



Executive Summary

About the Environmental Impact Statement format

In the interest of trying to improve the quality of environmental documents, the Rex Whitton Expressway study team wrote this Environmental Impact Statement (EIS) following the Federal Highway Administration's principles for quality NEPA documents. The three core principles for quality NEPA documents include:

- Tell the story of the project so that the reader can easily understand what the purpose and need of the project is and describe the strengths and weaknesses of alternatives;
- Keep the document as brief as possible by using clear, concise writing, an easy-to-use format, effective graphics and visual elements, and discussion of issues and impacts in proportion to their relative importance; and
- Ensure that the document meets all legal requirements in a way that is easy to follow for regulators and technical reviewers.

This format, based on the Washington State Department of Transportation's Reader-Friendly Tool Kit, differs greatly from the traditional EIS format.

The goal of the reader friendly document is to have a clearly written product for the reviewing resource agencies as well as the public. The EIS utilizes a question and answer style that defines technical terms and includes graphics to more easily illustrate the completed processes and analysis. The chapters of the document discuss the information necessary to the decision-making process, highlighting those areas most affected by the project. The document summarizes the Whitton Expressway study process and references the supporting technical details. The more technical and detailed information is located in the appendices of this document.

About the project and EIS

The Rex Whitton Expressway is an important roadway for Jefferson City, and will be more so in the future (See Figure ES-1). The local

Figure ES-1: Whitton EIS Study Corridor



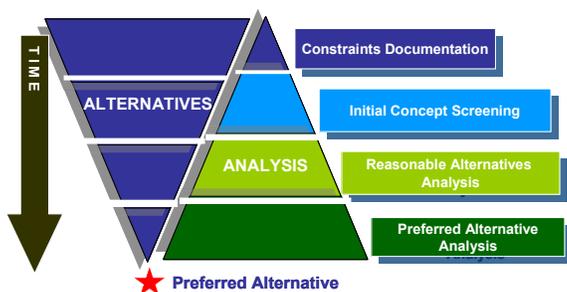
community, downtown businesses, and through travelers need to be able to travel safely and efficiently. That is why Jefferson City, Cole County and the Missouri Department of Transportation initiated a project to plan for improvements to US 50/63 (Whitton Expressway) and the local street network. The community needs this project to safely and reliably improve personal and freight mobility, reduce traffic congestion, and enhance access to the Missouri State Penitentiary Redevelopment site, Lincoln University and Jefferson City High School – all while respecting the character of Jefferson City.

The portion of the Whitton Expressway that is being studied in this document begins at Bolivar Street moving eastward through the corridor to the Eastland Drive interchange. Also included in the study is an area from about 300 feet south of Whitton to McCarty Street on the north. Access to the prison, which is located to the north of McCarty, will also be examined. The study corridor encompasses those areas that most directly affect downtown Jefferson City and the prison site.

Chapter 1 provides a discussion on reasons for conducting the project. The Purpose and Need Tech Memo provides additional detail and is located in **Appendix A**. The proposed action will address several needs including:

- Provide Sufficient Roadway Capacity and Improve Traffic Operations – Whitton Expressway will need to serve the local, regional and national traffic safely. There will also continue to be a need for local north-south connections – connections that will need to allow traffic to move safely and efficiently.
- Improve Traffic Safety – As traffic increases, Whitton Expressway will need improvements to function safely.
- Address Road and Bridge Deficiencies – There are locations where bridges or other structures need improvement or replacement for better traffic flow and safety.
- Improve Access to the Missouri State Penitentiary and Encourage Development.
- Improve Access to Lincoln University and Jefferson City High School.

Whitton Alternative Development and Screening Process



Alternatives become more developed and screening becomes more stringent during the study process.

Developing and evaluating alternatives

The study team followed a process (illustrated to the left) that first identified a wide range of initial concept alternatives. The study team screened those concepts based on initial criteria related to meeting the purpose and need. For more detailed information see **Chapter 2**, Table 2-1 and the Initial Screening Report in **Appendix B**. From that initial screening of alternatives, a set of “reasonable” alternatives were developed and subjected to a more stringent set of criteria.

The Whitton Expressway study process included these steps:

- The alternatives start as preliminary concepts;
- Initial screening identifies those concepts with major concerns;
- Concepts that seem reasonable were developed more fully as alternatives;
- More varied and stringent criteria were used as the alternatives become more developed.
- Public and agency comments were used to refine the concept and alternative development.

The initial concepts considered by the study team included the following:

- No Build;
- Travel Demand Management and Transportation System Management;
- A north and south bypass of Jefferson City;
- Improvements to the expressway;
- Improvements on the local street network for improved access to the prison.

The study team eliminated the following concepts (concepts 1, 2, 3, B, C, E, and F) from consideration because they failed to address the project's purpose and need:

- No-Build;
- Transportation System Management and Travel Demand Management;
- Two bypasses of Jefferson City, one to the North and one to the South;
- A concept on Whitton Expressway that maximized the total number of lanes available;
- Four prison access concepts, one that utilized Lafayette and Chestnut in tandem, one concept that would realign Clark Avenue to function as a pair of one-way streets, one concept that would realign Clark Avenue to function as the only prison access and one that utilized Eastland.
- The concept which would have a realigned Clark Avenue serve as the sole prison access was eliminated upon receipt of comments from the public and various agencies as discussed in Chapter 4. Once it was determined that access to Lincoln University and Jefferson City High School was a Purpose and Need component, the Clark Avenue option on its own would not meet this. See **Appendix A** for more information.

The study team selected to advance three mainline Whitton Expressway concepts and three prison access concepts as reasonable alternatives. Although the No-Build Alternative does not satisfy the project's purpose and need, it was carried forward for comparison purposes. To view the different alternative exhibits see **Appendix C**.

- Alternative 4 would construct an elevated viaduct starting just east of Broadway and returning to grade near the Jackson overpass.
- Alternative 5 would construct a parkway with a wide median and additional travel lanes. If necessary, MoDOT could add an elevated structure to carry through traffic separate from local traffic.
- Alternative 6 would construct a north-south overpass at Madison Street and add improvements at Jefferson and Monroe.
- Alternative A would construct a new half-diamond interchange on Whitton Expressway at Lafayette Street and widen Lafayette to four or five lanes.
- Alternative D would utilize a new half-diamond interchange at Lafayette and realigned Clark Avenue. This concept would provide for the flexibility to phase the improvements to take place as traffic warrants.
- Alternative G was an additional alternative that the study team chose to study based on feedback from the public involvement process. This alternative includes a slight permutation of Alternative D. The difference between the two is that Alternative G would construct a full diamond interchange at Lafayette, instead of the half-diamond interchange. Access from Clark Avenue would remain the same.

The process continued with the study team using another round of screening to recommend a Preferred Alternative. **Chapter 3** provides a summary and comparison of how the reasonable alternatives would affect, either positively or negatively, the community's environment. The study team chose the Identified Preferred Alternative by comparing each alternative's ability to meet the project's purpose and need against any unavoidable impacts to both the natural and social environments. For more information on traffic, the impact methodologies, the details of the environmental investigations and cultural resources see **Appendices D, E, F** and **G**. For the Summary Evaluation Matrix which summarizes the impacts of all the reasonable alternatives, see **Exhibit ES-1**.

Community involvement

Chapter 4 summarizes the public involvement efforts utilized throughout the study process. Local input was a critical component of the planning and evaluation process. The study team held public meetings and met with stakeholders to provide information and receive feedback on the project. In addition, during the EIS process, the study team formed and met with the Whitton Expressway EIS Community Advisory Group. The Community Advisory Group included representatives from Jefferson City neighborhoods and businesses located near the Expressway and the prison redevelopment site, as well as with the many governmental agencies whose cooperation and input was critical. For notes from the Community Advisory Group and public meetings see, **Appendix H**. For correspondence with the participating agencies, see **Appendix I**.

Identifying a Preferred Alternative

Based on the alternatives analysis and public input, the study team identified the Preferred Alternative for the Whitton Expressway EIS. As described in **Chapter 5**, the Identified Preferred Alternative consists of a combination of Alternative 6, the Madison Street Overpass option, and Alternative G, a new full-diamond interchange at Lafayette Street and a realigned Clark Avenue. The study team based their identification of the Preferred Alternative from the analysis of its transportation performance, including:

- Superior access to the prison redevelopment site;
- Access to Lincoln University and Jefferson City High School;
- Flexibility in constructing the improvements associated with the alternative; and,
- Costs to construct compared to transportation performance benefits such as roadway capacity, traffic operations, traffic safety, structural needs, and access requirements.

Along Whitton Expressway, the Madison Overpass best balanced the need for operation improvements with constructability. The full build out of the Madison Overpass would separate northbound and southbound through traffic from expressway traffic. It could also convert Jefferson and Monroe streets to function as one-way couplets if traffic warranted. The Identified Preferred Alternative offered flexibility on when to construct improvements. The first phase of construction would include the Lafayette interchange and the additional lane in each direction from Monroe to Lafayette streets, plus the eastbound and westbound auxiliary lanes between Lafayette Street and Clark Avenue. The roundabouts at the Clark Avenue interchange would be the next phase constructed. The additional eastbound and westbound lanes between Missouri Boulevard and Monroe Street would be constructed next. The Madison Overpass could be constructed separately from the mainline improvements. The Clark Avenue extension would be the last piece of the Identified Preferred Alternative that would be constructed if taking a phased approach. Prison site redevelopment, traffic, and access issues would dictate the need and pace for phasing the improvements. Regardless of how it was phased, the Identified Preferred Alternative offers the most direct and best access to the prison redevelopment site while also providing access to Lincoln University and Jefferson City High School. Information on the cost of phasing the project can be found in **Appendix K**.

The Identified Preferred Alternative is not without potential drawbacks. Most of the drawbacks are associated with social considerations. The full build-out of the Identified Preferred Alternative, which includes constructing a new interchange with Whitton Expressway at Lafayette Street, would directly affect historic resources such as the Craftsman/Monastery District and the property of the Lincoln University President's House, would acquire the Quinn Chapel AME church, and would alter access to several downtown businesses and institutions. The combined Lafayette interchange and realigned Clark Avenue would require more property acquisitions than the other Prison Access Alternatives. The full build-out of

the Identified Preferred Alternative would fully acquire 25 residential properties (both single and multi-family) and 4 business properties, and partially acquire 16 residential properties and 4 business properties.

Implications of the Identified Preferred Alternative to historic properties and parkland

Chapter 6 focuses on the Section 4(f) process as it pertains to this project and the Identified Preferred Alternative. The Section 4(f) legislation, as established under the U. S. Department of Transportation Act of 1966 (49 USC 303, 23 USC 138) provides protection for publicly owned parks, recreation areas, or wildlife and/or waterfowl refuges of national, state or local significance or land of an historic site of national, state, or local significance from conversion to transportation usage. Section 4(f) also applies to all archaeological sites on, or eligible for inclusion on, the National Register of Historic Places (NRHP) and which warrant preservation in place. Chapter 6 discusses the Identified Preferred Alternative for the Whitton Expressway study corridor and its potential effect on parkland and historic properties. The Identified Preferred Alternative affects the following Section 4(f) resources:

- One individually eligible historic property – Lincoln University President’s House property;
- One eligible historic district – Craftsman/Monastery District; and,
- Two public parklands – Park Place and the City’s Greenway Trail.

The historic resources listed above are those that the study team identified from the historic survey as eligible for the NRHP and that the project is anticipated to result in an adverse effect upon.

What kind of permits are needed?

Permits are categorized in two groups: regulatory permits and construction best management practices (BMPs). Regulatory permits assist government agencies in the administration and implementation of federal, state or local statutes or initiatives. Regulatory permits can include those for Sections 404 (USACE) and 401 (MDNR) of the Clean Water Act, National Pollutant Discharge Elimination System permit and a floodplain development permit. **Table ES-1** provides a listing of the regulatory permits that may be required for this project and agencies responsible for those permits. Construction BMPs serve as regulators of construction activities to protect the adjacent environs. For more specific information about these permits, see the Environmental Investigations Tech Memo in **Appendix F**.

Table ES-1: Regulatory Permits

Permit / Authorization	Authorizing Agency
Section 404, Individual or Nationwide	USACE
Section 401 Water Quality Certification	MDNR
National Pollution Discharge Elimination System (NPDES)	MDNR
Floodplain Development Permits	SEMA
Section 106	MO SHPO
Section 4(f)	FHWA

What were public and agency questions and concerns?

Understandably, many comments and concerns related to the effect transportation improvements would have on neighborhoods, specific homes, and other properties. Public comments often questioned how the project would affect Jefferson City neighborhoods, institutions, and infrastructure.

Questions and concerns generally fell into the following categories:

- Historic properties – How the project would affect Jefferson City’s historic districts, sites and landmarks;
- Neighborhood Cohesion – Wanted to avoid creating additional barriers between neighborhoods-especially in Old Munichberg, the Southside and the Central East Side neighborhoods;
- Pedestrian access – Improving pedestrian access across the Whitton Expressway;
- Economic access – Maintain accessibility to businesses on the south side of Whitton Expressway and improve accessibility to the prison redevelopment site, Lincoln University and Jefferson City High School; and
- Social – Minimize impacts to historic sites relating to the African-American community near Lincoln University, including Quinn Chapel;

List of Commitments

1. Maintenance of traffic and sequence of construction will be programmed to minimize traffic delays throughout the corridor. A traffic management plan will be developed and implemented during future engineering phases to ensure reasonable and convenient access to residences, businesses, community services, and local roads during construction.
2. MoDOT will coordinate construction activities, sequencing, and traffic management plans with local police, fire and emergency services, school district, and appropriate organizations to minimize delays during construction.
3. MoDOT will coordinate with area businesses regarding access issues, via direct communications throughout the construction period.
4. Once the final location of the roadway is established within the corridor and the final grades are established, coordination with the utility companies would be made to ensure utility services to the local area is continued.
5. MoDOT will ensure that any right of way acquisition and relocations will be accomplished according to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Relocation assistance under this program will be made available to all

relocated persons without discrimination. MoDOT will examine ways to further minimize property impacts throughout the study area, without compromising the safety of the proposed facility, during subsequent design phases.

6. During construction, MoDOT's specifications, Missouri Department of Natural Resources Solid Waste Management Program, and MoDOT's Sediment and Erosion Control Program will all be followed. To minimize impacts associated with construction, pollution control measures outlined in the MoDOT Standard Specifications for Highway Construction will be used. These measures pertain to air, noise and water pollution as well as traffic control and safety measures.

7. Through MoDOT's approved Pollution Prevention Plan for the National Pollutant Discharge Elimination System (NPDES), the control of water pollution will be accomplished. All construction and project activities will comply with all conditions of appropriate USACE and Missouri Department of Natural Resources permits and certifications.

8. The project construction will incorporate those features necessary to meet National Flood Insurance Program (NFIP) standards, FEMA and SEMA guidelines.

9. MoDOT will continue to coordinate with the SHPO and comply with the National Historic Preservation Act.

10. Plans for suitable pedestrian and bicycle access upon streets crossing the Whitton Expressway will be considered during the design of interchanges and bridges where warranted by land use. Any accommodations for bicycle/pedestrian access that are a part of this project will comply with the requirements of the American Disabilities Act of 1990.

11. The MoDOT Noise Policy will be used to address noise impacts. Where appropriate, possible noise abatement measures will be presented and discussed with the benefited residents during the design phase. Noise abatement measures will be considered that are deemed reasonable, feasible and cost effective.

12. In the event that the well house and limestone wall on the Lincoln University President's House property is impacted, the well house and remaining stone wall adjacent to it will be reconstructed.

MoDOT and FHWA will take the following steps, once the project has received funding, to mitigate impacts to minority populations through:

13. Expanded assistance in the relocation of any businesses within the project boundaries. MoDOT will assist displaced businesses in the search for a comparable business location.

14. MoDOT will work beyond the Uniform Act in assisting relocated residential tenants to become homeowners, as desired, by providing educational sources of information for preparing to become a homeowner.

15. MoDOT will work with the community to determine aesthetically pleasing treatments to retaining walls, bridge wings and bridge facings.

16. MoDOT will be conducting additional research and providing context on the historical African American community in relation to the Lincoln University President's Home property and the Craftsman/Monastery Historic District per the Memorandum of Agreement signed by MoDOT, FHWA and the Missouri State Historic Preservation Office. The final product will be a report that will be made available to SHPO, Lincoln University and the Missouri River Regional Library. Additional copies shall be provided to the appropriate local historical societies and retained by MoDOT. MoDOT will prepare a pamphlet and presentation based on the Architectural and Archaeological surveys and the report prepared above. These materials can be used by Lincoln University, the Cole County Historical Society, other local organizations and residents in order to preserve and share the history of the area.

17. MoDOT will incorporate an OJT (On the Job Training) program into the construction contract for this project, with a concentration on prompting OJT for African Americans within the project area.

18. MoDOT will take all steps reasonable and necessary to ensure that Quinn Chapel is relocated within this community, as is its desire.

Exhibit ES-1: Summary Evaluation Matrix

Whitton Expressway EIS

Evaluation Factors	Units	No-Build	WEST OF JACKSON			EAST OF JACKSON		
			Viaduct	Parkway	Madison	Lafayette	Lafayette Half & Clark	Lafayette Full & Clark
PURPOSE & NEED								
Does the alternative provide sufficient roadway capacity and improve traffic operations?		No	2	5 (2)*	3	Yes	Yes	Yes
Does the alternative improve traffic safety?		No	1	1 (1)	2	Yes	Yes	Yes
Does the alternative address structural and roadway needs		No	1	1 (1)	1	Yes	Yes	Yes
Does it improve access to major activity centers and encourage development?		No	1	1 (1)	1	Yes	Yes	Yes
ENGINEERING CONSIDERATIONS								
What are the anticipated construction costs?	\$ (Million)	n.a.	32-36	18-21 (44-49)	16-18	23-26	21-24	23-26
What is the total amount of right of way needed?	Acres	0	0.7	0.7	0.9	4.7	6.3	7.3
What are the estimated right of way costs?	\$ (Million)	n.a.	0.2-0.5	0.2-0.5	0.3-0.6	1.6-3.0	2.2-4.1	2.5-4.8
How difficult would it be to construct?	Rating	n.a.	5	3 (4)	2	3	3	3
How efficiently can traffic be maintained during construction?	Rating	n.a.	5	2 (3)	2	2	2	2
Can the alternative efficiently be implemented in phases?	Rating	n.a.	5	1 (1)	4	4	2	2
TRAFFIC & SAFETY CONSIDERATIONS								
What is the expected 2035 level of service on the mainline Whitton?	LOS (AM / PM)	F	B/C	B/C	D/E	C	B	D
Does this alternative improve traffic operations through the triplets?	Rating	n.a.	2	4 (2)	4	n.a.	n.a.	n.a.
Does the alternative address long-term capacity needs?	Rating	n.a.	2	4 (2)	3	3	2	1
Does the alternative create adverse traffic impacts on the secondary street network?	Rating	n.a.	2	4 (2)	4	4	1	1
Does this alternative improve accident rates along the corridor?	Rating	n.a.	2	3 (2)	3	3	2	3
Does this alternative affect incident management and emergency services?	Rating	n.a.	2	3 (2)	3	2	3	2
SOCIAL CONSIDERATIONS								
How many single-family properties will require a total acquisition?	#	0	0	0	2	10	21	22
How many single-family properties will require a partial acquisition?	#	0	0	0	0	9	8	12
How many multi-family properties will require a total acquisition?	#	0	0	1	0	2	1	1
How many multi-family properties will require a partial acquisition?	#	0	0	0	0	3	3	4
How many commercial properties will require a total acquisition?	#	0	1	0	0	9	4	4
How many commercial properties will require a partial acquisition?	#	0	1	2	3	2	0	1
How many institutional properties will require a total acquisition?	#	0	0	0	0	1	0	1
How many institutional properties will require a partial acquisition?	#	0	0	0	1	1	2	2
How many parking lots will require a total acquisition?	#	0	0	0	0	0	0	0
How many parking lots will require a partial acquisition?	#	0	7	7	7	1	1	1
What is the total population of those blocks that will be impacted by the project?	#	n.a.	108	94	94	734	682	682
What is the percentage of minority individuals living on those blocks that will be impacted by the project?	%	n.a.	31	22	22	37	38	38
Will the alternative impact business operations during construction?	Rating	n.a.	5	4	3	n.a.	n.a.	n.a.
Will existing on-street parking be impacted?	Rating	n.a.	2	3	3	5	3	3
Does this alternative affect the plans for Southside Redevelopment?	Rating	n.a.	2	3 (3)	4	n.a.	n.a.	n.a.
How about the Eastside Redevelopment plans?	Rating	n.a.	n.a.	n.a.	n.a.	3	2	2
Will the alternative impact Quinn Chapel?	Rating	n.a.	n.a.	n.a.	n.a.	5	3	5
Will alternative impact the IC Church?	Rating	n.a.	n.a.	n.a.	n.a.	1	4	4
Will bicycle and pedestrian accessibility be improved?	Rating	n.a.	2	3 (3)	2	3	3	3
Will access to Lincoln University be improved?	Rating	n.a.	n.a.	n.a.	n.a.	1	2	1
How about access to Jefferson City High School?	Rating	n.a.	n.a.	n.a.	n.a.	1	2	1
How about access to Central Bank or the Performing Arts Center?	Rating	n.a.	1	3 (3)	5	n.a.	n.a.	n.a.
Does it improve access to the Missouri Penitentiary Redevelopment site?	Rating	n.a.	n.a.	n.a.	n.a.	1	2	1
How about access to Coca-Cola and Central Dairy?	Rating	n.a.	1	3 (3)	5	n.a.	n.a.	n.a.
ENVIRONMENTAL CONSIDERATIONS								
How much parkland is impacted?	Acres	0	0	0	0	0	0.08	0.08
Does the alternative impact threatened and endangered species?	#	0	0	0	0	0	0	0
How much of the Wears Creek tributary would need to be channelized?	Linear ft.	0	285	1444	192	0	0	0
How much floodplain would be impacted? **	Acres	0	3.4	6.8	4.2	0.6	0.6	0.6
How many wetland areas are impacted?	#	0	0	0	0	0	0	0
Are any natural areas or habitats impacted?	#	0	0	0	0	0	0	0
How would the alternative impact the visual aesthetics?	Rating	n.a.	5	5	2	4	4	5
Would the region's air quality be adversely affected?		n.a.	No	No	No	No	No	No
Are any properties listed on the NRHP impacted?	#	0	0	0	0	3	0	0
Are any potentially eligible individual properties impacted?	#	0	1	1	1	1	0	0
Are any potentially eligible historic districts impacted?	#	0	0	0	0	1	1	1
Are any potentially eligible archaeological sites impacted by the alternative?	#	0	0	0	0	1	1	1
Are there any secondary or cumulative impacts associated with the alternative?	Rating	n.a.	1	1	1	1	1	1
Are any hazardous waste sites impacted?	#	0	0	0	0	0	0	0
How much farmland would be impacted?	#	0	0	0	0	0	0	0

Rating Scale - Factors are rated from 1 to 5 with 1 being the best and 5 being the worst. For those factors comparing impacts 1 represents the least impact and 5 represents the greatest impact.

* The numbers in parentheses reflect the Parkway - Future concept

** Floodplain impacts are based on FEMA floodplain data that does not exclude the existing roadway from the floodplain. Floodplain acreage impacts include existing right-of-way and proposed slope limits.

Note: Institutional properties include school property and churches