FINAL
Environmental Impact Statement

VOLUME 2

St. Louis and St. Louis County
MISSOURI

APPENDIX AA
Traffic Accident and Safety Data

The National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4370f, requires that this analysis of the proposed project must consider and discuss its effects and impacts on mankind, and its effects and impacts on plants, animals, resources, and the natural world in general. One of the key elements to be discussed in any NEPA analysis of a proposed highway project is its effects and impacts on the safety of those who use those highways. However, Congress has recognized that even while this document summarizes and presents traffic accident and safety information for the general information and benefit of the public, pursuant to federal law, some people may attempt to use the information to establish federal, state or local liability in lawsuits arising from highway accidents. Congress has enacted a law, 23 USC Section 409, which prohibits the discovery or use of highway accident and safety data, developed under federal law to make highway safety improvements, in litigation seeking damages for accidents and occurrences on these highways. Congress's rationale is obvious: the safety data was compiled and collected at their request, to help prevent future accidents, injuries and death on our nation's highways. If that information can be used in expensive damage suits, then the millions of dollars that litigation may cost the Missouri Department of Transportation (MoDOT) and local governments will not be available for their use to make Missouri's highways safer.

Traffic accident statistics and safety data are compiled, presented and summarized in portions of this NEPA document. Where noted in an introductory footnote to a segment of this document, the discussion, reports, lists, tables, diagrams and data presented throughout that chapter, unit, section or subsection was compiled or collected for the purpose of identifying, evaluating or planning the safety enhancement of potential accident sites or hazardous roadway conditions pursuant to federal law. Thus, that information and its supporting reports, schedules, lists, tables, diagrams and data are not subject to discovery, and they are prohibited by federal law (23 USC § 409) from being admitted into evidence in a federal or state court proceeding, or from being considered for other purposes, in any action for damages arising from an occurrence on the highways, intersections or interchanges discussed in this document.

APPENDIX A

A. Build Concept Interchange Options and Definitions

Due to tight interchange spacing, the complex travel movements being served by many of the interchanges contained within the study corridor, and the dense pattern of adjacent land uses, only a select number of compact interchange options were studied for each interchange location.

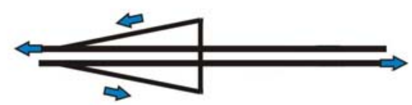
As described in Chapter I – Purpose and Need, there are significant constraints to expanding right-of-way (R/W) for the Build Concept. Because of these constraints, large-scale rural or suburban type interchanges, such as standard diamonds, trumpets, one quadrants, full cloverleaves, and partial cloverleaves, were excluded from the initial consideration of interchange options. In urban settings like this study corridor, these large-scale interchanges would greatly impact the adjacent land uses. The interchange types that were evaluated when considering the freeway Build Concept include the following as referenced in Chapter II - Alternatives.

1. NO INTERCHANGE OR INTERCHANGE REMOVAL

This Build Option proposes removal of the existing interchange on the local roadway, so no highway access would be provided. A structure would be needed for the local roadway to remain as an overpass or underpass across the highway.

2. HALF DIAMOND INTERCHANGE

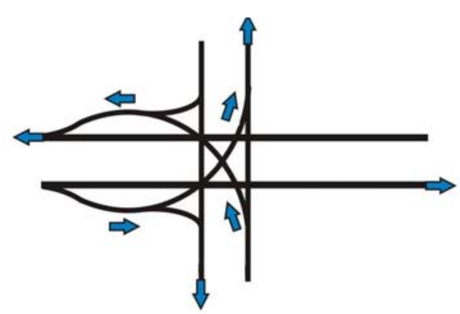
An interchange where traffic to and from a highway occurs at two separate locations along the highway creating a triangular or half diamond configuration in the plan view. Right-of-way area for the interchange is limited to one side of the arterial. A system of two intersections on the arterial provide half access between arterial and the highway; meaning, motorists are only allowed to travel to and from one direction on the highway from the arterial. The horizontal distance between the two intersections on the arterial would be designed to be greater than the width of the highway, anywhere from 250 to 500 feet (80 to 150 meters) apart.



Half Diamond

3. HALF SINGLE POINT URBAN INTERCHANGE

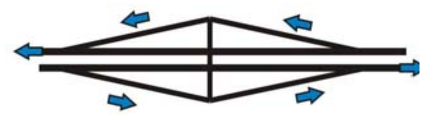
An interchange where traffic to and from a highway merges at a single point in one intersection on the crossing arterial. Only half access between arterial and the highway would be provided, so motorists are only allowed to travel to and from one direction on the highway from the arterial.



Half Single Point Urban Interchange (SPUI)

4. COMPACT DIAMOND / TIGHT DIAMOND INTERCHANGE

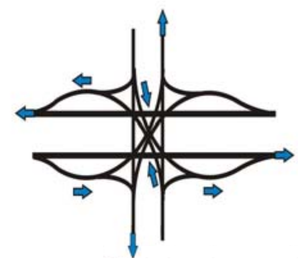
An interchange in which traffic to and from a highway occurs at four separate locations along the highway, creating a diamond configuration in the plan view. A system of two intersections on the arterial provides full access between arterial and the highway, so motorists are allowed to travel to and from both directions on the highway and arterial. The horizontal distance between the two intersections on the arterial would be designed to be greater than the width of the highway, anywhere from 250 to 350 feet (75 to 105 meters) apart. In most cases, the intersections are signalized and coordinated together to help operational efficiency. This compact intersection spacing uses much less R/W than a typical rural or suburban diamond interchange. The compact diamond interchange is also referred to as a tight diamond interchange.



Compact Diamond

5. SINGLE POINT URBAN INTERCHANGE

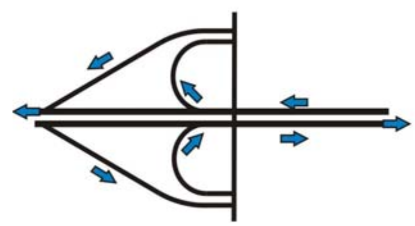
An interchange in which traffic to and from a highway merges at a single point in one intersection on the crossing arterial. It is also referred to as an “X” interchange. Full access between the arterial and highway would be provided. Motorists are allowed to travel to and from both directions on the highway and arterial. This type of interchange uses much less R/W than a typical cloverleaf or standard diamond interchange while handling large amounts of traffic very efficiently.



Single Point Urban Interchange (SPUI)

6. FOLDED DIAMOND INTERCHANGE

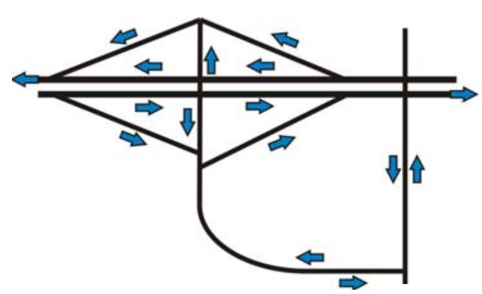
An interchange configuration in which the R/W area is limited to one side of the arterial in the plan view, similar to a half diamond interchange. A system of two or more intersections on the arterial provides full access between arterial and the highway; meaning, motorists are allowed to travel to and from both directions on the highway and arterial.



Folded Diamond

7. OFFSET DIAMOND INTERCHANGE

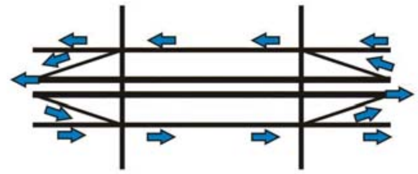
An interchange configuration in which the R/W area is limited to only one side of the arterial in the plan view. The intersections that allow full access between the arterial and highway occur on outer roads or access roads rather than directly to the arterial like other interchange types. The outer or access roads also provide motorists access to other land uses in the area as well as access between the arterial and the highway.



Offset Diamond

8. SPLIT DIAMOND INTERCHANGE

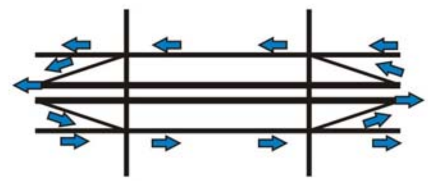
An interchange consisting of two half diamond interchanges and two separate local roadways that connect the two half diamonds. Traffic entrance and egress occurs at four separate locations along the highway, creating a diamond configuration in the plan view. A system of four intersections, two on each local roadway, provide full access between arterial and the highway. Motorists are allowed to travel to and from both directions on the highway and the arterials. There are local roads located parallel to the highway that link the two half diamond interchanges together at the ramp intersections, so motorists are allowed full access to and from the highway.



Split Diamond

9. COLLECTOR-DISTRIBUTOR INTERCHANGE SYSTEM (CD ROADS)

CD roads are lanes of traffic along a highway that separate themselves by using barriers or structures to allow entering and exiting traffic to merge and weave at lower speeds away from higher speed traffic. After merging and weaving is complete, the lanes merge back into the faster lanes of the highway. CD roads help increase the level of service of the highway's through traffic by not allowing weaving and merging of local traffic to impact the motorists traveling straight through the interchange area. When CD roads are used between two or more distinct, closely spaced interchanges along a highway, a collector-distributor interchange system is created. Exits and entrances for traffic accessing the local arterials are combined so the highway has less number of merging and diverging points within the area. CD roads are posted slower than highway speeds and do not allow access to local streets when traveling between the highway and arterial. CD roads are similar to highway ramps in that regard.



Collector-Distributor

B. Initial Interchange Option Screening Details

There are 17 existing interchanges located within the 11.7-mile (18.8-kilometer) long I-64 study corridor including I-170. Due to the close proximity between existing interchanges, the initial Build Concepts organized the freeway access points into nine larger interchange areas. As more design details were generated, the initial concepts evolved into Build Options specific to each interchange area. Descriptions of the Build Options considered are listed in Chapter II - Alternatives. A listing of interchange area Build Options is also shown in Chapter II - Alternatives. Each Build Option was then screened according to the interchange option methodology described in Chapter II - Alternatives.

The following discusses the initial interchange screening process in detail.

1. SPOEDE ROAD

Spoede Road considered specific interchange modifications not defined in above. They are defined as follows:

- ***Roundabout Interchange*** – An interchange where traffic traveling between a highway and arterial uses two roundabout intersections located either on the arterial or offset along an outer road similar to the offset diamond interchange. The use of two circular roundabout intersections rather than regular intersections to provide full access makes this interchange unique when compared to the others.

- ***U-Turn Interchange*** – A full access interchange that is a variation of the folded diamond interchange where the R/W area is limited to only one side of the arterial in the plan view. Traffic access between the highway and arterial merges along a low speed U-turn ramp on a separate structure from the arterial. The U-turn structure directly connects to the arterial at two intersections for access.

Table A-1 below shows the results of the screening process that occurred to the interchange options at Spoede Road.

Table A-1
Spoede Road Interchange Evaluation

Descriptions	Design Criteria	Safety	Traffic Operation	Access Mgmt.	Access	Impact to Existing Vegetation	Impact to Built Environment	Impact to Social Environment	Cost
No interchange	●	◒	–	●	–	●	◒	●	○
Half Diamond	●	◒	○	–	○	●	◒	○	○
Compact Diamond	●	◒	○	–	○	○	○	○	○
Offset Diamond (U-turn)	●	–	○	–	○	–	○	●	○
Offset Diamond (Roundabouts)	●	○	◒	–	○	○	◒	●	○

●=GREAT BENEFIT ◒=MODERATE BENEFIT ○=NEITHER BENEFIT NOR DETRIMENT – =DETRIMENT

Because intersections on Spoede are less than 700 feet (215 meters) apart, access management benefits were similar for most Build Options. Costs were also similar due to the similar construction complexity of each interchange type studied. The "No Interchange" option provided the most access management benefits and benefit to the existing vegetation; however, this option allowed no access to the highway.

In discussions, adjacent neighborhoods and municipalities indicated a strong preference for retaining access at this location. They also stated a strong preference for limiting the purchase of existing properties, and for having an interchange design that retains existing trees to serve as a visual buffer on MoDOT R/W. So, among the three options with full access at Spoede, the offset diamond with roundabouts provides the greatest set of benefits, primarily because of benefits from traffic operations, fewer adjacent environmental impacts and greater potential to support existing social environment. The preferred interchange alternative at the time of the FEIS circulation is still the offset diamond roundabout option.

2. LINDBERGH BOULEVARD

Two single point urban interchange design options were studied at Lindbergh Boulevard. Table A-2 shows the results of the screening process that occurred to the interchange options at Lindbergh Boulevard.

Traffic operational analysis was performed on several arterial intersections within the I-64 study that could negatively affect operations on the I-64 mainline. Where traffic congestion from an existing arterial intersection was shown to reach the I-64 mainline, improvements were proposed to the arterial intersection to prevent such congestion from occurring.

Table A-2
Lindbergh Boulevard Interchange Evaluation

Descriptions	Design Criteria	Safety	Traffic Operation	Access Mgmt.	Access	Impact to Existing Vegetation	Impact to Built Environment	Impact to Social Environment	Cost
Single Point	●	○	◒	–	○	○	◒	●	○
3-Level Single Point	●	○	●	–	◒	○	○	●	–

●=GREAT BENEFIT ◒=MODERATE BENEFIT ○=NEITHER BENEFIT NOR DETRIMENT – =DETRIMENT

The Clayton Road/Lindbergh Boulevard intersection located south of the Lindbergh Boulevard interchange currently is congested during peak hour conditions. Future year traffic congestion at this intersection would be very undesirable due to its close proximity to I-64. Traffic analysis performed during the Lindbergh Boulevard interchange evaluations shows that congestion from this intersection would not reach and affect I-64 mainline operations in either the 2-level or 3-level single point options.

Both the 2-level single point and the 3-level single point options were selected to study in greater detail until the engineering refinements that occurred after the initial screening.

Because it grade-separates Clayton Road above Lindbergh Boulevard, the 3-level option would provide improved traffic operations at that intersection and less congested access to and from I-64. However, it has a higher cost and impacts to adjacent properties more than the 2-level option. The 2-level option has a lower overall cost, plus traffic analysis shows that congestion the Clayton Road/Lindbergh Boulevard intersection would not reach and affect I-64 mainline operations similar to the 3-level option. For these reasons, the 3-level SPUI was eliminated from further consideration after further refinements. See Chapter II – Alternatives for more discussion. The preferred interchange alternative at the time of the FEIS circulation is still the 2-level single point option.

3. CLAYTON ROAD / WARSON ROAD

This interchange area considered some modifications using fly-over ramps as described as follows:

- ***Fly-over Ramps*** – Fly-overs are ramps that use bridge structures to vertically cross over the highway lanes to access the interchange on the crossing roadway. They are used in non-traditional interchange situations and often reduce R/W impacts on one side of the highway in lieu of the opposite side.

Table A-3 shows the results of the screening process that occurred to the interchange options at Clayton Road / Warson Road.

The safety benefit is somewhat low on the options because of poor driver expectations from the use of South Outer 40 Drive to access the interstate. Variations of speed and conflict points were similar between options also contributing to similar safety scores. The half diamond options have the lowest cost, fewest impacts to the surrounding environment, and best traffic operations; therefore, most options studied were variations of the half diamond option. The half diamond option closely resembling the current configuration was found to offer the most benefits, lowest cost and fewest impacts to the surrounding environment of the other half diamond options, so it is carried forward for further study.

This interchange area was subject to further refinements after the initial screening. See Chapter II – Alternatives for more discussion. The preferred interchange alternative at the time of the FEIS circulation is still the half diamond option.

Table A-3
Clayton Road / Warson Road Interchange Evaluation

Descriptions	Design Criteria	Safety	Traffic Operation	Access Mgmt.	Access	Impact to Existing Vegetation	Impact to Built Environment	Impact to Social Environment	Cost
Half Diamond (Fly-over to Outer Road)	●	○	●	–	◒	–	◒	○	–
Half Diamond (Realign Outer Road)	●	○	●	–	○	–	◒	○	●
Half Diamond (Like Existing Conditions)	●	○	●	–	○	○	●	○	●
Offset Diamond (Fly-over plus New Ramp to Outer Road)	●	○	◒	–	○	–	◒	○	–

●=GREAT BENEFIT ◒=MODERATE BENEFIT ○=NEITHER BENEFIT NOR DETRIMENT – =DETRIMENT

4. MCKNIGHT ROAD

Table A-4 below shows the results of the screening process that occurred to the interchange options at McKnight Road. A compact diamond and a single point urban interchange were considered at this location.

Table A-4
McKnight Road Interchange Evaluation

Descriptions	Design Criteria	Safety	Traffic Operation	Access Mgmt.	Access	Impact to Existing Vegetation	Impact to Built Environment	Impact to Social Environment	Cost
Compact Diamond	●	●	●	–	○	○	○	○	●
Single Point	●	◒	●	–	◒	○	○	○	○

●=GREAT BENEFIT ◒=MODERATE BENEFIT ○=NEITHER BENEFIT NOR DETRIMENT – =DETRIMENT

The level of service along McKnight Road would be similar with either option. Traffic operations between the two options are also alike, due to a lack of other nearby signalized intersections on McKnight Road to complicate timing coordination. Traffic simulation results indicate that both options provide essentially the same level of traffic efficiency. Due to similar interchange footprints, the impacts of both options to the built and existing vegetation are nearly identical.

The single point has slightly better access because it has one less signalized intersection to travel through, compared to existing. The compact diamond has fewer conflict points than the single point, providing slightly greater safety.

Local residents indicated that the less amounts of bridge structures associated with the compact diamond option would best fit the residential character of this location rather than the larger bridge structure of the single point. In the single point option, the mainline would be under McKnight Road and the interchange ramps would intersect McKnight Road on curved bridge structures. For this reason, the single point would have a greater cost.

Because of the fewer conflict points, cost benefits and similar ratings in the other criteria, the compact diamond was carried forward for further study. The preferred interchange alternative at the time of the FEIS circulation is still the compact diamond roundabout option.

5. BRENTWOOD BOULEVARD / I-170 / HANLEY ROAD / GALLERIA PARKWAY

This complex interchange area provides for a system-to-system movement between I-170 and I-64 using fly-over directional ramps defined below.

- ***Fly-over Directional Ramps*** – Fly-over directional ramps are one component of system to system interchanges. They are high-speed ramps that directly connect traffic from one highway to another by using tall structures. The ramps exit, increase in elevation and then cross over one highway to merge into the other.

Local access to Brentwood Boulevard and Hanley Road would be also provided in the options. Table A-5 below shows the results of the screening process that occurred involving the interchange options in this area.

Table A-5
I-170 Area Interchange Evaluation

Descriptions	Design Criteria	Safety	Traffic Operation	Access Mgmt.	Access	Impact to Existing Vegetation	Impact to Built Environment	Impact to Social Environment	Cost
CD Option (I-170 Connects to Brentwood)	●	◒	○	–	○	○	–	○	–
CD Option (I-170 Connects to Eager)	●	●	●	–	◒	○	–	○	–
CD Option (I-170 Outer Roads)	●	○	◒	–	◒	○	–	○	–
One-Way Outer Roads (I-170 Connects to Brentwood)	●	○	◒	–	○	○	○	○	–
One-Way Outer Roads (I-170 Connects to Eager)	●	◒	○	–	●	○	○	○	–

●=GREAT BENEFIT ◒=MODERATE BENEFIT ○=NEITHER BENEFIT NOR DETRIMENT – =DETRIMENT

The above design options have varying but many impacts to the built environment. The options have similar access management, due to the close proximity of Eager Road to the Brentwood Boulevard and Hanley Road interchanges. The options have low existing vegetation impact ratings, due to trade-offs of unused R/W near Brentwood Boulevard and Hanley Road interchange areas versus green space impacts along I-64, I-170, and Eager Road. The options have similar projected costs, due to long structures, curved structures and four levels of interstate ramps.

Many options require expanding the I-64 R/W, and the analysis examines the impact of total and partial property purchases related to each design concept. Much of the continuing conceptual engineering was undertaken to examine ways to lessen the amount of property needed.

The CD option provides the greatest safety, traffic operations, and access benefits, but it has a higher amount of property needed relative to the other options. The higher safety value of CD options is due to fewer conflict points and ease of signage, resulting in good driver expectations.

Outer road options have fewer R/W impacts because they incorporate Eager Road as part of the outer road system; however, traffic operations suffer in the trade-off.

It was found that variations of the CD concept could lessen impacts to the built environment. These options were explored in greater detail in Chapter II - Alternatives. The preferred interchange alternative at the time of the FEIS circulation is still the offset diamond roundabout option.

6. LACLEDE STATION ROAD

Due to its close proximity to the Hanley Road and Big Bend Boulevard interchanges, this interchange was targeted for removal by the Cross-County MTIA. If interstate access were to remain at Laclede Station Road, the level of service along the I-64 mainline would be compromised. Therefore, the no interchange option was the only one studied at this interchange. Table A-6 below shows the results of the screening evaluation at Laclede Station Road.

Table A-6
Laclede Station Road Interchange Evaluation

Descriptions	Design Criteria	Safety	Traffic Operation	Access Mgmt.	Access	Impact to Existing Vegetation	Impact to Built Environment	Impact to Social Environment	Cost
No interchange	●	◒	●	●	○	●	●	●	●

●=GREAT BENEFIT ◒=MODERATE BENEFIT ○=NEITHER BENEFIT NOR DETRIMENT – =DETRIMENT

The no interchange option provides positive benefits in all categories except access. However, the access lost at this interchange would be replaced by improved access at Hanley Road and Big Bend Boulevard. The preferred interchange alternative at the time of the FEIS circulation is still the no interchange option.

7. BIG BEND BOULEVARD

Table A-7 below shows the results of the screening process that occurred to the interchange options at Big Bend Boulevard.

Table A-7
Big Bend Boulevard Interchange Evaluation

Descriptions	Design Criteria	Safety	Traffic Operation	Access Mgmt.	Access	Impact to Existing Vegetation	Impact to Built Environment	Impact to Social Environment	Cost
Compact Diamond	●	◒	◒	–	○	○	○	○	●
Single Point	●	◒	●	–	○	○	○	○	○

●=GREAT BENEFIT ◒=MODERATE BENEFIT ○=NEITHER BENEFIT NOR DETRIMENT – =DETRIMENT

The safety benefits of both options are similar, since both increase the number of conflict points when compared to the existing partial cloverleaf. Driver expectations and variation of speed are similar between both options. The level of access is alike because both options provide a signalized intersection at Big Bend Boulevard, as opposed to the existing intersection with no signals. Access management ratings are low for both options because of the close location of the Dale and Wise Avenue intersections. Both options have identical impacts to the built and existing vegetation, due to similar interchange footprints. Both options impact Harter Avenue properties.

The single point option would be more expensive to build, but shows better traffic operation than the compact diamond. Traffic operations are slightly better with the single point, because it performs better within Big Bend Boulevard's close-spaced system of signalized intersections. In discussions with St. Louis County's Highways and Traffic Department, which maintain Big Bend Boulevard as part of the County's arterial system, they indicated a strong desire to improve traffic operations as much as possible on Big Bend Boulevard. Due to the potential traffic benefits that occur with the single point option along Big Bend Boulevard and since the criteria rated so similar, the single point option will be carried forward for further study. The preferred interchange alternative at the time of the FEIS circulation is still the offset single point option.

8. BELLEVUE AVENUE

The existing I-64 provides a half diamond interchange at Bellevue Avenue that serves travel to-and-from the west. The location of the Bellevue Avenue interchange is less than ½ mile (0.8 kilometers) from both Big Bend Boulevard and McCausland Avenue. This tight interchange spacing results in operational problems for mainline traffic operation. So, if an option resulted in a failing mainline weave or ramp merge level of service the rating is given the lowest mark. To aid traffic operations on I-64, some options included braided ramps as defined below:

- ***Braided Ramps (Scissor Ramps)*** – A situation where an off ramp from one interchange and an on ramp from another interchange are so close to one another that they cross each other and a structure would be used to vertically separate the ramps. As a result, the configuration of the crossing ramps in the plan view appears like the ramps are braided or look like a pair or scissors.

Table A-8 below shows the results of the screening process that occurred to the interchange options at Bellevue Avenue.

Table A-8
Bellevue Avenue Interchange Evaluation

Descriptions	Design Criteria	Safety	Traffic Operation	Access Mgmt.	Access	Impact to Existing Vegetation	Impact to Built Environment	Impact to Social Environment	Cost
No interchange	●	◒	●	●	–	●	◒	●	●
Half Diamond (Uses Big Bend Interchange)	●	○	○	–	–	–	○	○	●
Half Diamond (Two Braided Ramps)	●	●	○	–	○	–	○	○	○
Half Diamond (CD Option)	●	◒	–	–	○	○	○	○	●
Half Diamond (Left Hand Off-Ramp)	●	○	○	–	○	○	○	○	○

●=GREAT BENEFIT ◒=MODERATE BENEFIT ○=NEITHER BENEFIT NOR DETRIMENT – =DETRIMENT

As part of this evaluation, the “No Interchange” option was found to provide the most benefits, due to improved access management, traffic operations, impacts to environment, social environment and cost. Plus, removing access and traffic from Bellevue Avenue provided the greatest benefits to traffic operations specific to Bellevue Avenue.

Today, motorists and emergency vehicles accessing St. Mary’s Hospital from the west use Bellevue Avenue’s ramps. St. Mary’s Hospital’s emergency entrance currently is located on Bellevue Avenue ¼ mile (0.4 kilometers) north of I-64. In discussions with the local communities, access at Bellevue Avenue for emergency reasons and R/W impacts of providing ramps at Bellevue were extremely important. Conversely, adjacent resident stakeholders along Bellevue Avenue stressed closing I-64 access at that interchange due to high volumes of traffic on local streets. Through the EIS process, it was determined that access at Bellevue Avenue was necessary for emergency response and general hospital access reasons. The two braided ramps was identified as an effective, but more costly option for providing access while still maintaining traffic operations on the I-64 mainline. The half diamond (CD option) performs similarly to the braided ramps option, but did introduce insufficient mainline traffic operation.

Both the no interchange option and the half diamond option with two braided ramps were carried forward based on the initial screening. This interchange area was subject to further refinements after the initial screening. See Chapter II – Alternatives for more discussion. The preferred interchange alternative at the time of the FEIS circulation is the two braided ramps option.

9. McCAUSLAND AVENUE / OAKLND AVENUE / CLAYTON ROAD / SKINKER BOULEVARD

Table A-9 below shows the results of the screening process for this interchange area. Replacing access to Oakland Avenue does affect factors such as safety and cost so options were developed with different types of access to Oakland Avenue.

Table A-9
McCausland Ave. / Oakland Ave. / Clayton Rd. / Skinker Blvd. Interchange Evaluation

Descriptions	Design Criteria	Safety	Traffic Operation	Access Mgmt.	Access	Impact to Existing Vegetation	Impact to Built Environment	Impact to Social Environment	Cost
Compact Diamond at McCausland, Half Diamond at Oakland	●	●	◒	–	○	○	○	●	–
Compact Diamond at McCausland, Half Diamond at Skinker	●	●	●	–	○	○	○	●	●
Compact Diamond at Oakland, Half Diamond at McCausland	●	●	○	–	○	○	○	●	●
Compact Diamond at McCausland, Half diamond at Skinker (Indirect ramp to Oakland)	●	○	●	–	○	○	○	●	●
Compact Diamond at McCausland, Half Diamond at Skinker (Braided Ramp to Oakland)	●	●	●	–	○	○	○	●	○
Compact Diamond at McCausland, Half Single Point at Clayton	●	●	◒	–	–	○	○	○	○
Compact Diamonds at McCausland and Clayton	●	◒	○	–	○	○	○	○	●
Compact Diamonds at McCausland and Oakland	●	◒	○	–	○	○	○	●	●

●=GREAT BENEFIT ◒=MODERATE BENEFIT ○=NEITHER BENEFIT NOR DETRIMENT – =DETRIMENT

Access management benefits of the options would be identical, due to the close proximity of existing intersections along McCausland Avenue. Access ratings would be similar for the options because projected travel patterns and access times remain the same as in the existing conditions. Where an interchange option changed travel patterns, improved access at one location was offset by sacrificing access at a second location. The options require trade-offs of green space, resulting in identical impacts to the existing vegetation and built environment. The options involving changes in ramp configurations would affect the existing vegetation (Forest Park) more than the existing built environment. Impacts to the built environment along mainline I-64 were similar under the options.

The design most similar to the existing conditions, using compact diamond at McCausland Avenue and a half diamond at Skinker Boulevard with no ramp to Oakland Avenue, provides the most benefits due to optimum safety, traffic operations, impacts to environment, social environment and cost. If Oakland Avenue access is considered necessary, the braided ramp to Oakland Avenue option provides good safety and traffic operation, but at potentially greater cost. Due to the close proximity of the Dewey School on Clayton Avenue, a potentially eligible historic site, this interchange area is discussed in more detail in the Section 4(f) portion of this document. The option that considers an indirect ramp to Oakland Avenue does not provide a beneficial safety score due to poor driver expectation compared to the braided ramp.

Therefore, two options will be carried forward for further evaluation. Both have a compact diamond at McCausland Avenue and half diamond at Skinker Boulevard. One is without the Oakland Avenue ramp and other provides access to Oakland Avenue using a braided ramp to Oakland Avenue. The preferred interchange alternative at the time of the FEIS circulation option that does not include the ramp to Oakland Avenue.

10. HAMPTON AVENUE

The Hampton Avenue interchange is currently a cloverleaf configuration. Oakland Avenue is parallel to I-64 and is located in close proximity to the south interchange ramp terminals. Given the very limited amount of R/W for an interchange at this location, a single point interchange would be the concept most applicable. Table A-10 below shows the results of the screening process involving the interchange options at Hampton Avenue.

Table A-10
Hampton Avenue Interchange Evaluation

Descriptions	Design Criteria	Safety	Traffic Operation	Access Mgmt.	Access	Impact to Existing Vegetation	Impact to Built Environment	Impact to Social Environment	Cost
Single Point (Oakland Under Hampton, Oakland Ramp Optional)	●	●	●	●	○	○	●	○	–
Single Point (Oakland at Grade, Oakland Ramp Optional)	●	●	◒	–	○	○	●	○	○

●=GREAT BENEFIT ◒=MODERATE BENEFIT ○=NEITHER BENEFIT NOR DETRIMENT – =DETRIMENT

Both options feature identical safety due to reduction of conflict points, increased ramp lengths helping variation of speed, and good driver expectation ratings. Both options have identical impacts to the built environment. Both options affect the adjacent existing vegetation and Forest Park north of I-64 more than the built environment south of I-64.

Options at Hampton Avenue include grade separating the Hampton Avenue/Oakland Avenue intersection or keeping the intersection at-grade. A variation providing a direct ramp from eastbound I-64 to Oakland Avenue was also developed. It was found that a direct ramp to eastbound Oakland Avenue could either be provided or not provided in either option with neutral benefit or impact according to the defined methodology. Therefore, the direct ramp to Oakland Avenue is considered optional in both options.

It was decided that further evaluation of the single point option was needed beyond what the initial screening quantified, but the additional design features would be considered modifications to the single point option carrying forward.

This interchange area was subject to further refinements after the initial screening. See Chapter II – Alternatives for more discussion. The preferred interchange alternative at the time of the FEIS circulation is the single point with direct access to Oakland option.

11. KINGSHIGHWAY BOULEVARD / TOWER GROVE AVENUE / BOYLE AVENUE

Table A-11 shows the results of the screening process that occurred in this interchange area.

Because a single point urban interchange has the smallest footprint and provides improved traffic operations and access management relative to a diamond interchange, the single point urban interchange was the only option considered at Kingshighway Boulevard. Signal timing and coordination would be less complicated along Kingshighway Boulevard with the one signal of the single point design.

Table A-11
Kingshighway Blvd. (K'hwy) / Tower Grove Ave. (TG) / Boyle Ave. Interchange Evaluation

Descriptions	Design Criteria	Safety	Traffic Operation	Access Mgmt.	Access	Impact to Existing Vegetation	Impact to Built Environment	Impact to Social Environment	Cost
Single Point at K'hwy, Split Diamond at Tower Grove / Boyle	●	○	◒	–	◒	○	◒	●	○
Single Points at K'hwy and TG	●	◒	○	–	◒	○	○	○	○
Single Points at K'hwy and Boyle	●	○	○	–	○	○	○	○	○

●=GREAT BENEFIT ◒=MODERATE BENEFIT ○=NEITHER BENEFIT NOR DETRIMENT – =DETRIMENT

Costs are identical because the options provide the single point interchange at Kingshighway Boulevard and new ramps to and from the west near the Tower Grove Avenue/Boyle Avenue area. Because the smaller footprint of the Kingshighway Boulevard interchange would be offset by gains in the mainline I-64 footprint, the options have the same impacts to the existing vegetation. Access management ratings are low in the options due to the close locations of Clayton Avenue and Papin Street near the Tower Grove Avenue and/or Boyle Avenue interchanges.

At Tower Grove Avenue, a split diamond design provides the best traffic operations and access, has the fewest impacts to the built environment and has the greatest potential for social environment. Due to these reasons that option will be carried forward for further study.

Traffic operational analysis was performed on several arterial intersections within the I-64 study that could negatively affect operations on the I-64 mainline. Where traffic congestion from an existing arterial intersection was shown to reach the I-64 mainline, improvements were proposed to the arterial intersection to prevent such congestion from occurring. The existing Clayton Avenue and Boyle Avenue intersection is a made up of a system of three smaller intersections with traffic signals. Future year traffic analysis of this intersection showed that congestion from there could reach stem south to the Boyle Avenue interchange and cause congestion on I-64. As a result, improvements to the Clayton Avenue and Boyle Avenue intersection are proposed in each option that was evaluated and were carried forward for further evaluation to prevent congestion from reaching I-64. The preferred interchange alternative at the time of the FEIS circulation is still the single point interchange at Kingshighway Boulevard and new ramps to and from the west near the Tower Grove Avenue/Boyle Avenue area.

APPENDIX B
Traffic Analysis Supplement

A. Overview of Traffic Analysis

Traffic analysis of the No-Build and Build Alternatives was completed in more detail evaluating mainline weaving areas, ramp merge and diverge areas and level of service (LOS) for the ramp terminals. The *Highway Capacity Manual 2000* methodology was used to complete the analysis; plus, traffic simulation models were created and were used. This appendix contains the results of the evaluation. In general, the No-Build Alternative analysis continued to result in an unsatisfactory LOS (LOS E or F) while the Build Alternative resulted in satisfactory LOS (LOS D or above).

B. Mainline Weaving Area Traffic Analysis

The No-Build Alternative would repave but not improve many of the existing short and tight weaving areas on I-64 because of existing right-of-way (R/W) restrictions. An analysis of the LOS of freeway weaving areas located between the interchanges for the a.m. and p.m. peak hours of travel was completed. The *Highway Capacity Manual 2000* methodology was used to complete the analysis. Table B-1 illustrates the future (year 2020) weaving peak hour levels of service for the I-64 study corridor. The results indicate that most of the weaving areas located between interchange areas would operate at an unsatisfactory LOS (LOS E or F) in the No-Build Alternative.

Table B-1
No-Build Alternative Year 2020 Freeway Weaving Area Level of Service
(a.m. and p.m. Peak Hour)

Location	EB No. of Lanes	WB No. of Lanes	AM Peak Hr. EB/WB LOS	PM Peak Hr. EB/WB LOS
Lindbergh Blvd. cloverleaf	3+auxiliary	3+auxiliary	F / D	E / F
WB I-64 CD to NB I-170 and Brentwood Blvd.	Not applicable	2	E (WB)	F (WB)
I-170 to Hanley Rd.	3+auxiliary	3+auxiliary	E / E	E / F
Big Bend Blvd. to Bellevue Ave.	3+auxiliary	3+auxiliary	F / E	E / F
McCausland Ave. to Oakland Ave./Clayton Rd.	3+auxiliary	3+auxiliary	E / C	C / E
Oakland Ave./Clayton Rd. to Hampton Ave.	4	Not applicable	D (EB)	D (EB)
Hampton Ave. cloverleaf	4+auxiliary	4+auxiliary	D / E	C / F
Kingshighway Blvd. cloverleaf	4+auxiliary	4+auxiliary	E / D	C / F
I-170 (I-64 to Galleria Pkwy.)	3+auxiliary (NB)	3+auxiliary (SB)	D (NB) C (SB)	C (NB) C (SB)

Above level of service information based on *Highway Capacity Manual 2000*, Transportation Research Board, Chapters 23-25.

The analysis was performed by the HNTB Corporation as part of Job No. J6I0978 (R/W, aesthetic design and traffic modeling for the I-64 corridor from Spoede to Tower Grove), 2002.

Source: HNTB Corporation, 2002.

The same methodology was used to analyze Build Alternative. Table B-2 illustrates the future (year 2020) peak hour weaving levels of service for the I-64 study corridor. The results indicate that most of the weaving areas located between interchange areas would operate at a satisfactory LOS (LOS D or above) in the Build Alternative.

Table B-2
Build Alternative Year 2020 Freeway Weaving Area Level of Service
(a.m. and p.m. Peak Hour)

Location	EB No. of Lanes	WB No. of Lanes	AM Peak Hr. EB/WB LOS	PM Peak Hr. EB/WB LOS
Spoede Rd. to Lindbergh Blvd.	4+auxiliary	4+auxiliary	D / C	D / C
McKnight Rd. to Brentwood Blvd./I-170	4+auxiliary	4+auxiliary	D / C	D / D
I-64 north CD (stacked option 2)	Not applicable	3	B (WB)	B (WB)
I-64 south CD (stacked option 2)	3	Not applicable	B (EB)	B (EB)
I-64 north CD (flat option 3)	Not applicable	3	D (WB)	D (WB)
I-64 south CD (flat option 3)	3	Not applicable	B (EB)	B (EB)
I-170/Hanley Rd. to Big Bend Blvd./Bellevue Ave.	3+2 auxiliaries	3+2 auxiliaries	D / C	C / D
Big Bend Blvd. to McCausland Ave./Oakland Ave.	3+auxiliary	3+auxiliary	D / D	D / D
Big Bend Blvd. to McCausland Ave.	3+auxiliary	3+auxiliary	D / D	D / D
Clayton Rd./Skinker Blvd. to Hampton Ave.	4+auxiliary	Not applicable	D (EB)	D (EB)
Kingshighway Blvd. to Tower Grove Ave.	4+auxiliary	4+auxiliary	C / C	C / D

Above level of service information based on *Highway Capacity Manual 2000*, Transportation Research Board, Chapters 23-25.

The analysis was performed by the HNTB Corporation as part of Job No. J6I0978 (R/W, aesthetic design and traffic modeling for the I-64 corridor from Spoede to Tower Grove), 2002.

Source: HNTB Corporation, 2002.

C. Ramp Merge/Diverge Traffic Analysis

Many of the interchange entrance and exit ramps would be remain with minimal improvements in the No-Build Alternative. Existing R/W limits the amounts of improvements that can be made to the ramps. An analysis of the level of service (LOS) of freeway ramps, freeway merging areas and freeway diverging areas located at the interchanges for the a.m. and p.m. peak hours of travel was completed. The *Highway Capacity Manual 2000* methodology was used to complete the analysis. Table B-3 illustrates the future (year 2020) peak hour levels of service for the I-64 study corridor. The results indicate that most of the freeway entrance and exit ramps (freeway on and off ramps) would operate at an unsatisfactory LOS (LOS E or F) in the No-Build Alternative.

Table B-3
No-Build Alternative Year 2020 Freeway Ramp Merge/Diverge Level of Service
(AM and PM Peak Hour)

Location	I-64 Direction	AM Peak Hr. LOS	PM Peak Hr. LOS
Spoede Rd. off ramp	EB	A	A
Spoede Rd. on ramp	EB	D	C
Spoede Rd. off ramp	WB	F	F
Spoede Rd. on ramp	WB	B	F
SB Lindbergh Blvd. off ramp	EB	F	F
NB Lindbergh Blvd. on ramp	EB	F	E
Lindbergh Blvd. cloverleaf ramps	LOS governed by weaving area analysis.		
SB Lindbergh Blvd. on ramp	WB	E	F
NB Lindbergh Blvd. off ramp	WB	E	F
Clayton Rd./Warson Rd. on ramp	EB	F	F
Clayton Rd./Warson Rd. off ramp	WB	E	F
McKnight Rd. off ramp	EB	F	F

Location	I-64 Direction	AM Peak Hr. LOS	PM Peak Hr. LOS
McKnight Rd. on ramp	EB	F	F
McKnight Rd. off ramp	WB	B	F
McKnight Rd. on ramp	WB	D	F
Brentwood Blvd. off ramp	EB	F	F
Brentwood Blvd. on ramp	EB	D	C
Ramps between I-170 and Hanley Rd.	LOS governed by weaving area analysis.		
NB Hanley Rd. off ramp	EB	F	C
Hanley Rd. on ramp	EB	F	E
NB Hanley Rd. on ramp	WB	F	F
Hanley Rd. off ramp	WB	F	F
Laclede Station Rd. on ramp	EB	F	D
SB Laclede Station Rd. off ramp	WB	F	F
SB Big Bend Blvd. on ramp	EB	F	D
SB Big Bend Blvd. off ramp	WB	F	F
Ramps between Big Bend Blvd. and Bellevue Ave.	LOS governed by weaving area analysis.		
McCausland Ave. off ramp	EB	D	D
McCausland Ave. on ramp	WB	D	F
SB McCausland Ave. off ramp	WB	D	D
Ramps between McCausland Ave. and Oakland Ave.	LOS governed by weaving area analysis.		
Ramps from Clayton Rd./Skinker Blvd. to Hampton Ave.	LOS governed by weaving area analysis.		
Clayton Rd./Skinker Blvd. off ramp	WB	B	C
NB Hampton Ave. on ramp	EB	C	B
Hampton Ave. cloverleaf ramps	LOS governed by weaving area analysis.		
SB Hampton Ave. on ramp	WB	C	C
NB Hampton Ave. off ramp	WB	B	C
SB Kingshighway Blvd. off ramp	EB	D	C
NB Kingshighway Blvd. on ramp	EB	C	C
Kingshighway Blvd. cloverleaf ramps	LOS governed by weaving area analysis.		
SB Kingshighway Blvd. on ramp	WB	B	C
NB Kingshighway Blvd. off ramp	WB	C	C
Boyle Ave./Papin St. on ramp	EB	C	C
Boyle Ave. off ramp	WB	F	F
Ramps on I-170 between I-64 and Galleria Pkwy.	LOS governed by weaving area analysis.		
Galleria Pkwy. on ramp	NB I-170	C	C

Above level of service information based on *Highway Capacity Manual 2000*, Transportation Research Board, Chapters 23-25.

The analysis was performed by the HNTB Corporation as part of Job No. J6I0978 (R/W, aesthetic design and traffic modeling for the I-64 corridor from Spoede to Tower Grove).

Source: HNTB Corporation, 2002.

Many of the interchange entrance and exit ramps would be rebuilt with improvements in the Build Alternative to abide by the current design standards. An analysis of the LOS of freeway ramps, freeway merging areas and freeway diverging areas located at the interchanges for the a.m. and p.m. peak hours of travel was completed according to the same methodology. Table B-4 illustrates the future (year 2020) peak hour levels of service for the I-64 study corridor. The results indicate that most of the freeway entrance and exit ramps (freeway on and off ramps) would operate at a satisfactory LOS (LOS D or above) in the Build Alternative.

Table B-4
Build Alternative Year 2020 Freeway Ramp Merge/Diverge Level of Service
(AM and PM Peak Hour)

Location	I-64 Direction	AM Peak Hr. LOS	PM Peak Hr. LOS
Spoede Rd. off ramp	EB	D	C
Ramps between Spoede Rd. and Lindbergh Blvd.	LOS governed by weaving area analysis.		
Spoede Rd. on ramp	WB	B	C
Lindbergh Blvd. on ramp	EB	C	C
Lindbergh Blvd. off ramp	WB	C	D
Clayton Rd./Warson Rd. on ramp	EB	D	C
Clayton Rd./Warson Rd. off ramp	WB	C	C
McKnight Rd. off ramp	EB	C	C
Ramps between McKnight Rd. and Brentwood Blvd./I-170	LOS governed by weaving area analysis.		
McKnight Rd. on ramp	WB	C	C
Hanley Rd. off ramp (all options)	EB	D	C
Brentwood Blvd. on ramp (original and flat options 1 & 3)	EB	C	B
Ramps between Hanley Rd. and Big Bend Blvd./Bellevue Ave.	LOS governed by weaving area analysis.		
Ramps between Big Bend Blvd. and McCausland Ave.	LOS governed by weaving area analysis.		
Ramps from Clayton Rd./Skinker Blvd. to Hampton Ave.	LOS governed by weaving area analysis.		
Clayton Rd./Skinker Blvd. off ramp	WB	C	C
Hampton Ave. on ramp	EB	C	C
Hampton Ave. on ramp	WB	C	C
Hampton Ave. off ramp	WB	C	D
Kingshighway Blvd. off ramp	EB	B	B
Ramps between Kingshighway Blvd. and Tower Grove Ave.	LOS governed by weaving area analysis.		
Kingshighway Blvd. on ramp	WB	C	C
Boyle Ave./Papin St. on ramp	EB	D	D
Boyle Ave. off ramp	WB	D	D
NB I-170 off ramp from north CD (stacked option 2)	NB I-170	B	B
NB I-170 off ramp from north CD (flat option3)	NB I-170	C	B
Galleria Pkwy. on ramp (all options)	NB I-170	D	C
Galleria Pkwy. off ramp (all options)	SB I-170	C	C
Eager Rd. off ramp (original and flat options 1 & 3)	SB I-170	B	C

Above level of service information based on *Highway Capacity Manual 2000*, Transportation Research Board, Chapters 23-25.

The analysis was performed by the HNTB Corporation as part of Job No. J6I0978 (R/W, aesthetic design and traffic modeling for the I-64 corridor from Spoede to Tower Grove).

Source: HNTB Corporation, 2002.

D. Ramp Terminal Traffic Analysis

The ramp terminal intersections would be remain like existing with minimal improvements in the No-Build Alternative. An analysis of the LOS of the ramp termini for the a.m. and p.m. peak hours of travel was completed. Synchro traffic simulation software and the *Highway Capacity Manual 2000* methodology was used to complete the analysis. Table B-5 illustrates the future (year 2020) peak hour LOS for the ramp intersections in I-64 study corridor. The results indicate that some of the intersections will operate at an unsatisfactory LOS (LOS E or F) in the No-Build Alternative causing congestion and possible back-ups on the ramps reaching I-64 in some areas.

Table B-5
No-Build Alternative Year 2020 Arterial Ramp Terminal Level of Service
(AM and PM Peak Hour)

Location	AM Peak Hr. Northside/Southside LOS	PM Peak Hr. Northside/Southside LOS
Spoede Rd. interchange	F / E	F / D
Lindbergh Blvd. interchange	D / F	F / F
Clayton Rd./Warson Rd. interchange	A / A	A / A
McKnight Rd. interchange	A / B	B / A
Brentwood Blvd. interchange	C / B	C / B
Eager Rd./SB I-170 intersection	C	C
Hanley Rd. interchange	B / E	B / F
Laclede Station Rd. interchange	A / A	A / A
Big Bend Blvd. interchange	B / A	C / A
Bellevue Ave. interchange	B / F	B / F
McCausland Ave. interchange	B / C	B / B
Oakland Ave. interchange	A / F	A / C
Clayton Rd./Skinker Blvd. intersection	D	D
Hampton Ave. interchange	B / C	C / F
Kingshighway Blvd. interchange	F / D	D / F
Boyle Ave. interchange	C / D	A / E
Galleria Pkwy. interchange on I-170	A / B (west/east)	A / B (west/east)

Above level of service information based on intersection delay analysis from Synchro traffic model simulation which is based on *Highway Capacity Manual 2000*, Transportation Research Board, Chapter 16.

The analysis was performed by the HNTB Corporation as part of Job No. J6I0978 (R/W, aesthetic design and traffic modeling for the I-64 corridor from Spoede to Tower Grove).

Source: HNTB Corporation, 2002.

The ramp terminal intersections would be rebuilt to current design standards in the Build Alternative. Traffic signal coordination along the arterial would be made to increase travel efficiency. An analysis of the LOS of the ramp termini according to the same methodology was completed. Table B-6 illustrates the future (year 2020) peak hour levels of service for the ramp intersections in I-64 study corridor. The results indicate that the intersections would operate at a satisfactory LOS (LOS D or above) in the Build Alternative.

Table B-6
Build Alternative Year 2020 Arterial Ramp Terminal Level of Service
(AM and PM Peak Hour)

Location	AM Peak Hr. Northside/Southside LOS	PM Peak Hr. Northside/Southside LOS
Spoede Rd. interchange	B / C	C / B
Lindbergh Blvd. 2-level interchange	C (single point)	C (single point)
Lindbergh Blvd. 3-level interchange	B (single point)	C (single point)
Clayton Rd./Warson Rd. interchange	C / C	C / C
McKnight Rd. interchange	A / B	B / A
Brentwood Blvd. interchange (stacked option 2)	B (single point)	B (single point)
Eager Rd./SB I-170 intersection (stacked option 2)	A	B
Hanley Rd. interchange (stacked option 2)	B (single point)	C (single point)
Brentwood Blvd. interchange (flat option 3)	B (single point)	B (single point)
Eager Rd./SB I-170 intersection (flat option 3)	A	B
Hanley Rd. interchange (flat option 3)	B (single point)	C (single point)
Big Bend Blvd. interchange	B (single point)	C (single point)
Bellevue Ave. interchange	B / D	B / C
McCausland Ave. interchange	B / B	B / C
Oakland Ave. interchange (when applicable)	C (south side)	A (south side)
Clayton Rd./Skinker Blvd. intersection	D	D
Hampton Ave. interchange	B (single point)	C (single point)
Kingshighway Blvd. interchange	D (single point)	C (single point)
Tower Grove Ave. interchange	A / A	D / B
Boyle Ave. interchange	B / B	B / C
Galleria Pkwy. interchange on I-170 (stacked option 2)	A / A (west/east)	A / A (west/east)
Galleria Pkwy. interchange on I-170 (flat option 3)	A / A (west/east)	A / A (west/east)

Above level of service information based on intersection delay analysis from Synchro traffic model simulation which is based on *Highway Capacity Manual 2000*, Transportation Research Board, Chapter 16.

The analysis was performed by the HNTB Corporation as part of Job No. J6I0978 (R/W, aesthetic design and traffic modeling for the I-64 corridor from Spoede to Tower Grove).

Source: HNTB Corporation, 2002.

I-64
Environmental Impact Statement
Build Alternatives

Preferred Alternative
Greenway Subcorridor:

Alternative 1
G1 - Sta. 734+25 to Sta. 760+00
G2 - Sta. 760+00 to Sta. 800+00
G3 - Sta. 800+00 to Sta. 840+00
G4 - Lindbergh Boulevard
G5 - Sta. 840+00 to Sta. 880+00
G6 - Sta. 880+00 to Sta. 920+00
G7 - Sta. 920+00 to Sta. 950+91.63

Thruway Subcorridor:

Alternative 3
T17 - Sta.951+00 to Sta. 985+00
T18 - Sta. 985+00 to Sta. 1025+00
T19 - I-170
T20 - Sta. 1025+00 to Sta. 1060+00

Parkway Subcorridor:

Alternative 2
P1 - Sta. 1060+00 to Sta. 1091+60
P2 - Sta. 1091+60 to Sta. 1133+30
P3 - Sta. 1133+30 to Sta. 1170+00
P4 - Sta. 1170+00 to Sta. 1207+00
P5 - Sta. 1207+00 to Sta. 1244+00
P6 - Kingshighway Boulevard
P7 - Sta. 1244+00 (℄ I-64) to Sta. 22+81(℄ EB I-64)

Additional Build Alternatives
Thruway Subcorridor:

Alternative 2
(Upper Level)
T1 - Sta. 951+00 to Sta. 985+00
T2 - Sta. 985+00 to Sta. 1025+00
T3 - I-170
T4 - Sta. 1025+00 to Sta. 1060+00
(Lower Level)
T5 - Sta. 951+00 to Sta. 985+00
T6 - Sta. 985+00 to Sta. 1025+00
T7 - I-170
T8 - Sta. 1025+00 to 1060+00

Alternative 2a
(Upper Level)
T9 - Sta. 951+00 to Sta. 985+00
T10 - Sta. 985+00 to Sta. 1025+00
T11 - I-170
T12 - Sta. 1025+00 to Sta. 1060+00
(Lower Level)
T13 - Sta. 951+00 to Sta. 985+00
T14 - Sta. 985+00 to Sta. 1025+00
T15 - I-170
T16 - Sta. 1025+00 to 1060+00

Alternative 3a
T21 - Sta. 951+00 to Sta. 985+00
T22 - Sta. 985+00 to Sta. 1025+00
T23 - I-170
T24 - Sta. 1025+00 to 1060+00

Parkway Subcorridor:

Alternative 1
P1, P3, P4, P5, P6, P7 (Same as Preferred Alt)
P8 - Sta. 1091+60 to Sta. 1133+30

LAND USE LEGEND

- CHURCHES
- HAZARDOUS WASTE SITE
- SCHOOLS / INSTITUTIONS
- FLOODWAY
- 100-YEAR FLOODPLAIN
- POTENTIAL WETLANDS
- PARKS & REC FACILITIES
- AREAS REVERTING TO PARK STATUS
- AREAS BECOMING PARKLAND
- CONSTRUCTION IMPACT AREAS
- UNDERGROUND MINE ENTRY/ SHAFT LOCATIONS (APPROX.)
- MUNICIPAL FACILITY
- HOSPITALS
- STREAMS
- NATIONAL REGISTER OF HISTORIC PLACES (NRHP) LISTED RESOURCES
- NATIONAL REGISTER OF HISTORIC PLACES (NRHP) LISTED DISTRICTS
- RECOMMENDED ELIGIBLE NATIONAL REGISTER OF HISTORIC PLACES (NRHP) RESOURCES
- RECOMMENDED ELIGIBLE NATIONAL REGISTER OF HISTORIC PLACES (NRHP) DISTRICTS
- EXISTING DRAINAGE EASEMENT
- TEMPORARY EASEMENT (CONSTRUCTION)
- EXISTING RIGHT-OF-WAY
- PERMANENT EASEMENT (CONSTRUCTION)

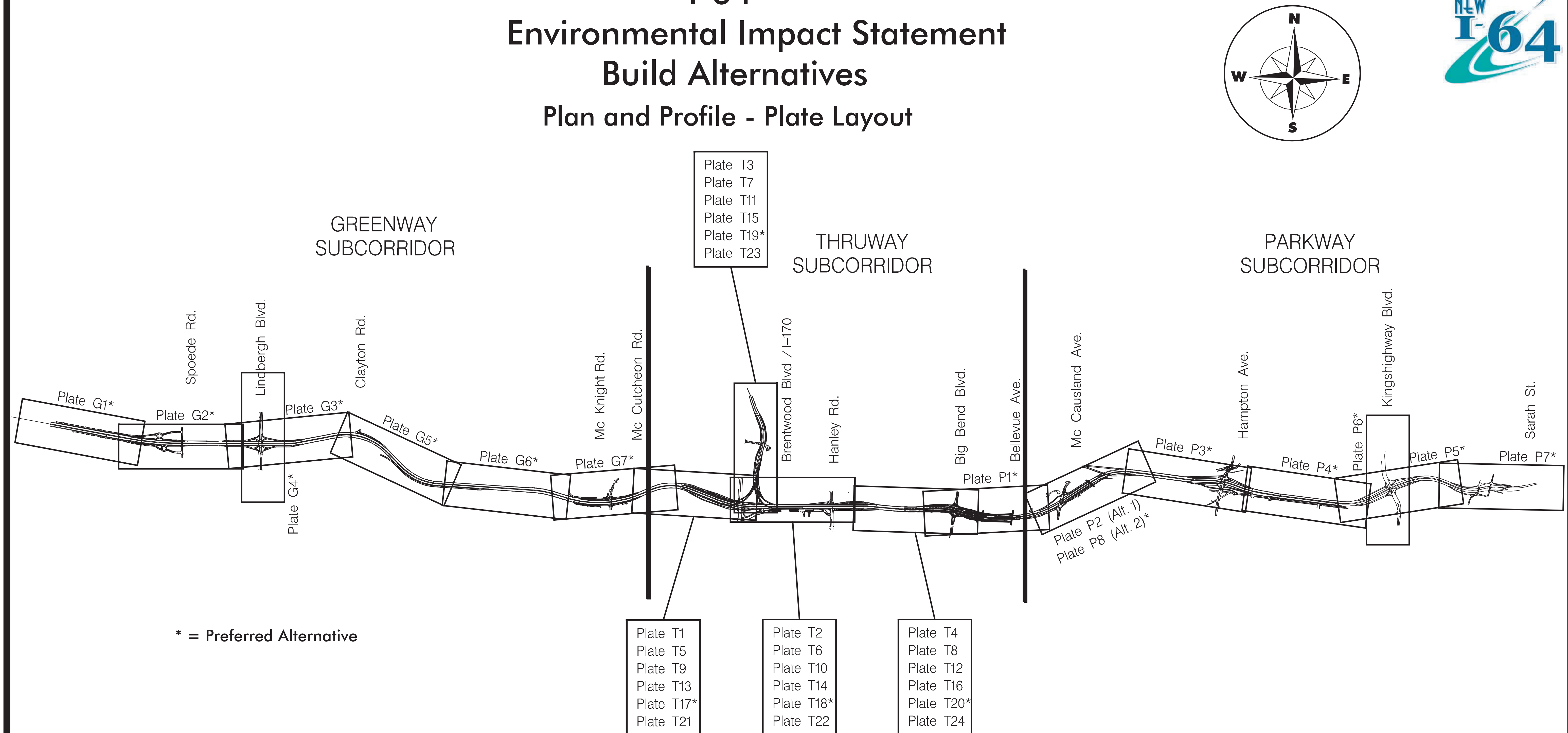
ROADWAY LEGEND

- MAIN ROADWAYS
- COLLECTION / DISTRIBUTION ROADWAYS
- GROUND-LEVEL RAMPS
- LOCAL STREETS / ROADWAYS
- DIRECTIONAL RAMPS
- VEHICULAR BRIDGES
- PEDESTRIAN BRIDGES
- MULTI-USE PATH
- PROFILE – BRIDGE DECK

THE HNTB TEAM

MoDOT

I-64
Environmental Impact Statement
Build Alternatives
Plan and Profile - Plate Layout



* = Preferred Alternative

Alternative 2
(Upper Level)
T1, T2, T3, T4
(Lower Level)
T5, T6, T7, T8

Alternative 3 *
T17, T18, T19, T20

Alternative 2a
(Upper Level)
T9, T10, T11, T12
(Lower Level)
T13, T14, T15, T16

Alternative 3a
T21, T22, T23, T24