



# I-75 Mill Creek Expressway Environmental Assessment HAM-75-2.30 (PID 76257)



Prepared for:  
The Ohio Department of  
Transportation  
and  
The Federal Highway Administration

**Tran** Systems

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## Executive Summary

This document summarizes impacts and consequences of the improvements to I-75 between the Western Hills Viaduct and Paddock Road within Hamilton County, Ohio, referred to as the I-75 Mill Creek Expressway 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 22 buildings/67 households. Commercial relocations are anticipated to 15 properties. No substantial concerns are associated with relocations.
- Park impacts are expected to include:
  - Mt. Storm Park – 0.28 acres permanent, 1.64 acres temporary, impacts to vegetation, will be re-vegetated
  - Camp Washington Recreation Center – approximately 140 square feet permanent, grassy area and trees impacted
  - Massachusetts Avenue Park – 0.11 acres impact (total site) including play equipment and benches, park to be relocated
  - Tot Lot Park – approximately 17 square feet of grassy area impacted
  - Elmwood Place Memorial Park (Maple Street Park) – impacts to trees only, which are within existing highway right-of-way, no impacts to park, retaining wall to be constructed and ballfield fence extended to wall
  - Bank Avenue Park – 0.36 acres permanent and no impacts to facilities except for walking path which will be replaced during construction
  - Valley Park – 0.03 acres temporary to reconstruct sidewalk and curb return to access drive
- No adverse effects are anticipated on cultural resources. Minor property impacts are required within St. John's Cemetery and the Western Hills Viaduct subway portals.
- Stream impacts consisting of approximately 39 feet of culvert extension on Unnamed Tributary to Mill Creek and pier footings within the channelized Mill Creek, with the area of work to be determined during bridge studies.
- A loss of just under 2 acres of mixed deciduous forest at Mt. Storm Park and approximately 18 acres throughout the remainder of the project area.
- Noise impacts are predicted on adjacent sensitive receivers. Noise walls are recommended at several locations. Public input meetings conducted per ODOT Noise Policy indicate that the public desires construction of the proposed walls. Two churches will be investigated for eligibility for noise insulation.
- Construction plan notes (for management of contaminated soils) are recommended for several properties evaluated in the Phase I Environmental Site Assessment. Twenty properties are recommended for Phase II Environmental Site Assessment in subsequent steps. Five properties will require authorization from Ohio EPA under a Rule 13 permit prior to any excavation or drilling activities.

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## Project Information

### *Project Description*

The I-75 Mill Creek Expressway Project involves adding one additional through lane in each direction on I-75 from the Western Hills Viaduct to north of the Paddock Road interchange. The project length is approximately 8 miles. It also includes improvements to the interchanges on I-75 at Hopple Street, I-74, Mitchell Avenue, Norwood Lateral (SR 562), and Paddock Road. The partial interchange at Towne Street is removed by the project. The Colerain/Beekman interchange on I-74, just west of the I-74/I-75 interchange, is improved as a part of this action. 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, the City of St. Bernard, and the Village of Elmwood Place. A project location map is included as **Exhibit B**.

### *Project Termini*

The southern project terminus is on I-75 in the vicinity of the Western Hills Viaduct. The northern terminus is on I-75 just north of the Paddock Road interchange. Due to improvements to the I-74/I-75 interchange, the project limits also extend along I-74 to the first interchange at Colerain/Beekman. A document explaining the project termini, and how these relate to other projects on the I-75 corridor, was prepared and approved by FHWA. A copy of the termini discussion is included in **Appendix A**.

### *Cost*

The total estimated construction cost for the project is \$642.5 million. That number is based upon anticipated construction year for each phase and is further detailed in the Schedule/phasing plan table included on page 27.

## Purpose and Need

The purpose of the project is to improve traffic flow and enhance safety along I-75 from the Western Hills Viaduct interchange on the south to the Paddock Road interchange on the north. Detailed studies identified poor existing physical conditions, substandard design features, high accident rates, and pervasive congestion within the project limits.

The Purpose and Need Document was prepared for the project and issued April 22, 2005. A copy of this document is included in **Appendix A**. The Purpose and Need was circulated to agencies within the Conceptual Alternatives Study and Assessment of Feasible Alternatives Study. It was made available to the public through the project website and public meetings.

## Development of the Preferred Alternative

The transportation issues along the I-75 corridor were initially examined as a part of the North-South Transportation Initiative (NSTI), conducted in 2000 by Ohio-Kentucky-Indiana Regional Council of Governments (OKI) and the Miami Valley Regional Planning Commission (MVRPC). The NSTI was a regional multi-modal transportation plan and Major Investment Study that focused on how to improve the safety, efficiency and reliability of transportation networks within Southwest Ohio, Northern Kentucky and Southeast Indiana. One of the most important corridors established by the public and stakeholders was I-75.

In late 2004, the I-75 Mill Creek Expressway project began with the intent of building upon the recommendations in the NSTI within this portion of the I-75 corridor. In order to support the development of alternatives, several documents were produced within the Ohio Department of Transportation's (ODOT) Project Development Process (PDP). Previously produced documents are listed below with a copy of each included in Appendix A.

- PDP Step 1 – *Public Involvement Plan*, April 2005: 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 – *Purpose and Need*, April 2005: The document provided tangible, quantifiable data to support the needs for the project.
- PDP Step 2 – *Existing and Future Conditions Report*, May 2005: Documented a broad range of transportation and environmental conditions within the study area.
- PDP Step 4 – *Planning Study Report*, June 2005: Detailed the development of several concepts to address the identified needs of the project.
- PDP Step 5 – *Conceptual Alternatives Study*, March 2006: Includes the refined and analyzed transportation improvements selected for further study in Step 4.
- PDP Step 6 – *Assessment of Feasible Alternatives*, May 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 – *Preferred Alternative Verification Review*, April 2008: A design submission that refines the project's impact limits.

Public involvement was conducted throughout the project, including newsletters, a project website, neighborhood meetings, regular meetings of a stakeholder committee, and open-house public meetings. These activities are documented in the above reports, included in Appendix A.

Alternatives for the project were developed for the I-75 mainline and each interchange, including Hopple, I-74/I-75, Colerain/Beekman, Mitchell, SR 562 (Norwood Lateral), Towne, and Paddock. The development of the Preferred Alternative is summarized below by location.

### ***I-75 Mainline***

Beginning in October 2004, the Project Team developed several Conceptual Alternative Solutions ("concepts") to address the identified needs, as documented in the Planning Study Report. Options developed for I-75 itself are referred to as the I-75 Mainline. In the planning study report, 20 concepts, including No Build, were initially considered. The 16 options that were eliminated from consideration are shown on the matrix, included as **Exhibit D**. The four options that were recommended for further consideration included the No Build Alternative plus:

- *I-75-A: Four Lane Continuity with Auxiliary Lanes* – This concept would involve adding a fourth lane on the outside in each direction north of I-74. Four lanes currently exist south of I-74. This alternative was recommended by the NSTI for further consideration. This option provides the opportunity to improve safety and congestion to a limited degree while minimizing property impacts and costs.
- *I-75-B: Five Lane Continuity* – This concept would involve providing five continuous freeway lanes through the study area, adding one lane in each direction south of I-74 and two lanes in each direction north of I-74. This option would provide additional capacity improvement, but at a higher cost and impacts.
- *I-75-C: Four Lane Continuity with Elevated Express Lanes* – This concept would involve providing four lanes at-grade through the study area, adding one through lane in each direction north of I-74, plus the construction of elevated express lanes. This option has the potential to provide superior improved capacity and safety benefits; however, it would be expected to be extremely expensive and intrusive to the surrounding communities.

In 2005, the project team built upon the findings of the Planning Study by developing and evaluating alternatives to avoid or minimize impacts to design and environmental features. The Conceptual Alternatives Study (CAS) was based on the information provided in the Planning Study Report, plus additional environmental and preliminary design information. Based upon the analyses in the CAS, Alternative I-75-B and I-75-C were eliminated from further consideration due to extensive impacts compared to the benefits. *I-75-A: Four Lane Continuity with auxiliary lanes* was carried forward. An additional alternative was also developed, *I-75-D: 5/4-Lane Alternative*. This option would provide for one additional through lane throughout the project limits, for four lanes in each direction north of I-74 and five lanes in each direction south of I-74.

In 2006 and early 2007, the project team built upon the findings of the CAS to develop and compare Feasible Alternatives for the project in the Assessment of Feasible Alternatives (AFA). One Feasible Alternative, the *I-75-D: 5/4-Lane Alternative*, was recommended for advancement along mainline I-75. Alternative *I-75-A: Four Lane Continuity with auxiliary lanes*, was eliminated because it provided no capacity improvements south of I-74 and would fail to satisfy the purpose and need.

In April 2008, the project team submitted the Preferred Alternative Verification Review (PAVR), a design review submission intended to confirm the project's impact limits. The documentation provided with the PAVR plans includes a summary of the design changes that occurred subsequent to approval of the AFA and a description of potential design exceptions. One noteworthy design change reduced the impacts in the Mt. Storm Park area compared to the design shown in the AFA.

## **Hopple Interchange**

Beginning in October 2004, the Project Team developed several Conceptual Alternative Solutions ("concepts") to address the identified needs at the Hopple Street Interchange. In the planning study report, eleven concepts, including No Build, were initially considered. The eight options that were eliminated from consideration are shown on **Exhibit D**. The three options that were recommended for further consideration included the No Build Alternative plus:

- *HOP-A: Tight Urban Diamond Interchange (TUDI)* – This concept would involve reconstructing the existing interchange as a tight diamond, narrowing the median of I-75, relocating Hopple Street to grade-separate the Central Parkway intersection, and constructing a connector road from Central Parkway to MLK Drive.
- *HOP-B: Offset Roundabout Diamond Interchange* – This concept would involve reconstructing the Hopple Street interchange as an offset roundabout diamond. A modern roundabout intersection would be constructed on the west side of I-75, which would accommodate all ramps. The I-75 northbound ramps would be constructed as flyovers over I-75.

In 2005, the Conceptual Alternative Study (CAS) recommended carrying forward these alternatives, but replaced the *HOP-B: Offset Roundabout Diamond Interchange* with *HOP-B1 Offset Diamond Interchange* which used a signalized intersection in lieu of a roundabout due to operational problems.

In 2006 and early 2007, the project team built upon the findings of the CAS to develop and compare Feasible Alternatives for the project. The interchange concepts recommended from the CAS were evaluated operationally and refined until a feasible solution could be found.

The interchange at Hopple Street underwent extensive redesign over the course of Step 6. Updated capacity analyses for arterial intersections, using refined planning level traffic and preliminary vertical alignment development, rendered both HOP-A (Tight Urban Diamond Interchange) and HOP-B1 (Offset Diamond Interchange) alternatives unfeasible. A new alternative was developed to find a solution that would function operationally. The *HOP-C: Semi-direct Diamond Interchange* was developed, which provided for direct movements from I-75 southbound to Hopple Street east and west, direct access to I-75 southbound from eastbound Hopple Street, semi-direct access to other movements through low speed loop ramps. In this alternative, Hopple Street / Martin Luther King (MLK) Drive is bridged over Central Parkway. A connector road was proposed to provide continuing access from Central Parkway to Hopple Street / MLK Drive. This alternative was documented in the Assessment of Feasible Alternatives (AFA).

In April 2008, the project team submitted the Preferred Alternative Verification Review (PAVR). Evaluation of the VISSIM traffic microsimulation model revealed failing freeway operation on I-75 northbound between the Hopple Street entrance ramp and I-74 exit ramp. Short ramp spacing and high vehicle volumes could have resulted in an unacceptable traffic weave condition. A braided ramp arrangement was then developed to eliminate the weave by splitting the Hopple Street northbound entrance ramp into separate ramps to I-75 and I-74. Because the AFA Hopple Street interchange design attempted to maximize the ramp spacing by placing the I-75 northbound entrance ramp on the south side of Hopple Street and over I-75, the ramp could then be relocated to the east side of I-75 to form a straight ramp onto the freeway eliminating the bridge over the I-75. With concerns over the sharp curvature of the multilane I-75 northbound exit ramp, rearranging the I-75 northbound exit and entrance ramps into straight ramps became the preferred design. The resulting interchange layout creates a modified three-point diamond where the Hopple Street westbound to I-75 southbound loop ramp is retained from the AFA.

After further engineering on the McMicken Avenue intersection with the Central Parkway connector road, the profile of McMicken Avenue was determined to be too steep with associated excavation requiring 21 additional relocations (including seven duplex units). The proposed design dead-ends McMicken Avenue with alternative local routes available using either Riddle Road to Martin Luther King Drive or Marshall Avenue to Colerain Avenue.

A Value Engineering (VE) Study for the Hopple Interchange area was conducted in July 2008. As part of the VE, it was recommended to investigate three other potential interchange configurations. VE-1 is a Double Roundabout Diamond with an at-grade intersection of Hopple Street and Central Parkway as a third roundabout. VE-2 is a partial cloverleaf interchange with an at-grade signalized intersection of Hopple Street and Central Parkway. VE-1 and VE-2 were eliminated when traffic analyses and simulations revealed that these alternatives are not feasible. VE-3 was a modification of the proposed interchange to move the I-75 northbound on-ramp to be opposite the I-75 northbound off-ramp, which would minimize property impacts. This configuration was analyzed and found to function based upon certified traffic volumes.

In addition, the VE study recommended altering the proposed braided ramp configuration to reduce the number of bridges and retaining walls without changing the property impacts. This recommendation was reviewed and accepted for implementation.

The two issues described above were recently raised and have not been incorporated into the drawings included as **Exhibit A**. A drawing showing the reduced footprint resulting from these changes is included as **Exhibit C**. This option is now recommended as the Preferred Alternative for this location.

## ***I-74/I-75 Interchange***

Beginning in October 2004, the Project Team developed several Conceptual Alternative Solutions (“concepts”) to address the identified needs at the I-74/I-75 Interchange. In the planning study report, 5 concepts, including No Build, were initially considered. The two options that were eliminated from consideration are shown on **Exhibit D**. The three options that were recommended for further consideration included the No Build Alternative plus:

- *I-74-A: Fully Directional Interchange with Local Access* – This concept would reconstruct the I-74/I-75 interchange to provide higher speed directional ramps to and from I-75 north, closing the existing ramps at Dreman and Colerain Avenues, and improving access to Colerain Avenue and Central Parkway.
- *I-74-B: Fully Directional Interchange with No Local Access* – This option would reconstruct the I-74/I-75 interchange to bring this system-to-system interchange up to current standards. All service ramps would be closed, with new higher speed ramps to serve I-75 north.

In 2005, the Conceptual Alternative Study (CAS) recommended carrying forward these alternatives, but noted that the *I-74-A: Fully Directional Interchange with Local Access* alternative would require additional design refinements to solve problems meeting design standards for the southbound I-75 to Colerain ramp.

In 2006 and early 2007, the project team built upon the findings of the CAS. The I-74-A alternative was refined to fix the ramp design standards. The resulting Feasible Alternatives were investigated further to evaluate operation, impacts and cost in the context of the overall project goals of improving safety and reducing congestion. The two options were compared in the Assessment of Feasible Alternatives (AFA).

The I74-A alternative involved providing higher speed directional ramps from I-74 eastbound to I-75 northbound and I-75 southbound to I-74 westbound; replacing existing ramps that are highly deficient and low speed. Additionally, local access ramps were proposed to retain the local connectivity to I-75 and I-74 that is there today. However, these partial movements do not provide reciprocating travel routes in that drivers are not able to take the same route on the return trip. Based upon the low to moderate traffic volumes expected to utilize the local access ramps and the increase in impacts (compared to I-74B), ODOT identified the *I74-B: Fully Directional Interchange with No Local Access* as the recommended Preferred Alternative, and presented this recommendation at the Public Meeting on 9/28/06. The comparison and public involvement results are discussed in detail in the AFA included in Appendix A.

Due to public and local agencies concern over the loss of the I-74 to eastbound Central Parkway off-ramp, a suggestion was made to provide a two-way connector road between Beekman Street and Central Parkway that intersects Beekman Street at the I-74 eastbound off-ramp to Beekman Street. This was shown in the AFA and carried forward for further consideration. Based upon public input, property impacts and cost, the proposed connector road was eliminated. The two-lane connector road resulted in property impacts that were unacceptable to the South Cumminsville neighborhood and generally gained little local support.

## ***Colerain/Beekman Interchange***

Beginning in October 2004, the Project Team developed several Conceptual Alternative Solutions (“concepts”) to address the identified needs at the I-74/Colerain/Beekman Interchange. In the planning study report, four concepts, including No Build, were initially considered. The one option that was eliminated from consideration is shown on **Exhibit D**. The three options that were recommended for further consideration included the No Build Alternative plus:

- *COL-A: Low Impact Improvement/Full Movement Interchange* – This option would involve minor changes to the existing interchange to provide for full movements to I-74.
- *COL-B: Double Roundabout Diamond Interchange (DRDI)* – This concept would involve reconstruction of the existing system interchange as a double roundabout diamond. This option would include providing full movements to I-74.

During evaluations for the Conceptual Alternatives Study (CAS), both of the alternatives were modified. The new options, *COL-A1: Low Impact Improvement with Full Movements* and *COL-B1: Double Roundabout Diamond Interchange (DRDI)*, were very similar to the COL-A and COL-B alternatives; however, the I-74 WB exit ramp was relocated to reduce floodplain impacts and provide for greater separation to the Beekman/Colerain intersection.

In 2006 and early 2007, the project team built upon the findings of the CAS. The *COL-B1: Double Roundabout Diamond Interchange (DRDI)* alternative was analyzed and found not to be feasible due to insufficient capacity at the northern roundabout. Therefore, the COL-A1 alternative was recommended as the Preferred Alternative.

In April 2008, the project team submitted the Preferred Alternative Verification Review (PAVR). The refined design proposes to continue Beekman Street north to Virginia Avenue and intersect Colerain Avenue and the I-74 westbound entrance ramp together at Beekman Street. This arrangement allows for better operation with the Colerain Avenue / Virginia Avenue intersection in that vehicles will not be required to change lanes to enter the I-74 eastbound entrance ramp.

In the AFA, the I-74 westbound exit ramp was proposed to intersect with Beekman Street as a two-phase signalized intersection. This was proposed to address the short weave between the ramp and Colerain Avenue intersection. After further consideration in the PAVR, the low volume weave on Beekman Street is expected to pose a lower safety risk than placing a signal on the ramp. Consequently, the signal is proposed to be removed allowing for a free-flow weave on Beekman Street. The narrower pavement by eliminating the signal avoids impacts to the Wesleyan Memorial Cemetery.

### ***Mitchell Interchange***

In the planning study report, seven concepts for the Mitchell Interchange, including No Build, were initially considered. The five options that were eliminated from consideration are shown on **Exhibit D**. The two options that were recommended for further consideration included the No Build Alternative plus:

- *MIT-A: Tight Urban Diamond Interchange (TUDI)* – This option would involve reconstruction of the current intersection as a tight diamond.

No changes were proposed during the Conceptual Alternatives Study. However, during the development of the Assessment of Feasible Alternatives (AFA), another alternative was developed for consideration. The MIT-B alternative proposed to retain the compressed diamond arrangement of the existing interchange but provide for an additional left turn lane under the bridge by modifying the existing bridge end spans. MIT-B was eliminated as not feasible due to the condition of the existing bridge. The MIT-A alternative was recommended as the Preferred Alternative.

### ***SR 562 (Norwood Lateral) Interchange***

In the planning study report, two concepts, including No Build, were considered for the Norwood Lateral Interchange. There were no options evaluated and dismissed. The two options that were recommended for further consideration included the No Build Alternative plus:

- *NOR-A: Modified Interchange with Additional Ramp Lanes* – This concept would involve construction of an additional ramp lane to and from the north on I-75.

Throughout development of the Conceptual Alternatives Study and Assessment of Feasible Alternatives, this option has remained feasible and is the recommended Preferred Alternative for this location.

## ***Towne Street Interchange***

In the planning study report, two concepts, including No Build, were considered at Towne Street. There were no options evaluated and dismissed. The two options that were recommended for further consideration included the No Build Alternative plus:

- ***TOW-A: Interchange Closed*** – This concept would involve closing the Towne interchange and removal of the ramps. The existing partial interchange serves a low traffic volume and interferes with the effective, safe operation of the Norwood Lateral interchange. The closure of Towne will be necessary under any improvement scenario for Norwood Lateral. This safety improvement also was recommended by the NSTI study.

Throughout development of the Conceptual Alternatives Study and Assessment of Feasible Alternatives, this option has not changed and is the recommended Preferred Alternative for this location.

## ***Paddock Interchange***

Beginning in October 2004, the Project Team developed several Conceptual Alternative Solutions (“concepts”) to address the identified needs at the Paddock Interchange. In the planning study report, five concepts, including No Build, were initially considered. Two options that were eliminated from consideration are shown on **Exhibit D**. The three options that were recommended for further consideration included the No Build Alternative plus:

- ***PAD-A: Low Impact Spot Improvements*** – This concept would involve minor improvements to the ramp intersections with Paddock Road to improve turn lane lengths and signal timing.
- ***PAD-B: Double Roundabout Diamond Interchange (DRDI)*** – This option would involve realigning the ramps and reconstructing the intersections with Paddock Road as modern roundabouts. The adjacent intersection of Paddock and Seymour Road would also be converted to a roundabout intersection to improve capacity and reduce conflicts with the adjacent ramp intersection.

In the Conceptual Alternatives Study (CAS), the PAD-A option, which has a low cost and low impacts, was found to function acceptably. Therefore, the PAD-B option was eliminated due to greater cost and property impacts.

During the Assessment of Feasible Alternatives, City of Cincinnati traffic staff expressed concerns that right turns from the I-75 northbound exit ramp onto Paddock Road changing lanes (including high truck volumes) to make left turns at the nearby Seymour Avenue intersection caused operational problems. As a result, the study team investigated adding a ramp from I-75 northbound to Seymour Avenue which would eliminate much of the lane changing between the intersections. The PAD-A alternative was modified to include the off-ramp to Seymour Avenue. The modified PAD-A alternative is the recommended Preferred Alternative.

## 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

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<sub>2.5</sub>

In July 2008, a project-level conformity analysis entitled *Quantitative PM<sub>2.5</sub> Hot-Spot Analysis* was conducted to determine whether the HAM-75-2.30 project complied with statutory requirements. The analysis determined that proposed project conforms to the purpose of the state air quality implementation plan by not causing a new air quality violation or worsening the existing violation and the PM<sub>2.5</sub> levels are predicted to be essentially the same in the project area under the build and no build scenarios. The HAM-75-2.30 project is not expected to worsen the existing violation of the 24-hour or annual PM<sub>2.5</sub> standards, and therefore the project meets the conformity hot-spot requirements in 40 CFR 93.116 and 93.123. Coordination was conducted with OEPA regarding the PM<sub>2.5</sub> analysis. Concurrence was received from OEPA on 8/14/08. A copy of this letter is included in Appendix C.

#### MSAT

In February 2008, a project-level conformity analysis entitled *Quantitative MSAT Analysis* was conducted for the project. 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. Coordination was conducted with OEPA regarding the MSAT analysis. Concurrence was received from OEPA on 2/1/08. A copy of this letter is included in Appendix C.

#### Carbon Monoxide (CO) and Ozone (O<sub>3</sub>)

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.

### **Noise**

As part of the I-75 widening and improvement in Hamilton County, a traffic noise impact analysis was completed in January 2008. The analysis determined that ten residential areas 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 A) are:

- NSA 1/NSA 3 - Located along the west side of I-75 beginning approximately 1,500 feet south of Seymour Avenue overpass and extending south, across Towne Street, to the Murray Road overpass. The proposed noise barrier wall would be 3,680 feet in length with an average height of 11.5 feet.
- NSA 2 - Located along the east side of I-75 beginning approximately 200 feet north of Towanda Terrace and extending south a distance of 1,200 feet to Towne Street. The average barrier height is 13.0 feet.
- NSA 5 - Located on the east side of I-75 and beginning just south of the railroad overpass, the proposed noise barrier wall would continue south past Ross Avenue Park to the Vine Street overpass. The noise wall is 2,558 feet in length with an average height of 12.8 feet.
- NSA 6 – Located on the east side of I-75, the proposed barrier wall would begin approximately 200 feet south of the Vine Street overpass and would continue south a distance of approximately 2,600 feet with an average height of 10.3 feet.
- NSA 7 – Located along the east side of the entrance ramp to I-75 from Mitchell Avenue, the proposed barrier wall would extend north from Mitchell Avenue for a distance of 550 feet with an average height of 11.5 feet.
- NSA 11 – Located along the west side of I-75 and beginning approximately 350 feet north of Bates Avenue and extending south a total distance of 1,165 feet to a point along the I-75 exit ramp to Hopple Street. The average height is 10.8 feet.
- NSA 12 – Located along the west side of I-75 and beginning at the Hopple Avenue southbound entrance ramp, the proposed barrier wall would extend south a distance of 1,528 feet at an average height of 12.2 feet.
- NSA 13C – Located along the east side of I-75 beginning approximately 650 feet south of the Marshall Avenue overpass, the proposed barrier wall would extend 2,260 feet south to the Western Hills Viaduct Loop ramp. The average height is 17.8 feet.
- NSA 14 – Located along the north side of I-74 beginning approximately 250 feet east of Beekman Street, the proposed barrier wall would extend 1,456 feet east and would average 14.9 feet in height.
- NSA 15 – Located along the south side of I-74 beginning at Beekman Street, the proposed barrier wall would extend east for a distance of 1,507 feet to just west of the Elmore Street overpass and would average 12.2 feet in height.

Sacred Heart Church, shown on Exhibit A Sheet 2, was found to have a noise impact but is located within an area within which a noise barrier was not reasonable. During final design for this section, the building will be investigated for eligibility for sound insulation as mitigation for noise impacts.

The Concordia Lutheran School and adjacent church, on Exhibit A Sheet 5, were evaluated and found to experience a noise level of 65 dBA, which is below the threshold for mitigation.

True Unity Baptist Church, shown on Exhibit A Sheet 6, was not originally evaluated. The building has come in and out of use as a church during the project development process, but is currently used for church services. Based upon its proximity, it is likely to experience a noise impact exceeding 69 dBA. Since it is located in an area with no other noise sensitive receivers, it will not be eligible for a noise barrier due to cost per benefitted receiver. During final design for the I-74/I-75 interchange, this location will be investigated for eligibility for sound insulation as mitigation for noise impacts.

Two public meetings were held on February 26 and 27, 2008 to obtain public comments and input on: 1) whether or not noise barriers should be constructed at the recommended locations, and 2) preferences for noise barrier color and texture. Public meeting materials for the noise wall meetings included exhibits of the project, associated noise levels, and proposed noise wall locations. Exhibits were also provided of available wall types and colors. During the public comment period, ODOT received input from 62 property owners. At all ten NSA locations, the affected property owners were in favor of constructing noise walls.

A final noise analysis will be prepared during design to confirm noise barrier heights, including line-of-sight analysis.

## **Community Impacts**

The I-75 Mill Creek Expressway study area encompasses several communities, including the City of St. Bernard, the Village of Elmwood Place and a portion of the City of Cincinnati. Within the latter, the neighborhoods of Carthage, Bond Hill, Winton Place, North Avondale, Clifton, Northside, South Cumminsville and Camp Washington (from north to south) are within the study area. Descriptions of these areas are included in the *Existing and Future Conditions Report* in **Appendix A**.

## **Bike/Pedestrian Facilities**

All locations where existing sidewalks are impacted will be replaced to current standards and ADA compliance. Listed below are the impacts and improvements associated with the project. There are a total of four pedestrian bridges that will be impacted by the project.

- The pedestrian bridge located 0.3 mile north of the proposed Monmouth Street overpass will be removed. A pedestrian study concluded that sidewalks on the new Monmouth Street overpass to the south will be a sufficient replacement.
- The pedestrian bridge located on the west side of Central Parkway, shown on **Exhibit A Sheet 5**, connects to a parking lot. The parking lot will be impacted by the project, so the bridge will no longer connect to anything and will be removed. The bridge's integrity will be maintained so the City of Cincinnati can relocate the bridge if desired.
- The pedestrian bridge over I-74 just southeast of the Colerain/Beekman interchange will be removed and replaced as a part of the project.
- The pedestrian bridge located just north of Paddock Road and connecting City Centre Drive and Summit Road will be removed and replaced.

Additionally, there are four locations where improvements will be made to various bike/pedestrian facilities.

- The new Connector Road between Hopple Street and Central Parkways will include sidewalks on both sides of the roadway and an ADA compliant connection between McMicken Avenue and the Connector Road.
- The bridge structures for Hopple Street and the I-75 northbound on-ramp (from Hopple/MLK) will be built to accommodate a future shared use path on the west side of Central Parkway.

- A shared use path will be constructed on the north side of MLK Boulevard down to Central Parkway.
- The new Monmouth Street roadway and bridge will include 8-foot sidewalks on both sides of the road.
- Widening for the I-75 northbound exit ramp requires reconstruction of the sidewalk on the west side of Central Parkway.
- Signal timing will be optimized to allow for pedestrian crossing at all locals for expected intersection improvements.

### **Access**

This section will focus on the community impacts of proposed changes to access. A Neighborhood Map is located in **Appendix B**.

#### ***Village of Elmwood Place***

The partial Towne Street interchange provides access to Elmwood Place via northbound I-75 ramps. There are no southbound I-75 ramps at the Towne Street interchange. Therefore, southbound traffic must utilize one of the adjacent interchanges. The majority of southbound I-75 traffic accessing Elmwood Place and the surrounding businesses utilize the Paddock Road interchange about  $\frac{3}{4}$  miles north of the Towne Interchange. From the Paddock Ramp, drivers have several options to travel southbound into Elmwood Place; however, these three are the most highly traveled routes:

- Paddock Road northbound to Anthony Wayne Trail/Vine Street southbound (1 mile)
- Paddock Road southbound to Seymour Avenue westbound to Vine Street south (1.1 miles)
- Paddock Road southbound to Towne Street westbound (1.2 miles)

Additional ramps at Paddock Road (along SR 562/Norwood Lateral) and Mitchell Avenue (south along I-75) provide access to Elmwood Place.

From the *North-South Transportation Initiative*, it was recommended that the Towne Street interchange be closed due to travel and safety issues. The Mill Creek Expressway study has carried forward that recommendation based upon the safety analysis. Following the removal of the Towne Street interchange the closest access to Elmwood Place would be located at the improved I-75/Paddock Road/Seymour Avenue interchange. The improvement will include a new I-75 northbound exit ramp to Seymour Avenue offering better access to Paddock Road and Seymour Avenue. The improved access will be less than one mile from the existing ramp intersection with Towne, resulting in a relatively minor increase in travel distance to those drivers using the Towne Street interchange today.

It should be noted that vehicles currently utilizing the Towne Street interchange must incorporate the Paddock Road interchange or one of the adjacent interchanges at Paddock/SR 562 or Mitchell/I-75 to complete a round trip, so the impacts are not substantial. The Village of Elmwood Place has participated on the stakeholder committee for the project.

#### ***City of St. Bernard***

The Mitchell interchange on I-75 and the Paddock Road interchange on the Norwood Lateral (SR 562) provide access to St. Bernard. The Paddock Road interchange will remain as is and the Mitchell interchange is proposed to be improved, therefore allowing better connectivity to St. Bernard.

#### ***Carthage Neighborhood***

The City of Cincinnati neighborhood of Carthage is located just west of the Paddock Road interchange off I-75. Minimal improvements are proposed at the Paddock interchange and will only improve access to and from the Carthage neighborhood.

***Bond Hill Neighborhood***

The Bond Hill neighborhood utilizes the Towne Street partial interchange and the Paddock Road interchange off Norwood Lateral (SR 562). The Paddock Road interchange will remain as is and the Towne Street interchange is proposed to be removed due to travel and safety issues. As discussed above, the Towne Street interchange is a partial interchange with return movements provided at the Paddock Road interchange. Because residents and businesses are currently utilizing the Paddock Interchange within their trips, elimination of the Towne Street interchange will not result in substantial impacts.

***Winton Place Neighborhood***

The residents of the Winton Place neighborhood utilize the Mitchell Avenue interchange to access I-75. Proposed improvements to the Mitchell Avenue interchange will only enhance the access to and from Winton Place.

***North Avondale Neighborhood***

The residents of the North Avondale neighborhood utilize the Mitchell Avenue interchange to access I-75. Proposed improvements to the Mitchell Avenue interchange will only enhance the access to and from North Avondale.

***Clifton Neighborhood***

Residents of the Clifton neighborhood utilize the Mitchell Avenue interchange, I-74/I-75 interchange, and Hopple Street interchange to access I-75. Proposed improvements to the Mitchell Avenue interchange will only enhance the access to and from Clifton.

The I-74/I-75 interchange currently provides access to and from the two interstate highways as well as local access to Central Parkway on the east and Elmore Street (Colerain Avenue) and Spring Grove Avenue to the west. These local access ramps create a safety and congestion hazard because of low speed ramps and weaving conditions because of short merge lengths. The Elmore/Colerain and Spring Grove ramps are currently utilized by residents of the Northside and South Cumminsville neighborhoods and industrial uses along Spring Grove Avenue (William P. Dooley Bypass) and Dreman Avenue. Their removal will improve safety and reduce congestion. By closing the Spring Grove loop ramp, traffic would have to travel an additional  $\frac{3}{4}$  mile by taking Elmore Street WB to Beekman NB to I-74 EB. The closure of the Elmore Street/Colerain Avenue ramp would warrant that traffic continue WB on I-74 and taking the Colerain/Beekman (SR 27) ramp NB to Colerain SB requiring an additional 1.1 mile trip. The additional time to complete these trips will create a minor impact to the residents and businesses in and around the I-74/I-75 interchange.

Furthermore, the local access ramps to Central Parkway within the I-74 EB to I-75 NB ramp would be removed creating a system-only interchange eliminating all local access safety and congestion issues. The closure of these ramps would directly affect Cincinnati State Community College whose facilities are just east of the ramps and the surrounding Clifton neighborhood. Cincinnati State employees, students and teachers along with residents of the Clifton neighborhood would be forced to utilize the improved Hopple Street interchange to the south (2.2 miles of additional travel). It should be noted that drivers currently using one of the Central Parkway ramps must utilize one of the adjacent interchanges to complete their round trip. Therefore, the relative familiarity combined with the expected improvements at the Hopple Street and Colerain/Beekman interchanges would substantially reduce the impacts to the surrounding neighborhoods.

The Hopple interchange provides direct access to all of the Uptown neighborhoods (which includes Clifton) in addition to the Cincinnati Zoo and Botanical Gardens, University of Cincinnati, Xavier University and numerous hospitals and other cultural facilities. The existing skewed intersection of Central Parkway and MLK Boulevard is currently a safety and congestion hazard that not only affects intersection traffic, but adjacent intersections into the Uptown area to the east and west along Hopple. Improvements to the Hopple interchange would correct this arterial intersection, having a positive impact to this area by reducing congestion, improving safety, and creating the potential for a gateway into the Uptown area.

### ***Northside Neighborhood***

Residents of the Northside neighborhood utilize the I-74/I-75 interchange and the Colerain Avenue/Beekman Street interchange. The impacts of the proposed closure of the local ramps that are a part of the I-74/I-75 interchange are included in the Clifton neighborhood description. The closure of the local ramps would potentially increase travel times for Northside residents accessing I-75 via the nearby Colerain/Beekman interchange.

The Colerain/Beekman interchange was originally meant to be a service interchange connecting I-74 with the proposed Colerain Connector. Therefore, the interchange is overbuilt for the current and potential future conditions. In addition, the Beekman NB to I-74 EB movement does not currently exist. Traffic coming from the Camp Washington and South Cumminsville neighborhoods must take Beekman NB to Elmore EB to Colerain SB to the Spring Grove loop ramp. The Spring Grove loop ramp provides access only to I-75 SB, there is no NB I-75 access.

The proposed improvements for the Colerain/Beekman interchange would all include the addition of the Beekman NB to I-74 EB ramp, improving service in Northside, South Cumminsville and Camp Washington. Further improvements include continuing Beekman Street north to Virginia Avenue and creating an intersection with Colerain Avenue and the I-74 westbound entrance ramp. This arrangement allows for better operation with the Colerain and Virginia intersection in that vehicles will not be required to change lanes to enter the I-74 eastbound entrance ramp.

The improved access at the Colerain/Beekman interchange, along with local road improvements (including Colerain and Virginia, which is a separate project) will lessen the impact of the removal of the local ramps within the I-74/I-75 interchange. Residents of Northside will have minor increases in travel distance, but in combination with the highway and interchange improvements, access will be improved.

Coordination was conducted with the Northside community and business association regarding the project. ODOT has committed to providing wayfinding signage from the Colerain/Beekman interchange to the Northside business district.

### ***South Cumminsville Neighborhood***

The residents of South Cumminsville access I-75 via the Colerain Avenue/Beekman Street interchange along I-74 and the Hopple Street interchange along I-75. Proposed improvements to both interchanges will improve access to and from South Cumminsville. Details of the Colerain/Beekman access improvements are located in the Northside neighborhood write-up and the Hopple access improvements are included in the Clifton neighborhood write-up.

### ***Camp Washington Neighborhood***

The Camp Washington neighborhood is accessed by the Hopple Street interchange and proposed improvements will only improve that access. Details of the Hopple access improvements are included in the Clifton neighborhood write-up.

### ***Overall***

The proposed improvements to the Mitchell Avenue, Hopple Street (including upgrades to Central Parkway and MLK Boulevard), and Colerain/Beekman (including local road upgrades) interchanges will enhance the access to and from Northside, South Cumminsville, and Clifton. Furthermore, the removal of the partial Towne Street interchange, which provides NB I-75 access to and from the Village of Elmwood Place, will be offset by the addition of the Seymour ramp at the improved Paddock Road interchange. Traffic studies indicate that the local street system is adequate to handle the changes in local travel patterns due to the access changes. The minor effects due to the loss of access to the neighborhoods surrounding the I-74/I-75 and Towne interchanges are not substantial compared with the proposed improvements and their effects on the entire project area.

## ***Property Impacts and Relocations***

Following is a summary of the anticipated property impacts of the project. 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. The updated existing right-of-way has been included on the exhibits.

### **Cemeteries**

Three cemeteries are located within or adjacent to the project limits.

St. John's Cemetery is an historic cemetery located north of Mitchell Avenue and shown on **Exhibit A Sheets 12**. Impacts to this location will be minimized through the use of a retaining wall. Based upon preliminary information, the wall is expected to be built using top-down construction in order to avoid extensive excavation behind the wall. Physical impacts are expected to be less than five feet behind the proposed wall. Using the current work limits, ground penetrating radar (GPR) will be used to confirm that there are no graves within the impacted area prior to construction. A permanent easement, with no physical impacts, will be required for 25-50 feet behind the wall for the area of the tiebacks.

Wesleyan Cemetery is an historic cemetery located at the Colerain/Beekman interchange and shown on **Exhibit A Sheet 7**. Based upon the current design, no impacts to this property are anticipated. Using the work limits for the area of existing right-of-way adjacent to the cemetery, GPR will be used to confirm the absence of burials within this area prior to construction.

Vine Street Cemetery is located south of Mitchell Avenue and shown on **Exhibit A Sheet 12**. The cemetery property will be impacted for widening of Mitchell Avenue. Impacts are expected to the entrance and driveway. No graves are located within the impact limits. The impacts to this location will be minimized through the use of a retaining wall. Physical impacts are expected to be less than seven feet behind the wall. A permanent easement, with no physical impacts, will be required for 15 feet behind the wall for the area of the tiebacks.

### **Commercial Properties**

The project is currently anticipated to involve the relocation of 15 commercial properties, they are:

- SMT Properties – 3145 Fairhaven Lane
- MSV Properties – 121 City Center Drive
- St. Bernard Self Storage – Broerman Avenue
- United Fabricating and Erection Co. – 50 Oak Street
- City of St. Bernard – 30 Oak Street
- Hummel Industries (St. Bernard Real Estate) – 40 Oak Street
- St. Bernard Fire Department – 5116 Vine Street
- Zebreese Realty Co. – 4120 Clifton Avenue
- C.P. Realty Co. – 3481 Central Parkway
- City of Cincinnati – 1106 Bates Avenue
- Cash Check (Randman Construction Corp.) – 741 MLK Boulevard
- Interstate Inn (Jai Jalaram Hospitality) – 3035 W. McMicken Avenue
- Jiffy Lube (Louisa Losego) – 3000 Central Parkway
- National Machine Tool Co. – 2900 Massachusetts Avenue
- New Horizons Meats & Distribution LLC – 2842 Massachusetts Avenue

The Camp Washington area has the most businesses affected, shown on **Exhibit A Sheets 3 and 4**. The businesses include a Jiffy Lube, a check cashing business, a convenience store, and a motel. Jiffy Lube and the

check cashing business have other locations within the city and may not result in job losses if employees can transfer to other locations. The Interstate Inn is a small, older motel, which most likely has local business and long-term tenants. This motel employs a small number of persons and therefore a small loss of employment will occur; however, it is negligible when compared to overall employment figures in the project area. Relocation of the convenience store is not expected to be difficult within the area, based upon the Conceptual Relocation Assistance Program Survey. Therefore, there is expected to be no resulting loss of employment.

Within the City of St. Bernard, the project will acquire the city garage, shown on **Exhibit A Sheet 14**. This impact is not avoidable without substantial impacts to Ross Avenue Park on the opposite side of I-75. Since available commercial properties within the city limits of St. Bernard are limited, the City has begun preliminary planning to evaluate options for relocation of this facility. The St. Bernard Fire Department is also currently shown as an impact. The above ground building is not impacted; however, the basement appears to be within the work limits. The current building sits atop an older foundation which extends north of the building under the parking lot. It is possible that the Fire Department will not need to be relocated, but additional design detail will be needed to make a final determination. A third property within St. Bernard, the Post Office, is not currently shown as a building impact; however there will be an impact to the parking area. At this time, it is assumed that the post office will remain in its current location. Additional evaluations will be necessary to determine if the post office will require relocation due to parking impacts. These properties are located within a construction segment that is scheduled for 2016, allowing ample time for the City to evaluate their options.

No substantial impacts to the tax base of the area are anticipated as a result of the project. A review of taxable value and total taxes for the impacted properties indicates that their value represents 1/20<sup>th</sup> of one percent for city and school district taxes within Elmwood Place and St. Bernard and less than 1/100<sup>th</sup> of one percent for the City of Cincinnati.

### Residential Relocations

The project is currently anticipated to involve the relocation of 22 residential buildings, representing a total of 67 households. These buildings are either owner occupied (8), single tenant (4), multiple tenant (9), or owner/tenant mix (1) households.

A Relocation Assistance Program Conceptual Site Survey Report conducted by Utility Land Company (ULC) was done and reported in the *I-75 Mill Creek Expressway Conceptual Site Survey Reports, February 6, 2006*. 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 and assumed approximately 21 residential buildings comprised of 89 households, which is greater than the current range of impacts. Therefore, the findings are anticipated to remain valid.

Based upon the evaluation, it is expected that the relocations can be made with no divisive or disruptive effect on the community or the separation of residences from community facilities and that the relocates can be relocated 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 concentration of residential relocations is within the vicinity of the Hopple Interchange along McMicken Avenue, shown on **Exhibit A Sheet 3**. This area is primarily tenant occupied and within an area that is expected to serve student populations for the University of Cincinnati. Coordination with affected property owners has not identified any concerns regarding community impacts of these relocations.

## 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 I literature review and history/architecture reconnaissance survey identified a total of 57 architectural locations, 50 of which form a district, which were investigated to determine their eligibility for the National Register of Historic Places (NRHP). Of the 58, eight properties were recommended for further work to clarify their eligibility for the NRHP. These properties include:

- The B&O Railroad Depot (HAM-5141-45)
- The NA Tower (HAM-7627-45)
- St. John's Cemetery (HAM-5168-45)
- Wesleyan Cemetery (HAM-6343-27)
- The Cincinnati Street Railway Colerain Avenue Substation (HAM-7628-40)
- The locally-designated Rachel Sidney Historic District
- Mills House (HAM-1696-40)
- The Ahrens-Fox Engine Company Building (HAM-7420-40)

The survey also concluded that both sections of the Western Hills Viaduct will require investigation for National Register Eligibility when the preferred alternative is developed. None of the other pre-1956 properties identified during the survey are eligible. These findings were included in a letter to the Ohio Historic Preservation Office (OHPO) dated August 3, 2005. OHPO indicated agreement with those findings on September 9, 2005.

An addendum to the Phase I survey identified an additional property, Mt. Storm Park (HAM-7675-07), which was recommended for further study to clarify their eligibility. Information on Mt. Storm Park was provided to OHPO on September 28, 2005. OHPO concurred with this recommendation on October 26, 2005.

Examination of the current work limits for the project revealed that only seven of the above properties recommended for additional work were located within the preliminary Area of Potential Effect (APE). As a result of a joint field review in July of 2006, ODOT and OHPO also identified one additional entity that warranted further investigation, the locally-designated Cincinnati Workhouse District. Therefore, eight properties were subjected to Phase II investigations to determine their eligibility for the NRHP. These included:

- The B&O Railroad Depot (HAM-5141-45)
- St. John's Cemetery (HAM-5168-45)
- The Cincinnati Street Railway Colerain Avenue Substation (HAM-7628-40)
- The locally-designated Rachel Sidney Historic District
- Mills House (HAM-1696-40)
- Mt. Storm Park (HAM-7675-07)
- The locally-designated Cincinnati Workhouse District
- Wesleyan Cemetery (HAM-6343-27)

Coordination with Consulting Parties identified three additional resources for consideration: Central Parkway, the Hopple Street Subway Tunnel Portals, and the Western Hills Viaduct Subway Tunnel Portals.

The resulting Phase II history/architecture evaluation had the following conclusions:

- The B&O Railroad Depot (HAM-5141-45) is not eligible
- **St. John's Cemetery (HAM-5168-45) is eligible**
- **The Cincinnati Street Railway Colerain Avenue Substation (HAM-7628-40) is eligible**

- The locally-designated Rachel Sidney Historic District is not eligible
- **Mills House (HAM-1696-40) is eligible**
- Mt. Storm Park (HAM-7675-07) is not eligible
- Temple of Love (HAM-1613-7), within Mt. Storm Park, is eligible (not within APE)
- Mt. Storm Pavilion (HAM-7539-7), within Mt. Storm Park, is eligible (not within APE)
- The locally-designated Cincinnati Workhouse District is not eligible
- The Hausenfluck House (HAM-1672-40), within the Cincinnati Workhouse District, is eligible (not within APE)
- The portion of Central Parkway within the APE is not eligible
- **The Hopple Street Subway Tunnel Portals (HAM-7415-40) is eligible**
- **The Western Hills Viaduct Subway Tunnel Portals is eligible**
- **Wesleyan Cemetery (HAM-6343-27) is eligible**

The properties indicated in bold above are eligible and within the APE. The determinations were provided to the Ohio Historic Preservation Office by letters dated March 21, 2007, and May 15, 2007. The OHPO concurred on April 5, 2007, and June 6, 2007.

An additional property was identified through public involvement for evaluation, 4086 Egbert Drive (HAM-7914-7). An Addendum to the Phase I History/Architecture Survey Report was prepared. ODOT-OES determined that the property is eligible for the NRHP. This determination was provided to OHPO by letter dated August 2, 2007. OHPO concurred on August 6, 2007.

A copy of the coordination letters is included in **Appendix C**. Copies of the Phase II reports can be found in **Appendix B**.

### Archaeology

A Phase I archaeological reconnaissance survey was completed within the APE for the project. The extent of development has reached every area within the Mill Creek Expressway vicinity resulting in a complex mixture of urban and undrained soils. Heavy disturbance was documented through secondary source research and subsequently verified in the field. The Phase I archaeological reconnaissance survey concluded that no significant archaeological sites are present within the project APE. This determination was provided to the OHPO by letter dated November 16, 2007. OHPO concurred on November 28, 2007. The complete Phase I Report can be found in **Appendix B**. A copy of the coordination letter is included in **Appendix C**.

### 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 two properties: the Western Hills Viaduct Subway Tunnel Portals (shown on **Exhibit A Sheets 1 and 2**) and St. John's Cemetery (shown on **Exhibit A Sheets 12 and 13**). These takes will not adversely affect the characteristics that qualify them for inclusion on the NRHP. Therefore, ODOT proposes a finding of "no adverse effect" for these properties.

The remaining properties will not be impacted (no temporary or permanent right-of-way) and are proposed to have "no adverse effect" or "no effect." In addition, no known significant archaeological resources will be adversely affected.

ODOT proposed a "finding of no adverse effect" for the project by letter dated May 13, 2008. The OHPO concurred with the finding of No Adverse Effect on June 2, 2008. A copy of the letter is included in **Appendix C**. By letter dated June 16, 2008, to the Federal Highway Administration (FHWA), ODOT requested concurrence from FHWA that

a *de minimis* Section 4(f) finding is applicable to the above properties. FHWA concurred on July 16, 2008, that a *de minimis* finding under Section 4(f) was applicable to these impacts. (See letter in **Appendix C.**)

### **Parks and Recreation Areas**

Twelve parks, recreation areas, or playgrounds are located within or adjacent to the work limits for the Mill Creek Expressway project, discussed below by location. While these properties are subject to protection under Section 4(f), none of these properties are subject to Section 6(f).

Public involvement activities throughout project development provided information on impacts to properties, including parks and recreation areas. In April of 2008, ODOT distributed a newsletter (included in **Appendix D**) to update the public on the impacts and potential mitigation being considered for these properties, including the intent to seek a *de minimis* finding under Section 4(f). No comments were received. The public hearing will also be a venue for review and comments in early 2009.

#### **Clifton neighborhood of Cincinnati**

**Mt. Storm Park** is located at 660 Lafayette Avenue and can be found on **Exhibit A Sheets 6 and 9**. The park abuts the south and east sides of I-75. The 65.9-acre site is located just north of the I-74 interchange and is owned by the Cincinnati Park Board. The park grounds rise steeply from the highway to a grassy peak which offers scenic views and includes a parking lot, two picnic shelters, restrooms, and a playground. These areas are accessed from Lafayette Avenue. There will be a permanent take of approximately 0.28 acres of the site. In addition, a temporary easement of 1.64 acres will be required during construction. The majority of this impact results from re-grading the slope between a planned retaining wall and the existing utility corridor. No facilities will be affected, and the primary impact will involve the loss of vegetation (just under 2 acres of mixed deciduous forest). If the impact to the park were completely avoided, then the railroad on the west side of the expressway would be impacted in its entirety. Additionally, the expressway would encroach on the sensitive land near the Mill Creek waterway. Impacts to Mt. Storm Park are unavoidable in order to improve traffic flow and enhance safety along I-75. Additionally, it is possible that certain trees prioritized by the Park Board will be avoided. Trees that are affected and have to be removed will be replaced according to a landscaping plan created by the Park Board.

By letter dated June 20, 2008, ODOT requested concurrence from the Cincinnati Board of Park Commissioners that the project as proposed, including mitigation, will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f). ODOT also stated their intent to request a *de minimis* Section 4(f) finding. The Board concurred on June 27, 2008. A copy of the letter is included in **Appendix D**.

#### **Camp Washington neighborhood of Cincinnati**

**Valley Park** is located south of Monmouth Avenue at 3250 Colerain Avenue and can be found on **Exhibit A Sheet 4**. It is bordered by Bates Alley to the south and a Hamilton County government building to the east. The park is owned by the Cincinnati Park Board and is 3.65 acres in size. The site is comprised of a large open grassy area with several trees spaced intermittently around the park. It includes a playground, picnic tables, public art, and two stone monuments. The neighboring building to the east has a parking lot accessible from Monmouth Avenue, but the lot is not part of the park. Due to the closing of the Bates Avenue overpass, the Monmouth Avenue overpass will be expanded to connect the community west of the expressway with Central Parkway on the expressway's east side. There will not be a purchase from this property, but there will be a temporary easement of 0.03 acres in the park's northeast corner during construction to reconstruct the curb and sidewalk on Monmouth Avenue. The majority of the impact will be to the drive on the park's east side. The drive will not be closed and access to the park will be maintained. The temporary easement will be for a short duration during the overall construction period for the Monmouth overpass. This temporary easement will not constitute a "use" under Section 4(f).

**Taft Field** is located immediately to the west of the Camp Washington Recreation Center and can be found on **Exhibit A Sheets 3 and 4**. The park is south of the intersection of Stock Avenue and Henshaw Avenue. It is owned

by the Cincinnati Park Board but is maintained and operated by the Cincinnati Recreation Commission. The site is 2.29 acres in size. The park includes a baseball field as well as a field for football and soccer. Parking is available at the Recreation Center parking lot. There will be no impact to this site.

**Camp Washington Recreation Center** is located at 1201 Stock Avenue and can be found on **Exhibit A Sheets 3 and 4**. The 1-acre site is owned by the Cincinnati Recreation Commission and is adjacent to Taft Field. The center includes a basketball court, playground, pool, fitness facility, multipurpose room, and an arts room. In addition to active sports, a variety of community and cultural programs are held at the facility. The site is accessed on the east side through a parking lot off of Stock Avenue. The parking lot is adjacent to the I-75 southbound off-ramp of the Hopple Street interchange. The placement of the southbound off-ramp will impact approximately 140 square feet of the property. The impact also includes the area between the parking lot and I-75, which contains a man-made habitat for a Kirtland's snake. According to the Ohio Department of Natural Resources, this snake species is listed as "Threatened." If the habitat location is not avoidable during preparation of detailed plans, ODOT will contact the Ohio Department of Natural Resources to safeguard the snake during construction and the snake habitat will be replaced elsewhere on the park property.

If the recreation center parcel were completely avoided, the Hopple Street interchange could not be improved to meet the project's purpose and need. The Recreation Commission will be compensated for the property and vegetation lost. Proposed mitigation also includes re-grading at Hopple Street to allow for aesthetic gateway features that the Camp Washington community could landscape and maintain.

**Massachusetts Avenue Park** is located at 2944 Massachusetts Avenue and can be found on **Exhibit A Sheet 3**. This site lies at the Northern terminus of Massachusetts Avenue near the I-75 southbound entrance ramp from Hopple Street. The park is 0.11 acres in size and has several benches and playground equipment. It is owned by the Cincinnati Recreation Commission. The site does not include any parking. Full impacts are expected to the park as a result of the placement of the southbound on-ramp. If the park were completely avoided, then impacts to residential and commercial properties on the east side of the expressway would be increased. The impacts to the park are unavoidable in order to improve traffic flow and enhance safety at the Hopple Street interchange while minimizing impacts to the surrounding area. To mitigate the impact, grading for the ramp will be adjusted to create enough flat area to replace the park. The playground equipment will be moved south to a new location on the same block.

**Tot Lot** is located at the northeast corner of Cook Street and Draper Street and can be found on **Exhibit A Sheet 1**. The park is 0.07 acres in size and contains a swing set. It is owned by the Cincinnati Recreation Commission. There is no parking on the site. About 17 sq ft in the northeast corner of the park will be impacted. The impact to the park is unavoidable because houses and apartments along Central Parkway would be impacted if the alignment were shifted to avoid the Tot Lot. The Recreation Commission will be compensated for the small loss in property.

By letter dated August 8, 2008, ODOT requested concurrence from the Cincinnati Recreation Commission that the project as proposed, including mitigation, will not adversely affect the activities, features, and attributes that qualify the Camp Washington Recreation Center, Massachusetts Avenue Park, and Tot Lot properties for protection under Section 4(f). ODOT also stated their intent to request a *de minimis* Section 4(f) finding. The Commission concurred on October 12, 2008. A copy of the letter is included in **Appendix D**.

### **South Cumminsville neighborhood of Cincinnati**

**South Cumminsville Leadership Rotary Park** (formerly listed as Beekman Park in AFA) is located at the northwest corner of Beekman Street and Elmore Street and can be found on **Exhibit A Sheet 7**. The mostly wooded park contains a gazebo and park benches for passive recreation. The site is owned by the Cincinnati Recreation Commission and totals 0.15 acres in size. The site lacks parking, but parking is available at nearby Wayne Park to the west. There will be no impact to this site.

**Wayne Park** is located at 3757 Beekman Street near the intersection of Elmore Street and Sylvan Avenue and can be found on **Exhibit A Sheet 7**. The park sits to the west and southwest of South Cumminsville Leadership Rotary Park. It is owned by the Cincinnati Park Board but is maintained and operated by the Cincinnati Recreation Commission. The 10-acre site includes a parking lot and provides a variety of recreational opportunities for neighborhood residents. The park includes three tennis courts, two softball fields, two basketball courts, and a playground. Softball leagues and local high school teams play at the facilities. There will be no impact to this site.

### City of St. Bernard

**Ross Avenue Park** is located adjacent to I-75 at the corner of E. Ross Avenue and Tower Avenue and can be found on **Exhibit A Sheets 14 and 15**. The 13-acre site contains five tennis courts, three picnic shelters, a maintenance/vending building, a gravel running track, a basketball court, and a baseball/softball field with concrete bleachers. The ballfield is open for public use and is also used by a semi-professional team. The park is owned by the City of St. Bernard. The park contains two parking areas with capacity for approximately 100 vehicles. The primary parking area is accessed off Ross Avenue across from Tower Avenue via a driveway immediately adjacent to the I-75 right-of-way. A small parking area adjacent to the tennis courts is accessed off Broerman Avenue to the east. Based upon public comment, the existing I-75 right-of-way is being retained in order to avoid impacts to the access driveway and parking area. Therefore, no impacts will occur to this site.

**Bank Avenue Park** abuts the east side of I-75, just north of St. John Cemetery and can be found on **Exhibit A Sheet 13**. The 5.87-acre park is bordered by housing along Bank Avenue to the north and the former Erie & Ohio Canal bed to the east and south. It is owned by the City of St. Bernard. It includes a soccer field, playground equipment, parking lot, and storage structure with restroom facilities which are accessible from Phillips Avenue on the site's east side. In addition to active recreation, local residents use the site as a place for dog walking. The park is the former location of the St. Bernard City Landfill and is subject to a Phase II ESA to determine the potential of encountering hazardous substances prior to construction activities. There will be a permanent impact of 0.36 acres to the park. The impact extends a maximum of about 30 ft into park property. No facilities will be impacted, except for a walking path which will be replaced during construction. This minor impact is unavoidable because the west side of the expressway abuts the Mill Creek waterway, and construction over the waterway would cause a greater impact. Proposed mitigation also includes extending a proposed noise wall the length of the park.

By letter dated October 14, 2008, ODOT requested concurrence from the City of St. Bernard that the project as proposed, including mitigation, will not adversely affect the activities, features, and attributes that qualify Bank Avenue Park for protection under Section 4(f). ODOT also stated their intent to request a *de minimis* Section 4(f) finding. The Mayor of St. Bernard concurred on November 8, 2008. A copy of the letter is included in **Appendix D**.

### Village of Elmwood Place

**Elmwood Place Memorial Park** (formerly listed as Maple Street Park in AFA) is located at the intersection of Maple Street and Cedar Street and can be found on **Exhibit A Sheet 18**. The park serves as the village's only baseball diamond as well as a small swimming pool. The site is bordered by I-75 on the eastern edge and the surrounding residential neighborhood on the north, south, and west. There is no parking on the site. The park is owned by the Village of Elmwood Place and is 1.46 acres in size. A retaining wall will be constructed at the base of the existing fence line of the park creating no impact to the park. The trees between the baseball field and the highway will be affected, but there will be no purchase at this park because construction remains within the existing right-of-way. The fence for the baseball diamond will be extended to reconnect with the new fence.

**Cedar Street Park** is located on the east side of Cedar Street between Linden Street and Walnut Street and can be found on **Exhibit A Sheet 18**. The park is about a block south of Elmwood Place Memorial Park and shares its eastern edge with the I-75 right-of-way. The 0.15-acre neighborhood park has a small swing set and a grassy area. It does not include any parking. The majority of the site is owned by the Village of Elmwood Place, but a portion in the middle of the park is owned by a private party. There will be no impacts to the park.

## ***Ecological Resources***

An Ecological Survey Report was completed and reviewed by OES. 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), the Ohio Environmental Protection Agency (OEPA), and the U.S. Environmental Protection Agency (USEPA). Copies of their comments with responses are included as **Appendix C**.

Based upon current information, ecological impacts are limited to 39-ft culvert extension, shown on **Exhibit A Sheet 10**, on an unnamed tributary of Mill Creek. Based upon these minimal impacts, it is anticipated that a Nationwide permit (NWP#14) will be obtained. Mitigation will be minimal and will be off-site, potentially through credits. No wetlands are located within the project limits.

## ***Threatened and Endangered Species***

No impacts to threatened or endangered species are anticipated. The project will comply with ODOT OES Technical Guidance (TG-ECO-01-07) for Indiana bat habitat. Trees with possible habitat for the Indiana bat will be removed after September 30<sup>th</sup> and before April 1<sup>st</sup> when bats are not utilizing such habitat.

It has been reported that the staff of the Camp Washington Recreation Center have constructed a snake habitat adjacent to the existing I-75 right-of-way within an impacted area. This is reportedly for a Kirtland snake, a state threatened species. If this area cannot be avoided during preparation of detailed plans, ODOT will coordinate with ODNR to locate and safeguard the snake during construction and the habitat will be relocated on the park property.

## ***Hazardous Waste***

An Environmental Site Assessment Screening, Environmental Site Assessment Phase I, and an addendum to the Phase I have been reviewed and accepted by ODOT OES. These studies recommended Phase II ESA investigations at 20 sites within the project limits. This work is in progress and will be completed prior to construction.

There are several former landfill areas located within the project limits. Excavation, including drilling work within these areas, requires permits 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.

## ***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 such populations occur within the study area, the project's impacts are dispersed along the project length and are not concentrated in minority or low-income neighborhoods. 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. No Environmental Justice impacts are anticipated as a result of the project. For more information, please refer to the discussion of Social and Community Resources and Environmental Justice in Section 3.15 of the *Assessment of Feasible Alternatives*, beginning on page 3-18, included in **Appendix A**.

## ***Secondary and Cumulative Impacts***

No noteworthy secondary or cumulative impacts are anticipated as a result of the project. As the project is an upgrade of an existing interstate facility within a highly developed area, no noteworthy secondary impacts are anticipated. For more information, please refer to the detailed discussion of other projects in the area along with the potential for cumulative impacts included in Section 3.16 of the *Assessment of Feasible Alternatives*, 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 22 buildings/67 households. Commercial relocations are anticipated to 15 properties. No substantial concerns are associated with relocations.
- Park impacts are expected to include:
  - Mt. Storm Park – 0.28 acres permanent, 1.64 acres temporary, impacts to vegetation, will be re-vegetated
  - Camp Washington Recreation Center – approximately 140 square feet permanent, grassy area and trees impacted
  - Massachusetts Avenue Park – 0.11 acres impact (total site) including play equipment and benches, park to be relocated
  - Tot Lot Park – approximately 17 square feet of grassy area impacted
  - Elmwood Place Memorial Park (Maple Street Park) – impacts to trees only, which are within existing highway right-of-way, no impacts to park, retaining wall to be constructed and ballfield fence extended to wall
  - Bank Avenue Park – 0.36 acres permanent and no impacts to facilities except for walking path which will be replaced during construction
  - Valley Park – 0.03 acres temporary to reconstruct sidewalk and curb return to access drive
- No adverse effects are anticipated on cultural resources. Minor property impacts are required within St. John's Cemetery, the Cincinnati Street Railway Station, and the Western Hills Viaduct subway portals.
- Stream impacts consisting of approximately 39 feet of culvert extension on Unnamed Tributary to Mill Creek and pier footings within the channelized Mill Creek, with the area of work to be determined during bridge studies.
- A loss of just under 2 acres of mixed deciduous forest at Mt. Storm Park and approximately 18 acres throughout the remainder of the project area.
- Noise impacts are predicted on adjacent sensitive receivers. Noise walls are recommended at several locations. Public input meetings conducted per ODOT Noise Policy indicate that the public desires construction of the proposed walls.
- Construction plan notes (for management of contaminated soils) are recommended for several properties evaluated in the Phase I Environmental Site Assessment. Twenty properties are recommended for Phase II Environmental Site Assessment in subsequent steps. Five properties will require authorization from Ohio EPA 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 on-going coordination and permitting.

**Wetlands/Streams** – Project will avoid wetland outside of project limits south of Colerain/Beekman interchange. All necessary 401/404 water quality certification permits will be acquired prior to construction activity. 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:

- Mt. Storm Park – revegetation of impacted slope according to agreed upon replacement ratio utilizing planting plan provided by Cincinnati Parks.
- Camp Washington Recreation Center – if impacted, relocation of constructed snake habitat and coordination with ODNR to safeguard snake during construction
- Massachusetts Avenue Park – Park to be relocated, replacement of play equipment and benches.
- Elmwood Place Memorial Park (Maple Street Park) – ballfield fence to be extended to retaining wall along highway
- Bank Avenue Park – Restoration of impacted walking path and extension of noise wall for length of park.

**Threatened and Endangered Species** - The project will comply with ODOT OES Technical Guidance (TG-ECO-01-07) for Indiana bat habitat. Trees with possible habitat for the Indiana bat will be removed after September 30<sup>th</sup> and before April 1<sup>st</sup> when bats are not utilizing such habitat. Additional coordination will be required with ODNR and the Cincinnati Recreation Commission to confirm the presence of the Kirtland snake within a constructed habitat on the Camp Washington Recreation Center parcel, and if applicable, arrange for its relocation prior to construction. If the Peregrine Falcon, Eastern Hellbender, or any mussels (in-water work) are encountered during construction, work must be stopped and the ODNR Division of Wildlife should be contacted.

**Noise** – Construct noise walls at 10 recommended locations as desired by affected property owners through public input meetings. Investigate Sacred Heart Church (Hopple/Mainline project) and True Unity Baptist Church (I-74/I-75 project) for potential noise insulation. Additionally, St. Bernard logo panels will be included on the parks side of the noise walls adjacent to Bank Avenue Park.

**Environmental Site Assessment** – Several 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. Phase II ESA investigations will be completed prior to construction. Any and all necessary plan notes required as a result of Phase II ESA investigations will be included in the final 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.

**Way finding signs to Northside** – A ground mounted “Northside Next Right” sign will be installed along I-74 WB and way finding signs will be installed from the Beekman Street/Colerain Avenue intersection to Hamilton Avenue in the Northside area.

**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 mainline and interchange alternatives 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 alternatives are the Preferred Alternatives for HAM-75-2.30, the I-75 Mill Creek Expressway project. Detailed descriptions of alternatives considered and dismissed are included in the *Planning Study Report, Conceptual Alternatives Study, Assessment of Feasible Alternatives, and Preferred Alternative Verification Review* documents included in **Appendix A**.

### Mainline I-75 – I75-D: 5/4-Lane Alternative

The *I75-D: 5/4-Lane Alternative* has the following benefits:

- Addition of one travel lane in each direction, improving operational efficiency.
- Removal of design deficiencies, improving safety.
- Overall impacts are lower than previously considered alternatives.
- The public has expressed its preference for the alternative in verbal and written comments received during the public involvement process.

### Hopple Interchange – VE Alternative 3: Recommended Alternative with I-75 NB on-ramp moved opposite off-ramp

The *VE Alternative 3: Recommended Alternative with I-75 NB on-ramp moved opposite off-ramp* has the following benefits:

- Removal of the left hand exit which causes accident problems and is an overall safety issue.
- Removal of the Partial interchange (Bates) and confusion with the separation of ramps.
- Hopple/Central/MLK intersection currently operates at a very poor level of service.
- VE Alternative 3 will preserve future Light Rail Corridor.
- VE Alternative 3 will add sidewalks and streetlights along both sides of Hopple.
- The public has expressed its preference for the alternative in verbal and written comments received during the public involvement process.

### I-74/I-75 Interchange – I74-B: Fully Directional Interchange with No Local Access

The *I74-B: Fully Directional Interchange with No Local Access* has the following benefits:

- Removal of the local access ramps which create operational and safety issues.
- Provide high speed directional ramps; replacing existing ramps that are highly deficient and low speed.
- Minor property impacts compared to prior alternatives.
- The public has expressed its preference for the alternative in verbal and written comments received during the public involvement process.

### Colerain/Beekman Interchange – COL-A: Low Impact Improvement with Full Movements

The *COL-A: Low Impact Improvement with Full Movements* has the following benefits:

- Addition of all traffic movements.
- Improved operations along Colerain Avenue and the Virginia Avenue/West Fork intersection.
- Provides improved access into Northside and South Cumminsville neighborhoods.
- Impacts avoided to Wesleyan Cemetery.
- The public has expressed its preference for the alternative in verbal and written comments received during the public involvement process.

Mitchell Interchange – MIT-A: Tight Urban Diamond Interchange (TUDI)

The MIT-A: Tight Urban Diamond Interchange (TUDI) has the following benefits:

- Improved operations along Mitchell Avenue.
- Minor impacts because of TUDI configuration.
- The public has expressed its preference for the alternative in verbal and written comments received during the public involvement process.

SR 562 (Norwood Lateral) Interchange – NOR-A: Modified Interchange with Additional Ramp Lanes

The NOR-A: Modified Interchange with Additional Ramp Lanes has the following benefits:

- Includes additional ramp lanes to and from the north on I-75 which improve operations.
- With the removal of the partial Towne interchange safety conditions will improve.
- The public has expressed its preference for the alternative in verbal and written comments received during the public involvement process.

Towne Street Interchange – TOW-A: Interchange Closed

The TOW-A: Interchange Closed has the following benefits:

- Removal will improve operations and enhance safety between SR 562 (Norwood Lateral) and Paddock Road.
- The public has expressed its preference for the alternative in verbal and written comments received during the public involvement process.

Paddock Interchange – PAD-A: Low Impact Spot Improvements

The PAD-A: Low Impact Spot Improvements has the following benefits:

- Addition of ramp at Seymour Avenue would improve operations.
- No property impacts.
- Recently constructed bridge only requires minor work.
- The public has expressed its preference for the alternative in verbal and written comments received during the public involvement process.

## Schedule/ phasing plan

A phasing plan for improvements along I-75 was prepared by ODOT District 8 for the project. The resulting construction years and segments with identified funding as of December 2008 are:

Phase	Project Description	Construction Cost (million) 2007 Dollars	Construction Cost (million) Award Date Dollars	Right-of-Way Acquisition Start	Construction Contract Award Date	Major Construction End
1	Mitchell Ave. Interchange (PID # 82278)	\$31.2	\$46.9	Feb 2009	Jan 2011	Jul 2013
2	Monmouth St. Overpass (PID # 82282)	\$4.5	\$6.6	Jun 2008	Jan 2010	Oct 2011
3	Colerain/Beekman/I-74 Interchange (PID # 82284)	\$7.7	\$10.5	Jan 2010	Apr 2011	Oct 2012
4	I-75 from Western Hills Viaduct to Monmouth Overpass (includes Hopple Interchange) (PID # 76257)	\$76.7	\$116.9	Sept 2010	Jan 2013	Oct 2015
5	I-75 from Monmouth Overpass to Mitchell Ave. (includes I-74 Interchange and I-74 improvements) (PID # 76257A)	\$111.9	\$185.6	Nov 2011	Oct 2014	Apr 2018
6	RR Overpass South of Norwood Lateral (PID # 82283)	\$28.0	\$42.8	Sept 2010	Oct 2013	Sept 2015
7	I-75 Mainline from Mitchell Ave. to the Norwood Lateral (PID # 82286)	\$29.2	\$50.9	May 2012	Oct 2015	May 2018
8	I-75 Mainline from the Norwood Lateral to Cross County Highway (PID # 77889)	\$101.9	\$135.4	Aug 2014	Oct 2017	May 2020

## Schedule for public hearing and FONSI

Extensive public involvement has been conducted for the project through each step of project development. Summaries of public involvement activities are included in the *Planning Study Report*, *Conceptual Alternatives Study*, and *Assessment of Feasible Alternatives* documents included in **Appendix A**.

A 30 day public review and comment period will be in place for this Environmental Assessment (EA). If the project is found to not have any significant impacts to the environment, the FHWA will issue a Finding of No Significant Impacts (FONSI). If significant impacts are determined, then an Environmental Impact Statement (EIS) would need to be completed. Input from the project's stakeholders and the public will serve to inform the FHWA's decision-making on the project.

## Public Involvement

### Meetings

The following is a list of Public, Implementation Committee, Aesthetic Committee, and Community meetings that have taken place along with the main topic of discussion. Summaries of public involvement activities are included in the *Planning Study Report*, *Conceptual Alternatives Study*, and *Assessment of Feasible Alternatives* documents included in **Appendix A**.

Public meetings were held on:

- January 11-12, 2006: to present the Conceptual Alternatives from Step 5.
- September 28, 2006: to present the Feasible Alternatives from Step 6.
- March 29, 2007: to present the changes to the Feasible Alternatives.

Implementation Committee meetings were held on:

- November 29, 2004: project kick-off meeting.
- January 24, 2005: definition of purpose and needs of the project.
- March 14, 2005: discussed Draft Purpose and Need and Existing and Future Conditions Report.
- June 6, 2005: discussion of Conceptual Alternative Solutions (Step 3-4).
- November 14, 2005: discussion of Step 5 and upcoming public meeting.
- April 24, 2006: discussion of Step 6 and public meeting dissection.
- August 21, 2006: discussion of Feasible Alternatives and Aesthetic Committee information.
- August 27, 2008: to present the Hopple VE Alternatives.
- November 12, 2008: present Preferred Hopple Alternative.

Aesthetics 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:

- October 2, 2006: Northside Business Association, Feasible Alternatives from Step 6.
- October 17, 2006: Northside Community Council, Feasible Alternatives from Step 6.
- May 16, 2007: Camp Washington Business Association, Feasible Alternatives from Step 6.

## Summary of Key Public Issues

The key public issues are listed as below. Further description is included in the *Planning Study Report*, *Conceptual Alternatives Study*, and *Assessment of Feasible Alternatives* documents included in **Appendix A**.

### Towne Interchange

Following the recommendation from the North South Transportation Initiative (NSTI) study, the relatively low volume ramps serving Towne Street were recommended to be closed to improve safety and reduce congestion due to conflicts. Throughout development of the project this option has not changed and is the recommended Preferred Alternative for this location.

Initial public discussion was documented during and after the January 11 and 12, 2006 public meetings. While only 13% of the comments received were related to the Towne closure, the Village of Elmwood Place sent a letter to ODOT officially opposing the proposed action.

As a result of the closure and the opposition, the City of Cincinnati and ODOT commissioned a study to consider the effects of this change on motorists and on the routes that would serve the redirected traffic, including any recommended improvements. Specifically, the City requested that the project team do additional studies in the Paddock area to determine whether the Paddock Road corridor and connecting roads will accommodate the additional traffic as a result of the proposed closure. The study concluded that there are several alternative routes available for vehicles, with relatively minor additions in travel time, to use in lieu of the partial interchange at Towne Street and I-75. Following the conclusion of the study, the Village of Elmwood Place agreed with ODOT's recommendation to close the Towne interchange due to improvements recommended at the Paddock interchange.

### I-74/I-75 Interchange

Due to several factors including; safety, low traffic volumes, connectivity via adjacent ramps, and impacts to the surrounding communities to maintain access, the local access ramps within the I-74/I-75 interchange were recommended to be closed. These include Elmore Street, Spring Grove, and the Central Parkway entrance and exit ramps. Access to the surrounding areas will be available at the improved Hopple interchange on I-75 and at the improved Colerain-Beekman interchange on I-74.

Initial public debate was documented during and after the September 28, 2006 public meeting. Almost 70% of the comments received were from either the Northside or Clifton neighborhoods and they ranged from access issues to impacts to businesses. As a follow-up to the large number of comments received concerning Northside, ODOT District 8 and the project team coordinated with neighborhood leaders and meetings of the Northside Business Association on October 2, 2006 and the Northside Community Council on October 17, 2006. In addition, a petition was received on October 30, 2006 that contained 406 signatures opposing the closure of ramps in the Northside area.

As a result of public input, ODOT agreed to consider improvements at the Colerain/Beekman interchange to offset the removed local access ramps to Northside. In addition, a travel time study was conducted to evaluate the differences in travel time once those ramps are closed. Distances traveled and total travel time was not found to change substantially for most travelers. As a result of the proposed closure and the opposition, the City of Cincinnati and ODOT commissioned a study to consider the effects of this change on motorists and on the routes that would serve the redirected traffic, including any recommended improvements. The study concluded that there are several alternative routes available for vehicles, with relatively minor additions in travel time, to use in lieu of the local access ramps at the I-74/I-75 interchange.

Based upon concerns about the impacts of closing the ramp from I-74 eastbound to Central Parkway, ODOT evaluated the possibility of providing a connector from the Colerain/Beekman interchange to Central Parkway to replace this function. At the March 29, 2007 public meeting, 75% of the comments received were regarding the proposed Beekman/Central Parkway Connector. The overwhelming majority of comments (90%) were not in favor of

the connector. Following the public meeting, the City of Cincinnati and the Northside neighborhood agreed with ODOT's recommendation for no local access at the I-74/I-75 interchange due to improvements recommended at Hopple Street and Colerain/Beekman on I-74.

#### Hopple Interchange

From the start of the project one of the goals has been to create a full service interchange at Hopple Street. With the determination to eliminate local access at the I-74/I-75 interchange, providing full movements became increasingly important. Public debate was relatively minor up until the Value Engineering (VE) study for the Hopple Interchange area was conducted in July 2008. The Cincinnati City Council passed a resolution which stated a desire for ODOT to evaluate the three additional alternatives developed at the VE for the Hopple Street Interchange.

On August 27, 2008 the Implementation Committee (IC) for the project met to discuss the three new alternatives. Following the IC meeting, the project team further evaluated the feasibility of the three VE alternatives. The analysis determined only one of the alternatives (VE Alternative 3) operated adequately and met the Purpose and Need for the project. The evaluations were then presented to the City Staff, where after Cincinnati City Council passed Resolution 53-2008 supporting VE Alternative 3 and urging ODOT to eliminate Alternatives 1 and 2. VE Alternative 3 was chosen by ODOT as the Recommended Preferred Alternative for the Hopple Street interchange.