

## **6.0 FINAL SECTION 4(F) EVALUATIONS FOR THE WOODBRIDGE NEIGHBORHOOD HISTORIC DISTRICT, I-94/M-10 INTERCHANGE, SQUARE D/DETROIT FUSE & MANUFACTURING BUILDING, AND THE UNITED SOUND SYSTEMS RECORDING STUDIOS**

Section 4(f) of the U.S. Department of Transportation Act of 1966 states that the Secretary of Transportation will not approve any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife or waterfowl refuge, or any land from a historic site of national, state or local significance unless:

1. There is no prudent and feasible alternative to the use of such land, and
2. Such program or project includes all possible planning to minimize harm to these resources resulting from such use.

The Recommended Alternative will not use any publicly owned land from a public park, recreation area, or wildlife or waterfowl refuge. Each parcel was reviewed to assess whether it was or was not a publicly owned land for a park or recreation area. The Wayne State University land purchasing agreements along I-94 were reviewed, as well as the University policies and Master Plan to ensure that the property was not subject to 4(f).

Archival research and surveys were undertaken to determine whether the Recommended Alternative would impact historic sites of national, state, or local significance. Archival research relating to both prehistoric and historic period land use within the planning corridor was conducted, and a detailed land-use history summary was prepared. In addition, a block-by-block windshield inspection of nearly 300 city blocks was conducted, covering an area of nearly 2,400 acres. The windshield survey was aimed at assessing the current physical condition of the study area, with particular respect to identifying the nature, extent, and preservation of architectural resources that might be associated with the I-94 study area. Architectural field survey methodologies were predicated on information contained in National Register Bulletin 24, *Guidelines for Local Surveys: A Basis for Preservation Planning*, and were conducted to comply with federal rules and regulations concerning historic properties, most specifically Executive Order 11593. The research and survey identified eight structures and four districts that are listed on the National Register of Historic Places. Nine additional, individual structures or districts were identified and documented as being potentially eligible for nomination to the National Register. These structures and districts are shown in Figure 5-12 and annotated by a clear star.

The Recommended Alternative will use land from the Woodbridge Neighborhood Historic District which is on the National Register of Historic Places (NRHP) and from the United Sound Systems Recording Studios and the Square D/Detroit Fuse and Manufacturing Company Building which have been determined eligible for the National Register of Historic Places. The Recommended Alternative also will adversely affect the I-94/M-10 (John C. Lodge Freeway) interchange which also has been determined eligible for the NRHP and which is already part of the Michigan highway system owned and operated by the Michigan Department of Transportation. As a result, a Section 4(f) Evaluation is required and that Evaluation, prepared according to the FHWA regulation 23 CFR 771.135 and the FHWA Technical Advisory T6640.8A, follows below.

## 6.1 Proposed Action and Need for the Project

A detailed description of the proposed project and its purpose and need are in Chapter 2. A summary follows.

The purpose of the I-94 Rehabilitation Project is to improve the condition and capacity of the existing I-94 roadway to ensure that it continues to fulfill its intended functions of providing for the national and civil defense and meeting the needs of local and interstate commerce. This section of I-94 (from east of I-96 to Conner Avenue) was constructed in the late 1940s and early 1950s and is one of the oldest urban interstate highways in the country. The freeway is rapidly aging and requires frequent maintenance.

The I-94 Rehabilitation Project identified other existing problems including inadequate capacity, safety hazards, poor local traffic circulation, limited accommodation of pedestrian and bicycle transportation, and an outdated design. Further concerns that have been identified as a result of comments on the DEIS include economic setting, and system connectivity and continuity. These problems and concerns are discussed further in FEIS Section 2.5 (Need for the Proposed Action).

The I-94 project area is within the city of Detroit. The project is 6.7 miles long and extends from east of the I-94/I-96 interchange easterly along existing I-94 to east of the Conner Avenue/I-94 interchange. In 2002, the 12 miles east of Conner Avenue were rehabilitated with pavement repair and resurfacing and the rehabilitation or replacement of 51 bridges. This segment of I-94 is central to the metropolitan roadway network providing connections to I-96, I-75, M-10, M-53, and M-3 (M-1 also crosses but has no direct access to I-94.). I-94 also connects border crossings to Canada and other major traffic generators including Wayne State University and the GM Cadillac Plant. Between I-75 and Conner Avenue, there are five local access interchanges located at Chene, Mt. Elliott, Van Dyke (M-53), Gratiot (M-3), and Conner. Project limits are shown in Figure 2-1.

Average Annual Daily Traffic (AADT) in the I-94 Project Area ranges from 120,000 to more than 160,000 vehicles per day and is expected to grow by more than 35 percent by the year 2025. High traffic volumes, substandard/outdated design, and inadequate capacity (especially during the morning and evening rush hours) contribute to congestion and an above-average crash rate. Due to a lack of east/west through streets in the area, local traffic is forced to use I-94 to travel relatively short distances, adding to the congestion and merging/weaving movements on the mainline pavement. Also, the heavy-truck volume is expected to grow faster than the volume of passenger vehicles. The capability of I-94 to handle trucks is especially important because I-94 is a vital link between United States – Canadian border crossings.

The Recommended Alternative, which is described in detail in Chapter 4, would replace the existing cross-section (three through-traffic lanes in each direction) with a wider cross-section consisting of four through-traffic lanes in each direction. The new cross-section also would provide a full-width shoulder adjacent to the median and outside lanes for emergency accommodation of disabled vehicles, together with auxiliary and acceleration-deceleration lanes to improve freeway entering and exiting operations. The median also would include a 6- to 10-foot variable width area between the shoulders to accommodate a concrete median barrier. The existing service drive segments would be improved and extended to provide two-lane continuous service drives throughout the project (three-lane service drives are proposed south of I-94 between M-10 and I-75). The service drives would be accompanied by continuous sidewalks to

enhance pedestrian and bicycle travel along the corridor. Sidewalks also would be included on all vehicular bridges crossing I-94, together with four pedestrian-only bridges planned east of I-75, to facilitate pedestrian movement across I-94. All bridges and pavements will be replaced, except for the Dequindre Yard Bridge which was reconstructed in 1999 (some modification will be required to accommodate the fourth through-traffic travel lane).

## **6.2 Section 4(f) Properties**

The Recommended Alternative will not use any publicly owned land from a public park, recreation area, or wildlife or waterfowl refuge.

The Recommended Alternative will use property from one historic district (the Woodbridge Neighborhood Historic District) listed on the NRHP and three properties that are eligible for listing on the NRHP: the I-94/M-10 interchange, the United Sound Systems Recording Studios, and the Square D/Detroit Fuse and Manufacturing Company Building. The properties are discussed in detail in the DEIS and FEIS Section 5.11 Cultural Resources. Descriptions and impacts are summarized below.

### **6.2.1 The Woodbridge Neighborhood Historic District**

The approximate boundaries of the Woodbridge Neighborhood Historic District are Trumbull Avenue, Grand River Avenue, Rosa Parks Avenue, W. Warren Avenue, Wabash, the Grand Trunk Railroad tracks, and the I-94 eastbound service drive (See Figure 5-11 in DEIS for specific boundaries). The district is south of I-94 and west of the Wayne State University (WSU) athletic fields and the I-94/M10 interchange. The district, which has an area of 162 acres, was listed on the NRHP in 1979.

The Woodbridge neighborhood is a middle-class, turn-of-the-century, urban residential area of primarily one- and two-family houses. The neighborhood is laid out in almost square blocks bisected by north-south service alleys. Houses and apartments in the district were built primarily between 1885 and 1920. The houses range in form from rambling Queen Anne structures with towers and elaborate spindlework porches to modest, boxy cottages. The houses are uniformly sited back from the sidewalk close together on narrow lots. A majority of the houses are brick, two and one-half story, with bay windows, broad front porches, and modest Queen Anne and Colonial Revival architectural features.

Small apartment buildings also were built in the historic district. A few emulated the architectural styles of the time including Art Deco influences and Georgian Revival architecture.

While the District contains public streets and sidewalks, its contributing properties generally are privately owned. As a result, there is no official public access or usage other than driving or walking about the District. No records are kept on visitors to the District.

### **6.2.2 I-94/M-10 Interchange**

The I-94/M-10 interchange was constructed in the early 1950s and connects two major freeways in Detroit (DEIS Figure 5-12). Ramps between the freeways allow traffic to exit one freeway and proceed directly at high speed to enter the other freeway. The approximate area of the interchange is 39.4 acres. The interchange is owned and operated by the MDOT. A detailed discussion of the interchange is found in DEIS Section 5.11.

The State Historic Preservation Office (SHPO) concurred with findings in the 1995 *MDOT Michigan Historic Bridge Inventory* that the interchange is eligible for listing on the NRHP. According to the inventory, the I-94/M-10 interchange meets NRHP Criterion A for its association with Post-World War II freeway construction and Criterion C for its unique design. Eight of the 14 I-94/M-10 bridges that make up the interchange, as well as a pedestrian bridge, are historic:

- M-10 southbound over the M-10 northbound ramp to I-94 westbound
- I-94 eastbound over the M-10 ramp northbound to westbound I-94
- M-10 southbound over I-94
- I-94 eastbound ramp to M-10 over M-10 southbound and I-94 westbound
- I-94 westbound ramp to M-10 over M-10 northbound and I-94 eastbound
- M-10 northbound over I-94
- I-94 westbound over I-94 ramp from M-10
- M-10 northbound over I-94 ramp from M-10
- Holden Avenue pedestrian bridge over M-10

Draft construction plans for the interchange were produced in 1945, construction began in 1948, and the entire interchange was completed in 1955. The I-94/M-10 interchange was the first freeway-to-freeway interchange in the Midwest, providing direct turning movements in all directions. A model was built and shipped to New York City for the “Conference of the Future” held in 1952, because engineers believed it was the most outstanding design for a highway interchange in the country at that time.

The interchange is a public facility and as such is open to anyone who wants to drive through the area. Traffic volumes would indicate how many vehicles traverse the area, but, no records are available on whether some of those vehicles might be there to visit a historic site eligible for the NRHP.

### **6.2.3 United Sound Systems Recording Studios**

The building housing the United Sound Systems Recording Studios has been determined eligible for the NRHP and is located northeast of the I-94/M-10 interchange in the southeast corner of the intersection of Second Street and Antoinette (I-94 westbound service drive). This building is a two-story brick building originally built as a residence with a two-story addition on the rear, and later converted to a recording studio. United Sound Systems Recording Studios, Detroit’s first major recording studio, was founded in 1933 and moved to this location in the 1940s.

The studio is significant for the musical contributions made there by some of the most influential, African-American artists of the jazz and Motown eras. Miles Davis (with Charlie Parker), and John Lee Hooker recorded there in the late 1940s. Berry Gordy produced records by Jackie Wilson and Smoky Robinson and the Miracles in the 1950s. Success continued into the 1960s and 1970s when such artists as Isaac Hayes and Aretha Franklin recorded there. The studio is eligible for the National Register because it is associated with events that have made a significant contribution to the broad pattern of our history (Criterion A), and it is associated with the lives of persons significant in our past (Criterion B). A complete description of United Sound Systems Recording Studios is found in the DEIS and FEIS Section 5.11.

The United Sound Systems Recording Studios building is privately owned, and it is not open to public access or usage. The building can be viewed from the public street and sidewalk, but no records are kept on the number of visitors.

#### **6.2.4 Square D/Detroit Fuse and Manufacturing Company Building**

The Square D/Detroit Fuse and Manufacturing Company Building is located on the northeast quadrant of the I-94 and I-75 interchange. The building is bordered by Piquette, Harper, Rivard, and Russell. The original Albert Kahn reinforced concrete building has a rectangular footprint and is three stories tall. The building was built in 1909, and is located in the area known as “Milwaukee Junction”, named for its proximity to the junction of the Detroit & Milwaukee and Grand Trunk Railway lines.

The Detroit Fuse and Manufacturing Company was a pioneer in the development and manufacture of enclosed electrical safety switches. In 1917, the company changed its name to Square D and grew to become one of the largest suppliers of electrical supplies in the United States. The success of the company did not preclude a 107-day strike by roughly 1,200 United Electrical Workers-member employees of Square D in 1954, which erupted in violence and filled Detroit newspapers for several weeks. The Square D/Detroit Fuse and Manufacturing Company Building is significant for its historical associations with both Square D and the 1954 strike. Demolition of the Square D/Detroit Fuse and Manufacturing Company Building would be an adverse effect.

### **6.3 Impacts to Section 4(f) Properties**

#### **6.3.1 Impacts to Woodbridge Neighborhood Historic District**

The proposed I-94 service drive (Kirby Avenue) will be moved south and will encroach about 40 feet into the Woodbridge District, constituting a Section 4(f) use. In the District, there are only two buildings adjacent to the service drive: the house at 5287 Hecla, and the commercial building at 5287 Trumbull. All other buildings have been removed at this time, leaving vacant lots. The Hecla house is a contributing structure within the Woodbridge Historic District, but will be impacted by the construction of I-94. The commercial building will not be affected and can remain in place. Parts of eight vacant lots also will be acquired to accommodate the service drive shift.

No buildings remain in the area bounded by Rosa Parks, Mark, and Wabash avenues, and the service drive. Hecla Street between Merrick and the service drive has only four houses (two on each side of the street) remaining other than the one at 5287 Hecla. Avery Avenue has more houses remaining than Hecla in the block between Merrick and the service drive; however, it also has a number of vacant lots. Commonwealth has almost all the homes remaining between Merrick and the service drive, except for the lots immediately adjacent to the service drive. The houses along Commonwealth continue to retain their historic residential characteristics. In the area where Commonwealth intersects the service drive, the service drive actually would be moved north, further away from the closest existing houses. See Chapter 13 (aerial photo layouts sheet 2 of 15) for the proposed highway location in this area.

Concerns also have been voiced by residents of the Woodbridge Neighborhood Historic District regarding truck traffic in the neighborhood and all traffic on the service drive. Trucks now avoid

the low bridge clearances by traveling on Kirby, Forest, Warren, and Trumbull. Bridge clearances on I-94 and the service drives will be increased to at least the current minimum standard of 14 feet, 6 inches. As a result, trucks that previously traveled through the neighborhood to avoid low clearances on I-94 can return to I-94. This would result in fewer trucks using neighborhood streets.

Traffic on the service drive (Kirby Avenue) between Fourteenth and Trumbull is expected to increase from about 200 vehicles per hour in the peak hour in 1995, to about 800 vehicles per hour in the peak hour in 2025 with the Recommended Alternative. Most of this traffic is expected to stay on the service drive in this area and not travel through the District. The service drive itself could include features that would encourage drivers to travel at lower speeds appropriate for a residential area. The final design will be determined in consultation with the city of Detroit and the SHPO.

Traffic on Rosa Parks and Trumbull avenues south of I-94 is not expected to change significantly from current volumes to 2025 volumes with either the No-Build or Recommended Alternative. This is a further indication that increases in traffic on the service drive will not translate into more traffic in the Historic District. The District should retain its residential character despite the removal of the house at 5287 Hecla and partial acquisition of eight vacant lots, which will have an adverse effect on the district. The vast majority of the district and its buildings will remain intact after the rehabilitation of I-94 is complete. Although, the acquisition of vacant property and the demolition of a single house at the edge of the district will have an adverse affect on the District, these changes should not contribute to the increase of traffic within the District itself.

### **6.3.2 Impacts to the I-94/M-10 Interchange**

Highway pavements typically are designed for a 20-year life cycle, and bridges typically are designed for a 50-year life cycle. The I-94/M-10 interchange was constructed over a five-year period from 1950 to 1955, making the various components 49 to 54 years old. The MDOT has provided maintenance per their maintenance plan throughout the interchange's existence. The interchange and pedestrian bridges are deteriorating, and the ratings of the physical condition of the bridges that make up the interchange are substandard. The interchange does not adequately handle the volumes of traffic that currently exist, and congestion will only increase with the expected increase in traffic volumes in the future. Its design contributes to an above-average crash rate with its left-hand entrances and exits. Adjacent interchanges have all right-hand entrances and exits resulting in a high volume of weaving movements as drivers maneuver from side-to-side to complete desired turns. The heights of some interchange bridges do not meet current standards that allow trucks to safely pass under the bridges.

The Recommended Alternative will replace the entire existing interchange with a new interchange design consisting of a completely different ramp configuration. This will result in the removal of all existing pavement and structures and construction of a new interchange in the same location. This complete removal and replacement will result in an adverse effect and constitute a use under Section 4(f).

### 6.3.3 Impacts to United Sound Systems Recording Studios

The redesign of the I-94/M-10 interchange using current standards results in a shift of the mainline of the freeway to the north and the off-ramp from westbound I-94 to M-10 would traverse the area currently occupied by the United Sound Systems Recording Studio building. In order to construct the ramp at this location, the United Sound Systems Recording Studios building would have to be acquired and removed. The removal of the building would be an adverse effect and therefore constitute a use under Section 4(f).

### 6.3.4 Impacts to the Square D/Detroit Fuse and Manufacturing Company Building

The redesign of the I-94/I-75 interchange to current design standards results in the ramp from westbound I-94 to northbound I-75 directly impacting the building. The removal of the building would be an adverse effect and therefore constitute a use under Section 4(f).

## 6.4 Avoidance Alternatives

Alternate locations for the proposed action were considered and are not practical because the project involves the reconstruction of an existing roadway with minimal need for additional rights-of-way. The only alternatives under consideration are variations in cross-section and interchange design on the existing alignment. Other locations outside the immediate area would not provide necessary system connections and would require significant new rights-of-way that would result in substantially greater impacts to the natural and built environment.

Comments on the DEIS and the adoption by the SEMCOG General Assembly of the transit report *Improving Transit in Southeast Michigan: A Framework for Action, October 2001*, resulted in the study team considering a narrower cross-section than proposed for the DEIS Build Alternative. The narrower cross-section would reduce impacts on neighboring properties and minimize displacements. Since the I-94 corridor was not included in the transit report's 12-corridor, 259-mile recommended system, the reserved space in the median could be eliminated without adversely affecting future transit opportunities. In addition, the 2025 traffic analyses indicated that, in most locations, the three-lane service drives could be reduced to two-lane service drives and still have adequate capacity on the service drives. The result is a reduction in proposed right-of-way width of about 19 feet on each side of I-94 for a total of 38 feet. A number of properties that were previously slated for acquisition are thus avoided.

Further narrowing of the proposed rights-of-way would not allow the addition of a general purpose traffic lane in each direction to accommodate current and anticipated future traffic volumes or the addition of weaving and acceleration-deceleration lanes to improve operations on the mainline of I-94. These additional lanes are also important to reducing traffic crashes and improving safety. Accommodation of current and future traffic volumes, together with improved operations and safety, are important elements of the purpose and need. Without these elements, the purpose and need would not be met.

### 6.4.1 Woodbridge Neighborhood Avoidance Alternatives

The No-Build and Enhanced No-Build Alternatives would not involve widening the service drive and would avoid use of any property from the Historic District. These alternatives, however, do not meet the purpose and need for the project.

Ramp locations are critical along I-94 in and near the Woodbridge neighborhood because of the complexity created by three freeway-to-freeway interchanges (I-94/I-96, I-94/M-10, I-94/I-75) within approximately two miles. This is very close spacing for freeway-to-freeway interchanges. The ends of the ramps for one interchange almost reach the start of the ramps for the next interchange. The freeway-to-freeway interchanges require long ramp lengths to achieve the difference in elevation necessary to separate all the movements on four different levels. In addition, minimum lengths are needed to place signs to advise drivers in advance of upcoming options and to allow time for drivers to position themselves in the proper lane to make the desired maneuver. However, within this same area, local access ramps are needed to serve the adjoining land including Wayne State University and the University Cultural Center, which are major traffic generators. This creates a very complex area along I-94 between I-96 and I-75, considering all the ramps and cross streets that must be accommodated.

The encroachment of the eastbound service drive (Kirby Avenue) into the Woodbridge Neighborhood Historic District is primarily to allow room for the eastbound I-94 off-ramp to the service drive and Trumbull Avenue. The ramp provides the most direct access from eastbound I-94 to Wayne State University. The existing ramp is shorter and stays in the area where existing I-94 curves to the north away from the Woodbridge District. The proposed replacement ramp has to be moved west to allow room for the eastbound I-94 off-ramp to M-10. It is carefully located to provide the minimum distances between other ramps that must be included. The only alternative to the proposed location of the ramp is to eliminate the ramp. Elimination is not considered feasible because it would restrict access to Wayne State University, the University Cultural Center, and the surrounding neighborhoods. Also, it would cause serious traffic congestion at other locations as drivers attempt to find other means to access these major traffic generators.

Another possible means of avoiding the Woodbridge Neighborhood Historic District is to shift the entire I-94 roadway to the north. Such a shift could affect the proposed location of the M-10 interchange. Any shift of the location of I-94 would create other problems, since I-94 was already carefully located to minimize impacts to the Wayne State University athletic fields, Research Park Apartments, McCoy Townhouses, Whiting Distribution Services, the Detroit transit facility on Wabash, the Fourth Street Neighborhood, and the Woodbridge Neighborhood Historic District. Shifting the roadway north would cause impacts to the other properties. Since the impacts to the District were limited, it appeared unnecessary to further impact other properties.

The Recommended Alternative is already reduced in size to the maximum extent possible. The Recommended Alternative is approximately 19 feet narrower on each side than the Build Alternative presented in the DEIS. The median contains only shoulders and space for a concrete median barrier and the service drive includes only two travel lanes and an 8-foot shoulder. Retaining walls are included to minimize the width needed for grading. Any further reduction in width would require compromising basic elements required for the purpose and need such as travel lanes or acceleration-deceleration lanes for ramps.

#### **6.4.2 I-94/M-10 Interchange Avoidance Alternatives**

The No-Build Alternative will not affect the existing interchange in the short term. Three of the eight core interchange bridges will require superstructure replacement or rehabilitation in the

next five to seven years due to their structural condition. The repairs would likely be in-kind, resulting in a no-adverse-effect finding and requiring no environmental documentation. The significance of the interchange is in the ramp configuration and design and not in the individual bridges. The remaining bridges and the pavements would likely be affected in the future as their condition deteriorates; however, a similar process could be followed retaining the basic historic design. The No-Build Alternative does not meet the purpose and need.

The Enhanced No-Build Alternative would replace all the pavement and bridges of the M-10 interchange in the next six to twelve years as the entire existing facility between I-96 and Conner Avenue is rehabilitated. The basic ramp configuration and design would be retained, preserving the basic interchange. Replacement of all the pavement and bridges might be an adverse effect since some modification would be required to meet current standards for bridge and pavement design. The Enhanced No-Build Alternative does not meet the purpose and need.

Several alternatives to improve I-94 without improving the M-10 interchange were considered early in the development of the project (DEIS Chapter 4). These alternatives were dropped from further consideration because they do not eliminate the left-hand exits and entrances. Also, additional through-traffic lanes could not be added without modifying the interchange. The left-hand exits and entrances must be eliminated because the adjacent interchanges have all right-hand exits and entrances and drivers must cross from one side to the other, weaving across several lanes of traffic, to make some turns. This weaving causes conflicts and contributes to crashes. The situation is especially difficult on I-94 near M-10 because of the short distances between M-10 ramps and ramps to and from I-75 and I-96. The DEIS Build Alternative and the modifications to the DEIS Build Alternative (developed after circulation of the DEIS) all require the redesign of the I-94/M-10 interchange.

### **6.4.3 United Sound System Recording Studios Avoidance Alternatives**

The No-Build and the Enhanced No-Build alternatives would avoid any use of this property, but would not meet the purpose and need for the study.

The property occupied by the United Sound System Recording Studios building is required to accommodate the westbound I-94 off-ramp to north and southbound M-10. The need to redesign the interchange is discussed above in FEIS Section 6.4.2. The need to locate ramps as proposed is discussed in FEIS Section 6.4.1, which describes the constraints dictated by the close proximity of the I-94 interchanges with I-75, M-10, and I-96. The westbound I-94 off-ramp to M-10 is designed to minimum requirements and is as short and compact as it can safely be. Minimum signage requirements control its design and provide minimum distances for drivers to read signs and prepare for the next maneuver. The result is the ramp cannot be shortened or located elsewhere.

The width of the I-94 median has been narrowed to include only shoulders and a concrete barrier. The service drive at this location was moved north to stay on existing Antoinette Avenue right-of-way between Cass Avenue and Second Street to limit acquisition in this block. These changes did reduce overall right-of-way needs, but the ramp still hits a corner of the United Sound building, requiring its removal.

Moving the entire I-94 roadway to the south to avoid the United Sound Systems Recording Studios building is not acceptable because it would adversely affect the NRHP-listed Cass Motor Sales building at 5800 Cass. The moving of the freeway also would affect the Wayne State

University multi-story parking garage. The eastbound service drive south of I-94 is already planned to be immediately adjacent to both the Cass Motor Sales building and the parking garage. Any move to the south would immediately affect both buildings.

#### **6.4.4 Square D/Detroit Fuse and Manufacturing Company Building Avoidance Alternatives**

The No-Build and the Enhanced No-Build alternatives would avoid any use of this property, but would not meet the purpose and need for the study.

The property occupied by the Square D/Detroit Fuse and Manufacturing Company Building is required to accommodate the westbound I-94 off-ramp to northbound I-75. The need to redesign the interchange is discussed above in FEIS Section 6.3.4. The ramp is a critical maneuver in the redesign of the interchange. The preliminary engineering performed has attempted to minimize impacts. The interchange is skewed in a northeast to southwest direction and missing this building with any improvements to the interchange ramp is not possible.

### **6.5 Measures to Minimize Harm**

The Federal Highway Administration and the State Historic Preservation Officer have entered into a Memorandum of Agreement (MOA) regarding the adverse effects on, and mitigation of impacts to, the historic properties described in this section. A copy of the MOA is included in Appendix E. The MOA outlines the mitigation measures that are proposed and stipulates that the MDOT has participated in the consultation between the FHWA and the SHPO. The MOA also states that the MDOT was invited to concur that the undertaking will be implemented with measures to minimize harm. The signed MOA was submitted to the Advisory Council on Historic Preservation.

#### **6.5.1 Woodbridge Neighborhood District Measures to Minimize Harm**

The MOA specifies several actions to minimize the harm to the house at 5287 Hecla Street. The MDOT will make an effort to locate a vacant parcel within the District and move the house to the vacant parcel. This is contingent on the structural condition of the house, finding an available parcel, and the cooperation of the property owner. If the owner is unwilling to participate, the MDOT will prepare and implement a marketing plan (subject to approval of the SHPO) that seeks another owner to purchase and move the house. This marketing plan will be finalized as a cooperative effort between the SHPO, a representative staff member from the City of Detroit Historic District Commission and the property owners. If the house fails to sell, it will be demolished. The owner has been contacted, but no response has yet been received.

Prior to demolition or other action that might adversely affect the house at 5287 Hecla Street, it will be recorded to SHPO standards to create a permanent record of its existence. The documentation would be provided to the SHPO and any appropriate archives as designated by the SHPO. In addition, a Cultural Resources Historic Workshop was held on December 11, 2003 to discuss historic properties and districts in the project corridor. Representatives of the Woodbridge Neighborhood Historic District were contacted and invited to participate. Discussions at the Workshop addressed possible actions to preserve, protect, and/or record historic properties in general and the Woodbridge Neighborhood Historic District, in particular.

During the plan preparation, the design of streets and sidewalks in the Woodbridge Historic District will be finalized as a cooperative effort between the SHPO, a representative staff member from the city of Detroit Historic District Commission, and the property owners. The MOA states that all areas within the District, which are disturbed by construction, will be landscaped in a manner consistent with the time period for which the District is recognized.

### **6.5.2 I-94/M-10 Interchange Measures to Minimize Harm**

Prior to the initiation of any demolition of the I-94/M-10 interchange and as part of the MOA, the interchange will be recorded to SHPO standards by a professional historian to preserve a permanent record of its existence. The documentation would be provided to the SHPO and any appropriate archives as designated by the SHPO. Also as part of the MOA, copies of original plans and other materials relating to the design and construction of the interchange will be compiled and retained by the MDOT and provided to the SHPO and any repositories as directed by the SHPO. A small-scale exhibit of the interchange will be produced and the exhibit display schedule will be coordinated with the SHPO.

### **6.5.3 United Sound Systems Recording Studios Measures to Minimize Harm**

As part of the MOA, prior to the initiation of any demolition or construction activity affecting the building at 5840 Second Street, the MDOT will record the building which housed the United Sound Systems Recording Studios to SHPO standards to create a permanent record of its existence. The documentation would be provided to the SHPO and any appropriate archives as designated by the SHPO.

The history of the United Sound Systems Recording Studios is important for its role as one of the first major recording studios in Detroit. The studio is important due to the production of recordings by prominent African-American musicians of the last century at the studio and its' role in the evolution of American music. A documentary film will be produced, in cooperation with the SHPO, which will document the history of United Sound Studios. In addition, the MDOT will prepare, in consultation with the SHPO, a historical context and survey of popular music-related sites in the Detroit area. As part of the MOA, the MDOT will generate a dissemination and publication plan for the resulting history with the SHPO.

The Cultural Resources Historic Workshop described in FEIS Section 6.5.1 also addressed the United Sound Systems Recording Studio.

### **6.5.4 Square D/Detroit Fuse and Manufacturing Company Building Measures to Minimize Harm**

As part of the MOA, prior to the initiation of any demolition or construction activity affecting the building, the MDOT will record the Square D/Detroit Fuse and Manufacturing Company Building to SHPO standards to create a permanent record of its existence. The documentation would be provided to the SHPO and any appropriate archives as designated by the SHPO.

The original, three-story Detroit Fuse and Manufacturing Company Building, designed by the architect Albert Kahn, is significant for its historical associations with both Square D and the 1954 strike. Demolition of the Square D/Detroit Fuse and Manufacturing Company Building would be an adverse effect. Any shifting of the freeway to miss the building will impact the

Piquette Avenue Industrial Historic District and other potential historic factories in the Milwaukee Junction area. As part of the mitigation effort to preserve record of this site, an exhibit will be developed with the SHPO detailing the 1954 Square D strike.

## **6.6 Coordination**

In accordance with Section 106 of the National Historic Preservation Act, a Memorandum of Agreement (MOA) between the Federal Highway Administration and the State Historic Preservation Officer has been negotiated and signed to document the results of the coordination described below. The results of the coordination include the measures that will be carried out to minimize the adverse effects to the historic properties. Since the Section 106 MOA applies to the same properties addressed by this Final Section 4(f) Evaluation, the measures to minimize adverse effects described in the MOA will also apply to the Section 4(f) properties. The MDOT concurred in the MOA. A copy of the MOA is included in Appendix E.

### **6.6.1 Woodbridge Neighborhood District Coordination**

As a part of the planning process, the Woodbridge Neighborhood Historic District was reviewed in the field with the SHPO on May 11, 1999, after a meeting to brief reviewers on the project and identify historic properties in the area. The properties affected by the project were discussed in detail. A letter dated August 2, 1999, describing the impacts of this project was sent to the SHPO for review and comment. The SHPO responded on August 17, 1999, with comments. Copies of these letters are included in Appendix F.

On June 8, 1999, at a regular monthly meeting of the Woodbridge Citizens District Council, an overview of the I-94 Rehabilitation Project, the proposed improvements, and potential effects were presented to district officials and residents. Council members and other attendees voiced concerns regarding truck traffic, traffic in general, air pollution, consideration of mass transit, and preservation of the urban landscape and character.

Public hearings were held on March 5 and 6, 2001, at the Museum of African American History and Kettering High School to gather public input after circulation of the DEIS. No comments regarding the Woodbridge Neighborhood Historic District were received. Public informational meetings were held on October 21 and 22, 2003, at the Museum of African American History and the Wayne County Community College campus near Conner and I-94 to gather public input on the Recommended Alternative. Context Sensitive Solutions workshops were held on February 24 and 26, 2004, to discuss possible approaches to blend I-94 into the area affected by its rehabilitation, the city of Detroit, and the state of Michigan.

A Cultural Resources Historic Workshop was held on December 11, 2003, at Wayne State University. Representatives of the Woodbridge Neighborhood Historic District, other organizations representing the surrounding area, historic interests, and the SHPO were sent written invitations followed by telephone reminders. Cultural resources along the I-94 Project Area were described. Specific discussions were directed to the Woodbridge Neighborhood Historic District, the I-94/M-10 interchange, and the United Sound Systems Recording Studios. The conclusions reached at the Cultural Resources Historic Workshop, together with the two Context Sensitive Solution workshops, are documented in summaries found in Appendix G.

The MDOT Real Estate will consult the owner of the house at 5287 Hecla prior to a decision regarding disposition of the building.

### **6.6.2 I-94/M-10 Interchange Coordination**

The August 2, 1999, letter detailing the impacts of this project mentioned above in FEIS Section 6.6.1, also described the impacts to, and mitigation proposed for, the I-94/M-10 interchange. The material attached to the letter described the 1995 *MDOT Michigan Historic Bridge Inventory* and its finding that the I-94/M-10 interchange was eligible for the NRHP. The SHPO concurred with that finding.

The I-94/M-10 interchange also was discussed at the public hearings, Context Sensitive Solution workshops, and Cultural Resources Historic Workshop described in FEIS Section 6.6.1. No comments were received regarding the replacement of the interchange as a result of the holding of the public hearings or circulation of the DEIS. The interchange's eligibility for the NRHP and its replacement were brought up at the Cultural Resources Historic Workshop in the opening presentation, and some ideas were offered by attendees (see the summary in Appendix G). In the Context Sensitive Solutions workshops, the project was discussed in general; however, no specific comments regarding the interchange were submitted by attendees. The discussion did not produce any additional mitigation ideas beyond those already described above in FEIS Section 6.5.2 and the MOA.

### **6.6.3 United Sound Systems Recording Studios Coordination**

As a part of the planning process, the United Sound Systems Recording Studios was reviewed in the field with the SHPO at the May 11, 1999, meeting described above in FEIS Section 6.5.1. The property was discussed during the field trip, and it was noted that it needed to be studied. The August 2, 1999, letter to the SHPO describing the impacts of this project noted that the Studio was potentially eligible for the NRHP. In a letter dated January 8, 2001, the SHPO concurred that the Studio was eligible for the NRHP. A copy of the letter is included in Appendix F.

The United Sound Systems Recording Studios building also was discussed at the same public hearings, Context Sensitive Solution workshops, and Cultural Resources Historic Workshop described above. The United Sound building's eligibility for the NRHP and its ultimate destruction were brought up at the Cultural Resource Workshop in the opening presentation, and the discussions that followed offered a number of suggestions (see summary in Appendix G). Those suggestions were considered, and several were incorporated into the mitigation ideas described above in FEIS Section 6.5.3 and the MOA.

The MDOT Real Estate will consult the owner of the United Sound building prior to a decision regarding disposition of the building.

### **6.6.4 Square D/Detroit Fuse and Manufacturing Company Building Coordination**

Though not covered in the DEIS, additional information regarding the history of the Square D/Detroit Fuse and Manufacturing Company Building was recently discovered. The Square D building is National Register eligible based on the new information. At the December 11, 2003 Historic Workshop (See Appendix G), it was noted that the building was under study due to

recent designations of the Piquette Avenue Industrial Historic District and historic factories in the Milwaukee Junction area. No additional comments were received. Research was provided to the SHPO attached to a July 21, 2004 concurrence letter that was subsequently signed by the SHPO on August 4, 2004. A copy of the letter is included in Appendix F.

## **6.7 Section 4(f) Summary**

### **6.7.1 No Feasible and Prudent Alternatives**

The age and physical condition of existing I-94 between I-96 and Conner Avenue in Detroit requires that action be taken to keep the facility in serviceable condition. The congestion, capacity, safety, operational, and other problems identified in this FEIS further require that the rehabilitated roadway be designed to current standards and expanded with added capacity to accommodate current and future traffic and improve service to local and through traffic. The existing right-of-way is used in its entirety to maximize the utilization of resources already committed to I-94 and reduce impacts. The Recommended Alternative has been narrowed to the minimum width that will accomplish the purpose and need. As a result, there are no prudent and feasible alternatives to the Recommended Alternative.

### **6.7.2 Planning to Minimize Harm**

Since there is no alternative to using the existing alignment and taking adjacent properties where additional right-of-way is necessary, the action must include all possible planning to minimize harm. Moving the Woodbridge Neighborhood District house at 5287 Hecla Street to nearby vacant land will be considered during right-of-way acquisition, subject to feasibility, and by the owner. The I-94 cross-section was reduced, eliminating the need to acquire the commercial building at 5287 Trumbull. The encroachment at the house on Hecla and at the recording studio also was reduced, but not enough to avoid acquisition. Both of these structures are affected due to off-ramps. All ramp configurations between I-96 and I-75 were further studied; however, the area is so constrained that other locations for the offending ramps were not available. The left-hand entrances and exits on the I-94/M-10 interchange require its replacement. Moving the interchange to a new location to preserve the existing interchange was not an option because of the increase in impacts resulting from a new location. The redesign of the I-94/I-75 interchange to current design standards results in the ramp from westbound I-94 to northbound I-75 directly impacting the Square D/Detroit Fuse and Manufacturing Company Building. Moving this ramp is not feasible to meet current design standards. The four historic resources will be recorded to appropriate SHPO standards prior to their destruction or moving.

All possible planning to minimize harm has been completed and the Recommended Alternative is a feasible and prudent alternative with the least harm to the Section 4(f) resources after considering mitigation.

### **6.7.3 Formal Coordination**

Consultation with the SHPO, the owners of the Section 4(f) properties, the FHWA, and other interested parties was initiated to determine whether there were any actions available that would minimize harm. A special Cultural Resources Historic Workshop was held to consider the effects on the affected historic properties. Representatives of the project attended a meeting with

the Woodbridge Citizens District Council to discuss the project and other concerns of the neighborhood. Staff assigned to the project, together with reviewing agency personnel, attended coordination meetings and took field trips to familiarize them with the specific properties and their setting.

Other coordination was not required since the Recommended Alternative will not use any publicly owned land from a public park, recreation area, or wildlife or waterfowl refuge.

#### **6.7.4 Coordination Comments**

Copies of letters with comments from the SHPO are included in Appendix F.

Comments, discussions, and conclusions resulting from the Cultural Resources Historic Workshop are described in the summary of that Workshop included in Appendix G.

A meeting with the Woodbridge Citizens District Council was held on June 8, 1999 to discuss resident concerns.

#### **6.7.5 Conclusion**

Based on the above considerations, there is no feasible and prudent alternative to the use of land from the Woodbridge Neighborhood Historic District, the I-94/M-10 interchange, the United Sound Systems Recording Studios, and the Square D/Detroit Fuse and Manufacturing Company Building. The Recommended Alternative includes all possible planning to minimize harm to the aforementioned properties resulting from such use.