

## A. BRIEF PROJECT HISTORY

The project began in May 1992 with a Stage I Location Study that was guided by a Technical and an Executive Committee. The Stage I study determined the need for the project and defined four feasible alternate corridors. Based on public comment from a November 18 and 19, 1992 public meeting series and technical reviews, two of the corridors, one north and one south of downtown were selected for further consideration. A second round of public involvement meetings on August 17 and 18, 1993 was held to solicit comment on a feasible alignment in each corridor. The stage I study findings are printed in the November 1993 *Stage I Report*.

The Stage II study began in the Fall of 1994. It was guided by a Study Management Group made up of some two dozen representatives from both sides of the river, including federal, state, and local officials in transportation and non-transportation areas, as well as private-sector participants. A four-person Executive Committee developed by agreement between Missouri and Illinois provided project oversight and key decisions. The Stage II study, a major investment study, revalidated the project need and considered a full range of alternatives, including alternate modes, technologies, and alignments. Public involvement meetings on March 29 and 30, 1995, along with a briefing for elected officials, meetings with affected and interested groups, and opinion polling, helped to narrow the range of alternatives to the most feasible. A second round of public informational meetings on July 1 and 2, 1996, plus another elected officials briefing, meetings with affected and interested groups, and opinion polling were used to solicit input on the more detailed descriptions of the most feasible alternatives. Consistent with community input, a project definition for development in the DEIS was determined and announced by press release on November 13, 1996; and the Stage II study findings were printed in the May 1997 *Mississippi River Crossing Major Investment Study*. Importantly, this study process resolved the question of whether a build option for a new bridge should be pursued on the north or south side of downtown in favor of the north side of downtown.

The Stage II project definition for development in the DEIS includes:

- downtown traffic measures to modulate traffic flow;
- a transit pricing option that will reduce the cost of public transit during the peak periods to encourage transit use between Illinois and downtown;
- a preferred alignment for a new bridge on the north side of downtown; and
- further investigation of tolls as a possible new bridge financing method.

The study considered all of the bridges across the Mississippi River in the St. Louis area, including the Eads and MacArthur Bridges. The Eads Bridge roadway deck is currently under reconstruction and is anticipated to reopen to traffic in 2002; this bridge, in addition to the rebuilt Chain of Rocks Bridge, will accommodate pedestrian and bicycle crossings. The MacArthur Bridge has a substandard two-lane roadway deck that is privately owned and not for sale. Trying to acquire and rebuild this roadway deck would not yield enough capacity to eliminate the need for a new bridge. Under these conditions, MacArthur Bridge roadway deck improvements would not be cost-effective.

A Corridor Protection Public Hearing was held in Illinois on November 19, 1997 and requisite plans were filed in the St. Clair County Courthouse to permit the Illinois Department of Transportation to preserve the right of way needed to build the approach to the new bridge in the face of mounting commercial development pressures.

## **B. PROJECT PURPOSE**

The purpose of the proposed action is to relieve increasingly severe traffic congestion and reduce traffic crashes on downtown St. Louis-area Mississippi River crossings, especially on the Poplar Street Bridge (I-55/70/64), thereby helping to avoid economic stagnation at the core of the region.

Controlling traffic with downtown traffic control measures, providing a transit pricing incentive to use MetroLink, and adding vehicular capacity with a new bridge and related interstate highway network enhancements, with or without toll financing, are the key measures which define the proposed action.

The proposed action will provide needed traffic capacity and travel efficiency, improve system linkages and community access, reduce traffic crashes, increase user benefits, including reducing travel times, and help prevent economic stagnation. Without a new bridge, unmet demand will result in increasing abandonment of the core and reinforcement of the region's propensity to sprawl.

## **C. PROJECT NEED**

As the only core-area interstate crossing of the Mississippi River, the eight-lane Poplar Street Bridge is severely overburdened. Its capacity is inadequate to meet the needs of the through and local motorists, including truckers, traveling on and between I-55, I-44, I-64, and I-70, as well as in and out of downtown St. Louis. Its 30-year-old design is now substandard. Too many decision points are placed in too close proximity at both approaches to the bridge so that motorists do not have adequate distance to weave or merge into and diverge out of the traffic flow. The substandard design of the approach ramps compounds the resulting congestion problems and leads to traffic crashes.

### **1. Traffic Capacity and Travel Efficiency**

Traffic projections show that conditions in the Poplar Street Bridge corridor will continue to worsen, resulting in a Level of Service F, indicating traffic failure, on all key interstate highway segments by the year 2020, if no improvements are made. Without the proposed action, congestion will double, lasting for three hours, and the average delay will stretch from ten minutes per vehicle today to 55 minutes in 2020. Building the project (without tolls) will result in net travel time savings of an estimated 15,880 vehicle-hours per day. Relocating I-70 will significantly improve travel efficiency by shortening through movements

on I-70 by 3.5 kilometers (2.2 miles) and through I-70-I-64 movements by 2.6 kilometers (1.6 miles). Reducing driver travel time and distance with the proposed action will yield \$52 million in annual user cost savings in the design year 2020, as well as lower motorists' operating and maintenance costs.

## **2. System Linkage and Community Access**

The core-area interstate highway network does not provide adequate traffic distribution. I-55, I-70, and I-64 share the same 3.2-kilometer (two-mile) roadway section from their East St. Louis interchange to the west Poplar Street Bridge approach in Missouri. Having all interstate movements through the core area of St. Louis on one stretch of roadway with frequently changing horizontal and vertical alignment, as well as multiple underdesigned on- and off-ramps, results in peak-period congestion. The proposed action is designed to provide an alternate linkage in the core-area interstate system and upgrade the interchange complexes at both ends of their existing common stretch. These upgrades will improve both mainline interstate operating conditions, and enhance safety and community access.

The proposed action will divert some of the interstate and downtown-destined traffic from the Poplar Street Bridge, reducing traffic demand on the Poplar Street Bridge and on the narrow, depressed interstate highway section opposite the Arch that leads to the Poplar Street Bridge. It will bracket downtown St. Louis with new interstate access on the north and with improvements in the existing access on the south side of downtown. The new northside access will distribute traffic to the uncongested northwest quadrant of downtown, where motorists can access downtown via major arterials, Tucker and Fourteenth Street. The new access will also permit Seventh, Ninth, and Tenth Streets to revert to two-way local-only neighborhood traffic flow. North of the new bridge interchange with existing I-70, local access to and from I-70 will be consolidated at a single compressed diamond interchange at St. Louis Avenue. Improvements on the south side of downtown will include an extension of Spruce Street over existing I-70, better linking the south side of downtown with the Arch grounds and the riverfront and providing two-way circulation around the Arch grounds.

On the Illinois side, the proposed action will siphon traffic off the most congested part of the interstate network and simplify and enhance the interchange of existing I-55/70 with I-64, plus provide new community access. These physical changes will permit providing flexible and close-in freeway management opportunities to use in conjunction with the traffic control center. Dynamic message signs on westbound I-55, I-70, and I-64 in Illinois will alert motorists to incidents or unusual congestion on the downtown bridges and inform them of which system linkage (the Poplar, King, Eads, or the new bridge) they should use to avoid congestion.

## **3. Traffic Safety**

The Poplar Street Bridge has an accident rate more than three times higher than either Missouri or Illinois' statewide averages. The proposed action is estimated to eliminate

more than 165 traffic crashes in the year 2020, including one fatality and 49 injury accidents. These avoided traffic crashes are anticipated to yield more than \$4.6 million in accident savings in the design year 2020.

#### **4. Economic Growth and Development**

Land at the periphery of the St. Louis region is readily available for development. This region's propensity to build at the fringes will be reinforced by core-area disincentives resulting from inadequate river-crossing infrastructure. The locally unacceptable levels of congestion resulting from inadequate infrastructure will stifle downtown-area development and may be expected to lead to an exodus of existing businesses. Without a new bridge, unmet traffic demand will move with new growth and development to the edge of the region, leaving the core in decline. The proposed action is fundamental to sustain the kinds of growth envisioned by the St. Louis 2004, Downtown Now, National Stockyards redevelopment, and related core-area plans and proposals.

### **D. AFFECTED ENVIRONMENT**

The proposed project lies within the core area of St. Louis, which has seen intensive human settlement and varied land use for more than 100 years with a broad range of land uses and activities normally associated with urbanized areas, including special wastes, historic structures, special lands, and archaeological artifacts. The project study area contained about 50,000 people, or two percent of the St. Louis metropolitan area in 1990. About three-quarters of the declining study-area population is African-American, and with the exception of downtown St. Louis, the population is predominantly low-income. Wetlands, floodplains, and threatened and endangered species are present in the study area on the Illinois side of the Mississippi River.

### **E. ALTERNATIVES**

A no-build alternative is under consideration. A no-build alternative involves no new construction other than already programmed roadway and light rail transit improvements that will be constructed by the design year 2020. Even though the already programmed improvements will provide a higher capacity network than today, the no-build alternative will not provide sufficient capacity for the number of motorists wanting to cross the river. The existing transportation network cannot accommodate the increasing river crossing traffic.

The proposed action consists of the four measures ratified by the general public, the Study Management Group, and the Executive Committee in the project's Major Investment Study. These four measures include: downtown traffic control measures; transit pricing; build alternative; and toll financing.

## **1. Downtown Traffic Control**

A series of traffic control measures will be implemented in the core area to enhance the ability of the new MoDOT Chesterfield traffic control center to address traffic on the downtown bridges and the key roadway links that feed them. Traffic data will be collected, processed, and distributed to motorists in the core area to improve management of both recurrent congestion and non-recurrent traffic incidents, such as traffic crashes, disabled vehicles, construction zones, etc. Among the measures to be employed are additional detection stations, closed-circuit television cameras at additional key traffic monitoring locations, and additional dynamic message signs. Traffic control operators will be able to distribute information directly to motorist-assist patrols, police, and motorists via the variable message signs and highway advisory radio in order to alert the public, for example, to be able to avoid a congested bridge and choose an alternative. Operators can also adjust traffic signal timing to sort traffic, for example, in the evening peak periods on the downtown street system leading to the core bridges, as well as route and prioritize traffic movements during special events.

## **2. Transit Pricing**

The transit pricing incentive involves funding the operating cost of a 25-cent reduction in the price of each morning and evening peak-period MetroLink trip between Illinois and downtown St. Louis. Currently, the basic \$1.25 MetroLink trip translates to an average discounted fare of 60 cents for passengers because of the use of passes and other discounts. Further reducing that cost to the passenger to a nominal 35-cent level as a result of the project's 25-cent per trip incentive will draw additional transit ridership from current vehicular trips. Considering the cost of operating an automobile and parking it downtown, this option coupled with a new bridge could draw more than 20 percent additional riders to transit, which will be extended to Mid-America Airport by about 2003. Additional coordination will be needed between Bi-State, IDOT, and MoDOT, and both the Madison and St. Clair County Transit Districts to establish and fund the appropriate allocations for this transit pricing incentive.

## **3. Build Alternative**

The build alternative involves restructuring the core-area interstate highway network with the addition of a new eight-lane Mississippi River bridge to better distribute traffic, see **Figure S.1**. I-70 will be relocated northward as a four-lane roadway from a point east of IL Rt. 203 in Illinois to a point north of downtown St. Louis near the Ninth & Howard X-bridge over existing I-70 in Missouri. A four-lane I-64 Connector will be extended northward from the current I-55/70/64 interchange in Illinois parallel to St. Clair Avenue to the relocated I-70 alignment and the new Mississippi River crossing. I-44 will be signed common with I-55 from their juncture south of downtown St. Louis to the Poplar Street Bridge, and existing I-70 from the Poplar Street Bridge to the new bridge in Missouri will be resigned I-44.

The existing I-55/70/64 interchange in Illinois will be reconstructed above the water table, because existing deep wells are reaching the end of their useful life and inadequate space is available to locate new ones. The reconstructed interchange will enhance safety and improve local access. St. Clair and Baugh Avenues, which are presently a one-way pair between Ninth/Tenth and Fifteenth will be made two-way, better accommodating access and circulation at the new Emerson Park MetroLink station. Collinsville Avenue will be relocated northward through the interchange tying into Collinsville Road at Ninth Street east of Exchange Avenue. The eastbound I-64 exit ramp to St. Clair Avenue will be relocated southward to Fifteenth Street, and the return movement will also be relocated southward to a point midway between Fifteenth and Eighteenth.

A half-diamond I-70 interchange accommodating movements to and from the west will be built at IL Rt. 203; movements to and from the east are accommodated at the existing IL Rt. 203 interchange. A half-diamond I-64 Connector interchange accommodating movements to and from eastbound I-64 will be built at relocated IL Rt. 3, and a partial-cloverleaf I-70 interchange with relocated IL Rt. 3 will be built for east- and westbound I-70/new bridge traffic.

On the Missouri side, a directional interchange will be built to connect existing and relocated I-70, I-44 (existing I-70 south of the new bridge), and downtown at Tucker and Fourteenth, two major arterials in the northwest quadrant of downtown. The interchange will include a relocated North Cass Avenue alignment between Broadway (at Mound) and Thirteenth/Tucker, providing access to all four quadrants of the interchange. A relocated South Cass Avenue alignment between Broadway (at Mullanphy) and O'Fallon near Tucker will provide additional local circulation. The directional interchange will be only two-levels above groundline with the bridge structures above groundline concentrated within a two-block industrial area of the existing Ninth & Howard X-bridge. A landscaped median will be introduced into Cass Avenue between Ninth and Tenth to enhance the residential environment for the Cochran Gardens townhouses.

The four-lane parkway access to Fourteenth Street will extend under Tucker. The parkway will terminate in a signalized intersection near Carr, where northbound Fourteenth Street will include a protected left-turn bay so that neighborhood traffic will have ready access between downtown and points to and from the north. A landscaped median will be introduced into Fourteenth Street between Cass and Carr to enhance the adjacent O'Fallon Place townhouse residential environment. Seventh, Ninth, and Tenth Streets will revert to two-way local-only traffic north of Cole Street with the removal of interstate traffic presently cutting through the Columbus Square and Cochran Gardens neighborhood and past the Patrick Henry Elementary School on the way into and out of downtown.

A compressed diamond interchange will be completed at St. Louis Avenue to provide local access to and from I-70 north of the Tucker/Fourteenth access points. The deteriorated St. Louis Avenue viaduct will be rebuilt for strength, and the Madison viaduct will be reconstructed for a wider horizontal and higher vertical clearance. Improved access will be provided directly from northbound Broadway to the reversible lanes, and the



MISSISSIPPI RIVER  
CROSSING  
F.A.P. 999 RELOCATED I-70  
& I-64 CONNECTOR

ALL ROADWAY  
IMPROVEMENTS

FIGURE NO. S.I

southbound Broadway viaduct over the interstate will be reconstructed about a block north of its present crossing. The existing Ninth & Howard and Seventh & Cass X-bridges will be removed, and replaced with the relocated Cass crossings. The I-70 pedestrian overpass at North Market will be rebuilt, and the railroad trestle south of Madison Street will be removed.

On the south side of downtown, the approach to the Poplar Street Bridge in Missouri will be rebuilt to simplify the number of close-together decision points, which will make the bridge approach safer and better able to handle traffic demand. The connections to and from I-55 will be made two lanes wide and will have more gentle vertical grades and horizontal curves. The access to and from existing I-70 and Memorial Drive will be removed, with downtown access relocated so that motorists will exit the bridge to one-way-northbound Fourth, at Spruce, and return from one-way-southbound Broadway. Spruce Street, with a sidewalk, will be extended eastward from Fourth over the interstate to a raised Poplar/northbound Memorial Drive intersection, which will better connect the south side of downtown with the Arch grounds/riverfront and provide for two-way circulation around the Arch grounds. Southbound Memorial Drive will be connected to Fourth near Poplar, and the sharp curve in Fourth immediately south of this point will be flattened. Poplar will be closed between Fourth and Broadway, and will be cul-de-saced immediately west of Broadway to safely accommodate the I-64 on-ramps. Spruce will be made one-way westbound between Fourth and Broadway to accommodate the revised local access to and from the interstate.

#### **4. Toll Financing**

Financing the cost of the project by imposing tolls on one or more of the bridges across the Mississippi River at St. Louis is a possibility that the Major Investment Study determined should be considered in the project's DEIS. Toll revenue could be used to pay off bonds issued to build the project and possibly help maintain existing bridges and approach networks. A congestion pricing incentive, where tolls are pegged higher in the peak than during the remainder of the day, was modeled to reduce the number of trips made during the peak. This scenario encourages peak-period motorists to either shift the time of their trips to the off-peak, take transit, or to rideshare.

Tolls would be collected in one direction only for a round trip to reduce the cost and traffic delay involved with collecting tolls in both directions. Regular commuters could use a prepaid electronic toll collection system, which eliminates the need to restrict traffic flow at toll booths; infrequent and out-of-town motorists would need to use the toll plazas. The toll plazas would be built in Illinois, except for the Clark Bridge, which terminates in the core area of Alton. The greatest cost for the toll plazas would be associated with the new bridge and with the Poplar Street Bridge, where the toll booths and approach lanes would need to be built on structure by widening the existing collector/distributor bridge approach lanes.



Tolls on only the new bridge would distort traffic patterns leading to congestion and would not generate sufficient revenue to pay for the project. Also, provisions will need to be developed to make up the McKinley Bridge's existing revenue stream if the new bridge is not tolled, because the proximity of a toll-free new bridge to a tolled McKinley Bridge would siphon all the traffic from the older bridge and its peak-period two lanes are needed to provide adequate river crossing capacity in the design year, even with the new bridge in place.

## F. ENVIRONMENTAL EFFECTS

The proposed action is expected to have multiple effects on the man-made and natural environment. Standard policies and procedures, as well as mitigation measures, will be implemented to minimize adverse effects where avoidance is not possible.

***Economic:*** The proposed action is expected to enhance economic development in the core of the region, including benefitting the plans and proposals for the reinvigoration of downtown St. Louis, the north riverfront, and the Metro East area, notably East St. Louis and the National Stockyards redevelopment area. The project's increased visibility and improved accessibility may be expected to refocus development to vacant and underutilized parcels in the core area. The project will yield some 6,000 person-years of construction jobs, and it will create another 15,000 person-years of indirect and induced employment. Its income effect on the local economy will be in the range of \$1.2 billion.

***Residential:*** The proposed action will displace existing houses, for which federal relocation guidelines will be applied to assure every household of safe, decent, and sanitary replacement housing. The project is expected to displace 13 occupied dwelling units in Illinois and five in Missouri. The Illinois displacements involve three single-family and five two-family units located adjacent to the existing I-55/70/64 interchange. The Missouri displacements involve only one single-family house west of existing I-70 (which is the only house on a commercial strip of Tucker), a loft unit east of and adjacent to existing I-70, and a single-family and a two-family unit east of existing I-70 on Tenth Street facing I-70 at St. Louis Avenue. Adequate relocation housing stock is available.

***Environmental Justice:*** The project will not disproportionately, adversely affect low-income or minority persons in Missouri. All of the residents adjacent to the project in Illinois are low-income, minority residents. While no groups of non-minority, non-low-income residents have been avoided to the detriment of minority or low-income populations within the project area or region, the project will cause disproportionately high and adverse effects, which will be predominately borne by minority, low-income residents in Illinois. All reasonable measures will be taken to mitigate these unavoidable effects.

***Businesses:*** The project is expected to displace three small businesses in Illinois and 47 businesses in Missouri, and assistance will be made available for each business that may need to be relocated. The typical business to be relocated is a small business employing

fewer than six persons; the exceptions are the seven businesses employing more than a dozen persons. Together all of the businesses to be relocated employ some 400 persons. Every effort will be made to help the businesses find suitable replacement sites within their present taxing jurisdictions. The city of St. Louis has designated a North Riverfront Redevelopment Initiative area to accommodate businesses that will need to be relocated for the Mississippi River crossing project. Another 16 businesses will suffer a partial taking, which will be compensated; these businesses are expected to be able to continue in operation at their present location. Special consideration will be required during design of the project to meet the needs of the barge industry, for which the U.S. Coast Guard has provided input. The project will require relocating or modifying rail lines in the stockyards area in Illinois, as well as at the north and south Missouri interchanges. Similarly, three overhead AmerenUE transmission routes will need to be modified by relocating towers and raising electrified lines or other means to provide adequate clearance.

**Tax Revenues:** Tax losses from displacements will be a small fraction of any tax jurisdiction's income and will not negatively affect private property values. The project will enhance property values in some areas closest to access points.

**Historic/Archeological:** The project will not adversely affect Illinois properties listed in or eligible to be listed in the National Register of Historic Places. The project will adversely affect four industrial buildings in Missouri that are considered eligible for the National Register of Historic Places, for which a number of mitigation measures are proposed in the project's Section 4(f) evaluation. Archeological resources associated with the pre-historic Cahokia Mound builders and pre-1900 archeological resources may be encountered during construction, and appropriate documentation will be developed according to the mitigation plan prepared as part of the archeological studies undertaken following land acquisition.

**Air Quality:** The project conforms to the State Implementation Plan for air quality and the Clean Air Act Amendments for transportation-related improvements. The project is included in the region's Transportation Improvement Program and its Long-Range Transportation Plan. The project is expected to enhance air quality by reducing congestion. Also, the project's maximum carbon monoxide concentrations at the worst-case intersections of Tucker & Cole and Tucker & O'Fallon will not exceed National Ambient Air Quality Standards.

**Noise:** A noise wall/berm is proposed to reduce noise levels for the Cochran Gardens public housing. In other I-70 Missouri frontage areas where existing interstate noise levels already exceed noise guidelines, a landscaping enhancement in lieu of noise walls is proposed in response to the requests of the affected residents and institutions. Intensified landscaping will be placed along I-64/St. Clair Avenue in Illinois in lieu of noise walls, according to the preferences of the city of East St. Louis. Noise walls are not cost-effective north of the I-55/64 interchange, where commercial/industrial redevelopment is proposed and where Enterprise Community Fund and Empowerment Zone funds are available to benefit low and middle income neighborhoods. Also, the East St. Louis Housing Authority is entertaining eliminating its 12 remaining public housing units in this area.

**Natural Resources:** The project will have no measurable effect on the total groundwater supply. The project will directly impact 133 hectares (328 acres) of land, more than half of which is disturbed or developed with urban land uses. The project will remove some generally marginal wildlife habitat, including about 1,600 to 2,200 Illinois- and federally-threatened decurrent false aster (*Boltonia decurrens*) plants, which thrive in disturbed areas and which represent about two percent of the estimated plants located within about one kilometer (0.62 miles) of the project. This loss will be mitigated as part of the project's wetlands compensation plan. The project is not expected to adversely affect threatened and endangered bird species, which use habitat within close proximity of highways in the project area for foraging. Similarly, the project is not expected to adversely affect the federally- and state-endangered pallid sturgeon, hatchery reared specimens of which have been released into the Mississippi and Missouri Rivers to help protect the species.

**Water Resources:** The project will involve: placing piers in the Mississippi River; relocating a 935-meter (3,070-foot) section of the Cahokia Canal; displacing an old 4.4-hectare (10.8-acre) oxbow of the pre-canal Cahokia Creek adjacent to the Gateway Golf Links; and displacing a section of the Old Cahokia Creek adjacent to existing I-55/70; as well as filling about one-third of a borrow-pit lake adjacent to the Milam landfill. Pier placement in the river is expected to involve a worst-case bottom displacement of 1,130 square meters (12,200 square feet). Construction practices and scheduling will be employed to minimize fisheries impacts.

**Floodplain:** The project will involve placing about 6.7 hectares (16.6 acres) of fill within 100-year floodplains and building a ramp over an additional 2.7 hectares (6.7 acres) of floodplain. Floodplain impacts are expected to primarily affect water storage rather than conveyance and will be addressed in consultation with regulatory agencies as part of ongoing flood control initiatives, including dredging of canals to improve flood control and compensatory flood storage activities, which the U.S. Army Corps of Engineers is studying in the American Bottoms.

**Wetlands:** The project will displace about 15 hectares (37 acres) of wetlands, which will be mitigated by building wetland replication areas to duplicate and maintain the functional values of the affected wetlands at graduated impact-to-mitigation ratios from 1.5:1 to 5.5:1. A conceptual wetlands compensation plan has been developed that includes acquisition of two sites to mitigate the project's wetlands impacts. One site is the close-by Fairmont Golf Course, where 26.3 hectares (65 acres) are favorably disposed to conversion for wetlands and mitigating the project's false decurrent aster displacements. The second site is farmland adjacent to the Cahokia Canal at the southeast quadrant of IL Rt. 162 and I-255, where about 40.6 hectares (100 acres) of off-site replication will be developed.

**Special Waste:** Soil management will be undertaken at hazardous and non-hazardous waste sites in the project right-of-way. These include part or all of: three Comprehensive Environmental Response, Compensation, and Liability Act sites; 31 underground storage tank or leaking underground storage tank sites; and 66 sites with high volatile organic compounds, lead and heavy metals, or polynuclear aromatic hydrocarbons, etc.

**Parkland:** The proposed action will require a less-than-one-acre (less than 0.4-hectare) construction easement at the southwest corner of the 36.4-hectare (90-acre) Jefferson National Expansion Memorial to change the ground line to accommodate the Spruce-Poplar-Memorial Drive intersection and relandscape the site. This project's Section 4(f) evaluation includes a number of mitigation measures.

**Aesthetics:** The project will be designed to be aesthetically pleasing. The 305-meter (1,000-foot)-minimum main span structure over the Mississippi River is proposed to be a signature bridge, which will be designed so that it does not compete with the Gateway Arch, located over a mile away. The design of the main span has not been determined at this time. Alternate concepts of what it could look like have been developed to help visualize the structure, which is expected to become a landmark, like the near Northside water towers. The project's north interchange in Missouri will be only two levels above groundline, no taller than nearby existing industrial buildings, and its structures above groundline will be concentrated within two blocks of the interchange centroid. Access to Fourteenth Street will be extended under Tucker and O'Fallon to minimize visual intrusion. Both the new north interchange and the project's rebuilt south interchange in Missouri will be landscaped appropriately as entries into the city and the state. These interchanges could also include coloring and patterning of concrete surfaces and use of distinctive steel paint colors. A deteriorated, old railroad trestle will be removed from the north riverfront as part of the project. Landscaping will also be incorporated into the project right-of-way in Illinois.

## **G. OTHER FEDERAL ACTIONS**

A number of other federal actions are required to implement the proposed action. These include permits required under the U.S. Rivers and Harbors Act and the U.S. Clean Water Act. The United States Corps of Engineers will need to issue a Section 10 permit(s) for filling in U.S. waters and a Section 404 permit(s) for activities affecting jurisdictional wetlands. The United States Coast Guard will need to issue a Section 9 permit to allow a bridge to be built over the Mississippi River. The states of Illinois and Missouri are granted the authority to issue water quality certificates under Section 401 of the Clean Water Act for activities in waterways and wetlands and for issuing stormwater discharge permits under the National Pollutant Discharge Elimination System permit program. Additional, related state review and permitting will be required.

A memorandum of agreement will need to be signed by the Missouri State Historic Preservation Officer and the Missouri Department of Transportation detailing the mitigation measures taken to address the project's impacts on four industrial buildings determined eligible for the National Register of Historic Places in accord with Section 106 of the National Historic Preservation Act. Similarly, a memorandum of agreement will need to be signed by the National Park Service and the Missouri Department of Transportation to modify the May 12, 1963 Cooperative Agreement, which included the city of St. Louis, detailing the mitigation measures taken to address the project's construction impacts on less

than one acre (0.4 hectares) of the Jefferson National Expansion Memorial under Section 4(f) of the Department of Transportation Act.

## **H. PROJECT COST AND SCHEDULE**

The proposed action, including downtown traffic control, is expected to cost \$587.8 million in current dollars to build with \$253.1 million in Missouri costs and \$334.7 million in Illinois costs. An additional \$63.2 million in separate Illinois-FIRST funding will be expended to reconstruct the existing I-55/70/64 interchange out of the water table, a project that needs to be accomplished whether or not the proposed action is built. (Similarly, the relocated IL Rt. 3 project is a separately-funded project; Illinois-FIRST funds have been programmed for the north part of this project from the McKinley Bridge in Venice to St. Clair Avenue through the relocated I-70 interchange.)

The schedule for the proposed action calls for beginning design on the Illinois FIRST-funded project components in 2000, which involve canal and railroad relocations and bridge modifications relating to relocating IL Rt. 3 and rebuilding the I-55/64/70 interchange. With advancement of preliminary tasks at local risk, the project will be readily defined for consideration in the next federal transportation bill in 2003. Alternatively, a toll financing bond package could be advanced at that time. With federal matching funding or bond funding available in 2004, sequenced construction could begin, with a goal that all project segments would be completed and opened to traffic in 2010. The main span with local access points on both sides of the river will likely be an early phased construction objective. Reconstruction of the Poplar Street Bridge approach in Missouri, which is dependent on relocating I-70 across the new bridge, will likely be the last segment completed and opened to traffic.