME Church and First Baptist Church), and Lockland Schools for potential noise insulation.

Environmental Site Assessment – Three sites involve inclusion of plan notes for handling of contaminated soils. These notes will be summarized for each construction project and provided to the designers for inclusion in the plans. Rule 27-13 permits will be required for work in any landfill areas. A plan note will be included in the contract plans that will govern contractor work in and near landfills in order to maintain compliance with applicable regulations. Any structures that will be removed will require an asbestos survey before demolition can commence.



Air Quality - The project in its entirety will be completed in Phases over several years. Based on this, all necessary additional studies for PM2.5 will be conducted by construction Phase after Stage 1 plans have been developed. Any and all necessary plan notes will be included in the final plans.

Public Notifications During Construction - ODOT will issue notifications through local media and to public officials to provide notice of changes in travel patterns during construction.

PREFERRED ALTERNATIVE

Based upon information presented in this Environmental Assessment the following alternative best satisfies the project's purpose and need and minimizes impacts to the natural and human environment. FHWA and ODOT are in agreement that the following alternative is the Preferred Alternatives for HAM-75-10.10, the *I-75 Thru the Valley Project*. Detailed descriptions of alternatives considered and dismissed are included in the PSR, CAS, AFA, and PAV documents included in Appendix A.

The Preferred Alternative would add one lane to I-75 in each direction with auxiliary lanes where needed to achieve interchange spacing requirements (see Exhibit A). The Preferred Alternative will not only correct the severe safety problems along the corridor but will also include a number of access improvements as described below.

- The Galbraith Road interchange will maintain its full access to I-75. The I-75 southbound and Galbraith Road ramps, along with the Galbraith Road to I-75 northbound ramp would remain as they are today, with the exception of the southbound ramp to Galbraith Road exiting farther north and running parallel to I-75 via a collector-distributor road. The I-75 northbound to Galbraith Road left exit would be replaced with a right exit connecting with Galbraith Road in its current location.
- The SR 126 interchange will be improved by adding two of the three missing movements. A new ramp connecting SR 126 westbound to I-75 northbound will be added, as well as a new ramp connecting I-75 southbound to SR 126 westbound.
- The Davis Street ramp from I-75 northbound will be closed due to the proximity to the Galbraith Road to I-75 northbound ramp and the Shepherd Lane interchange.
- The Cooper Avenue ramps to and from I-75 southbound will be closed without replacement.
- A new connection to Anthony Wayne Avenue will be added to and from I-75 southbound to provide additional access. The ramps would be placed south of the former Cooper Avenue ramps.
- The C-D system between Glendale-Milford Road and Shepherd Lane will be eliminated in both directions due to high accident rates. Elimination of this C-D roadway also results in the following access point closures/removals.
 - The Mangham Drive Ramps
 - The GE loop ramps
- Construct GE Parkway, a 2-lane local road east of I-75 between Shepherd Lane and Glendale-Milford Road to provide access to the GE employee parking lots whose access was lost through removal of the C-D road.
- The Shepherd Lane/I-75 northbound exit ramp will remain in its existing configuration, but a new northbound entrance ramp will replace the existing loop ramp and a new tight diamond at Shepherd Lane will provide access to and from I-75 southbound.

- A new local road will be constructed to reconnect Shepherd Lane and Mangham Drive in Lincoln Heights.
- A new ramp connecting I-75 southbound ramp to the GE local road will also be constructed.
- The Glendale-Milford Road interchange will receive much needed capacity improvements to handle future traffic flows in the future.
- The Sharon Road interchange will receive capacity improvements to handle future traffic flows.

Auxiliary Lanes will be placed in the following locations:

- Along I-75 northbound and southbound between Paddock Road to SR 126.
- Along I-75 northbound and southbound between Shepherd Lane and Glendale-Milford Road.
- Along I-75 northbound and southbound between Glendale-Milford Road and Sharon Road.
- Along I-75 northbound and southbound between Sharon Road and I-275.
- Shepherd Lane to the Galbraith/Anthony Wayne C-D exit, southbound.

SCHEDULE/PHASING PLAN

A phasing plan for improvements along I-75 was prepared by the project team using ODOT’s estimating software for the project. The resulting construction years and segments with identified funding as of 2009 are shown in Table 8. Exhibit F illustrates the project phasing schematic for the *I-75 Thru the Valley Project*.

Table 8: Project Phasing

Phase	Project Description	Estimated Construction Start
1	I-75 from Shepherd Lane to Glendale-Milford Road and Local Roads (PID: 82288)	2013
2	I-75 from Paddock Road to Galbraith Road (PID: 76256*)	2020
3	Norfolk Southern RR Bridge over I-75 SB (PID: 76256*)	2020
4	I-75 SB Split from Galbraith Road to Shepherd Lane (PID: 76256*)	2016
5	I-75 from Glendale-Milford Road to Kemper Road (PID: 76256*)	2020
6	SR 126 Ramps (PID: 76256*)	2020
7	I-75 NB Split from Galbraith Road to Shepherd Lane (PID: 76256*)	2020
8	I-75 SB Ramp to GE Parkway (PID: 76256*)	2020

*New PID’s will be assigned as funding becomes available.

Project costs were calculated based on information provided from FHWA’s Cost Estimate Workshop and are shown in Table 9. It should be noted that utility relocation and environmental costs shown in Table 9 are already incorporated into the estimated construction cost column. The final year of expenditure column shows the total project costs for each project phase.

Table 9: Project Costs

Phase	Estimated Construction Cost	Design/Engineering Cost	Construction Engineering Contingency	Projected Right-of-Way Cost	Utility Relocation Cost	Environmental Cost	Final Year of Expenditure Cost
1	\$74,219,084	\$3,710,954	\$7,421,908	\$15,912,724	---	\$500,000	\$101,264,670
2	\$23,996,920	\$1,199,846	\$2,399,692	\$10,716,941	---	---	\$38,313,400
3	\$80,364,562	\$4,018,228	\$8,036,456	\$1,339,431	---	---	\$93,758,678
4	\$21,103,552	\$1,055,178	\$2,110,355	\$1,339,431	\$2,968,368	---	\$25,608,516
5	\$68,719,102	\$3,435,955	\$6,871,910	\$3,503,754	---	\$1,000,000	\$82,530,721
6	\$86,964,818	\$4,348,241	\$8,696,482	\$6,443,044	\$1,000,000	\$250,000	\$106,452,584
7	\$59,301,380	\$2,965,069	\$5,930,138	\$1,020,682	---	---	\$69,217,270
8	\$57,956,315	\$2,897,816	\$5,795,631	\$1,213,455	---	---	\$67,863,217
						TOTAL	\$585,009,056

PUBLIC INVOLVEMENT

Public involvement was conducted throughout the project, including newsletters, a project website, community meetings, regular meetings of a stakeholder committee, and open-house public meetings. Summaries of public involvement activities are included in the PIP, PSR, CAS, and AFA documents which can be found in Appendix A.

MEETINGS

The following is a list of Public, Implementation Committee (IC) and Aesthetic Committee meetings that have taken place along with the main topic of discussion. Community meetings are also listed below and involved discussion of public concerns and alternatives.

Public meetings were held on:

- *January 19, 2005*: to present the Conceptual Alternatives from Step 5.
- *June 29, 2005*: to present the changes to the Conceptual Alternatives.
- *July 19, 2006* to present the Feasible Alternatives from Step 6.

IC meetings were held on:

- *June 22, 2004*: committee kick-off meeting.
- *July 27, 2004*: discussed project data, project goals, and public involvement.
- *August 24, 2004*: discussed Conceptual Alternatives.
- *October 26, 2004*: discussed public involvement and the Conceptual Alternatives evaluation.
- *December 7, 2004*: discussed Planning Study Report and Step 5 activities.
- *March 22, 2005*: discussed public involvement and reviewed the changes to the Conceptual Alternatives.
- *May 24, 2005*: discussed upcoming public meeting and the draft project matrix.
- *August 23, 2005*: discussed new project recommendations stemming from the second public meeting.
- *February 7, 2006*: discussed Feasible Alternatives and public involvement.
- *August 16, 2006*: discussed the results of the third public meeting, reviewed the Recommended Preferred Alternative and Aesthetics Committee information.

Aesthetic Committee meetings were held on:

- *August 13, 2007*: introduction to aesthetic options available.
- *October 2, 2007*: discussion of chosen aesthetics.

Community meetings were held on:

- *June 15, 2004*: Lincoln Heights

- *June 15, 2004:* Lockland
- *July 19, 2004:* Lincoln Heights
- *August 16, 2004:* ARTIMIS
- *December 27, 2004:* Arlington Heights
- *February 3, 2005:* Cincinnati Chamber of Commerce
- *March 3, 2005:* Lockland
- *March 22, 2005:* GE
- *April 19, 2005:* Hartwell
- *April 25, 2005:* Lincoln Heights
- *May 2, 2005:* Arlington Heights
- *May 5, 2005:* Cincinnati Chamber of Commerce
- *May 10, 2005:* Reading
- *May 12, 2005:* Evendale
- *May 16, 2005:* Lincoln Heights
- *May 17, 2005:* Lockland School District
- *May 24, 2005:* Sharonville
- *June 2, 2005:* Cincinnati Chamber of Commerce
- *June 6, 2005:* Glendale
- *June 7, 2005:* OKI Regional Council of Governments
- *June 20, 2005:* Wyoming
- *July 27, 2005:* Cincinnati Chamber of Commerce
- *August 23, 2005:* GE
- *October 5, 2005:* Lockland
- *November 3, 2005:* Mill Creek Watershed Council of Governments
- *March 21, 2006:* Lockland
- *April 14, 2006:* Wyoming
- *April 18, 2006:* Hartwell
- *April 27, 2006:* GE
- *May 1, 2006:* Glendale
- *May 2, 2006:* Hamilton County Engineers Office
- *May 2, 2006:* OKI Regional Council of Governments
- *May 4, 2006:* Lincoln Heights
- *May 9, 2006:* Mill Creek Watershed Council of Governments

- *May 9, 2006:* Reading
- *May 11, 2006:* Evendale
- *May 22, 2006:* Arlington Heights
- *May 23, 2006:* Sharonville
- *May 24, 2006:* Reading
- *May 31, 2006:* Cincinnati
- *June 20, 2006:* Lockland
- *September 11, 2006:* Reading
- *September 21, 2006:* Lincoln Heights
- *December 7, 2006:* GE
- *March 20, 2007:* Hamilton County Engineers Office
- *March 30, 2007:* Sterns and Fosters
- *April 3, 2007:* McCluskey Chevrolet
- *April 3, 2007:* GE
- *April 16, 2007:* Reading
- *April 16, 2007:* Wyoming
- *April 17, 2007:* Hartwell
- *April 23, 2007:* Cincinnati
- *May 7, 2007:* Glendale
- *May 8, 2007:* Sharonville
- *May 10, 2007:* Evendale
- *May 15, 2007:* Reading
- *May 15, 2007:* Sycamore Township
- *May 21, 2007:* Arlington Heights
- *May 22, 2007:* Mill Creek Watershed Council of Governments
- *May 24, 2007:* Lockland
- *June 25, 2007:* GE
- *June 28, 2007:* Lincoln Heights
- *December 13, 2007:* GE
- *April 3, 2008:* Lockland
- *April 15, 2008:* Southwestern Water
- *May 2, 2008:* Reading
- *July 13, 2009:* GE

- *July 24, 2009:* Lincoln Heights
- *August 30, 2009:* Lincoln Heights/Evendale

SUMMARY OF KEY PUBLIC ISSUES

The key public issues are listed as below. Further description is included in the PSR, CAS, and AFA documents included in Appendix A.

Galbraith Road Interchange Access

The current left-bound exit from I-75 Northbound to Galbraith Road has been a point of discussion during the *I-75 Thru the Valley Project*. It is the current policy of ODOT to try to close left exits wherever possible because they do not meet driver expectancy and are shown to have twice as many accidents as right exits. Specifically, the area around the Galbraith Road left exit has an accident rate that is twice the Ohio base crash rate for urban interstates. While this number does not seem as significant when there are other areas of the corridor that are 16 times the average, it does represent more crashes than are deemed acceptable. Additionally, the other crash-prone areas in the corridor are addressed with the proposed improvements. Most of the crashes in the area surrounding the left exit can be attributed to people crossing over multiple lanes to exit or to rear-end crashes when exiting vehicles slow as they approach the ramp. Again, while this may not be seen as a problem today, the traffic and number of lanes in this area will increase with any of the Build Alternatives. In fact, between Paddock Road and SR 126 there will be six lanes of traffic in the northbound direction (three existing lanes, a new lane, an auxiliary lane and a designated exit lane for SR 126). It will be possible in the future to cross all six lanes to exit Galbraith Road. It is not unreasonable to assume that the types of crashes that are seen today will increase in the future with additional lanes and more vehicles. Left exits also do not allow for transportation versatility in the future in regards to special purpose lanes. Truck lanes, High Occupancy Vehicle Lanes, Express Lanes, Bus Lanes or High Occupancy Toll Lanes cannot be implemented on I-75 if left exits are present. Finally, the left exits on I-75 at Hopple Street and Western Hills are being replaced with right hand exits by the *I-75 Mill Creek Expressway Project*.

Several local entities expressed great concern over the closure of the Galbraith Road left-exit and believe that closing the left exit would have a negative effect on their communities and businesses. In response to these concerns, the *Thru the Valley Project* Team took a fresh look at an alternative to add a right-hand Galbraith Road exit from I-75 northbound. After considerable technical analysis, a feasible design for a right-hand exit was developed. The new ramp would exit the interstate just north of SR 126, go over existing I-75 northbound and access Galbraith Road at the same location as the current left-hand exit. The right-hand exit is now included in the Preferred Alternative.

Davis Street Ramp Closure

Access to Davis Street from I-75 Northbound is currently a single ramp, without returning access to the interstate. This ramp is also only 0.92 miles from the SR 126/I-75 interchange and 0.91 miles from the Shepherd Lane/I-75 interchange. Due to the ramp's proximity to adjacent interchanges and the policy of ODOT to not allow partial interchanges to remain on the interstate system, the decision was made to close the Davis Street ramp as part of the

Thru the Valley Preferred Alternative. The Davis Street ramp is primarily utilized by those which to access the City of Reading and the Village of Lockland. With the removal of the ramp, these communities will have access to/from the interstate at the Galbraith Road interchange to the south and at the Shepherd Lane interchange to the north.

Cooper Street Ramp Closure

The existing Cooper Road ramps on southbound I-75 in Lockland lie in the walled section of the interstate. These ramps have dangerously sharp curves with design speeds of only 15 mph. These ramps currently serve the Village of Lockland. Because of the design deficiencies associated with the ramps, the Preferred Alternative proposes to eliminate these access points. While there is adequate access to the Village of Lockland at the Galbraith interchange to the south and the improved Shepherd Lane interchange to the north, there was also a desire from the public to “replace” the Cooper Street ramps within the Village. Therefore, the Preferred Alternative includes the construction of the “Anthony Wayne” ramps just south of the existing Cooper Street ramps. The new “Anthony Wayne” ramps will provide access to and from I-75 Southbound to Anthony Wayne Road. The new ramps will meet current design standards and provide improved access to the Village of Lockland as well as communities within the City of Cincinnati.

Shepherd/Mangham Drive Interchange Access

Shepherd Avenue interchange is currently a partial interchange with an exit ramp from I-75 Northbound. This interchange is connected to Mangham Drive, the GE Loop ramps, and the Neumann Way C-D system. The Mangham Drive partial interchange is located only on I-75 Southbound and serves the Village of Lincoln Heights. Currently, these two interchange act together with the Shepherd Lane ramps providing the movements to and from I-75 Northbound, while the Mangham Drive ramps providing access to and from I-75 Southbound. There are current design deficiencies associated with the Mangham Drive ramps including inadequate storage length and turn radius. Having ramps act in coordination at separate locations is not feasible in the future, especially for those motorists unfamiliar with the area. Therefore, the Preferred Alternative proposes to relocate the I-75 Southbound entrance and exit ramps to Shepherd Lane and create a full interchange. The Village of Lincoln Heights initially had reservations regarding this adjustment. They were concerned that their community would be losing access to I-75. After an education and communication process, the Village realized that the relocation of the ramps would better serve their community in the future. The Preferred Alternative also includes an access road from Shepherd Lane north to connect to Mangham Drive, thus providing safe and efficient access to the interstate from the Village of Lincoln Heights.

General Electric Access

The Evendale/Neumann Way C-D system begins south of Shepherd Lane and extends to north of Glendale Milford Road and was constructed primarily to serve GE located east of I-75 between Shepherd Lane and Glendale-Milford Road. The unique design of the collectors and loop ramps allows access to both northbound and southbound I-75 from GE. The GE driveways which connect directly to the collector, via stop signs, do not conform to current interstate design standards. Therefore, the elimination of the collector system is included in the Preferred Alternative and appropriate future access to GE was analyzed. During the *Thru the Valley Project*, a specific GE Traffic Study was undertaken to determine the future

impacts that GE commuter travel would have on the interstate and to determine the projects necessary to provide safe and efficient access to the GE facility. It was determined during the GE Traffic Study that access at only Shepherd Lane to the south and Glendale-Milford to the north would not be adequate. Therefore, included in the Preferred Alternative is a new two-way local roadway, GE Parkway and an additional I-75 Southbound exit ramp directly to the Parkway. GE Parkway will essentially replace the outdated and dangerous collector system, as a local road with two-way travel between Shepherd Lane and Glendale Milford Road. During the Traffic Study, we found that a larger majority of traffic to GE would be coming from the north in the future, thus an additional exit ramp on I-75 southbound was added to provide congestion relief to the Glendale-Milford Road interchange.

PUBLIC REVIEW PERIOD AND NEXT STEP

The purpose of this EA is to assist FHWA and ODOT in determining whether or not an Environmental Impact Statement (EIS) is needed. An EIS is required when a project is likely to have significant impacts on the human or natural environments. A thirty day review and comment period will be in place for this EA. The purpose of the comment period is to allow interested parties to offer additional information that may assist in the determination of whether or not an EIS is needed. If no substantial additional impacts are identified, the FHWA intends to issue a Finding of No Significant Impact (FONSI) for this project which will complete the environmental review process.