This project will address elements of the environmental impacts that were originally evaluated in an Environmental Assessment (EA) under MoDOT Job No. J6I3020.The Final EA and Finding of No Significant Impact (FONSI) were approved April 13, 2017. The I-270 North EA describes the preferred alternative and performance measures agreed to that would guide the design selection and process to meet the purpose and need of the EA. The I-270 North EA includes the entire portion of I-270 between the I-70/I-270 interchange and the Chain of Rocks Bridge – a total distance of approximately 16 miles, and the study width is roughly 1 mile beyond the interstate roadway element limits. This project, J6I3020B, will fully address the purpose and need from the I-270/US 67 interchange to the I-270/Old Halls Ferry Road interchange, approximately 6 miles. The project also addresses significant portions of the purpose and need from the I-270/Old Halls Ferry Road interchange to the I-270/Bellefontaine Rd interchange, approximately 2 miles. MoDOT has prepared this reevaluation for the project for two reasons: 1) a review is warranted due to updates in technology, available data, and modifications made to the modeling used in the original EA and 2) design-build contracting is being used on this project, which will result in modifications to the preferred alternative.

The purpose and need of the I-270 North EA, in the broadest sense, consists of four main needs. The needs are to: address the aging infrastructure along I-270, improve the mobility and operations within the I-270 corridor, achieve accessibility consistent with the designated uses of I-270, and improve safety within the I-270 corridor. There are currently two projects on the State Transportation Improvement Plan (STIP) that address areas within the study corridor; they are this project, J6I3020B, and a project that will address the I-270/Riverview Dr interchange, J6I3020C.

The project is scheduled to be awarded as a design-build project in November 2019. FHWA approved the Financial Plan and the Project Management Plan on September 18, 2019, and the Request for Proposal (RFP) on June 26, 2019. Two potential design-build teams submitted Statements of Qualification (SOQ). MoDOT short-listed both teams to proceed. The team's plans for the project's design and construction are based on the RFP issued in late June. The final technical proposals were submitted to MoDOT October 3, 2019. The winning contractor will be selected in November 2019 and construction could start as early as spring 2020.

The design-build teams were allowed to propose the design within the defined footprint of the EA and governed by the parameters of the fixed-cost contract. MoDOT evaluated the proposals based on parameters from the RFP and will be involved in the final design and construction of the project. The selected proposal from the team is less than the build out shown in the preferred alternative.

Performance Measures from EA

The I-270 North EA is composed of Performance Measures that were used to evaluate the alternative configurations for specifying the preferred alternative established in the EA. The performance measures consist of corridor-wide measures that were established in the I-270 North EA to determine if the purpose and need have been met. MoDOT used these performance measures to improve cost savings that may be realized through alternative project delivery options, which often result in design details that differ from the preferred alternative.

Following are the corridor-wide performance measures, as well as a comparison of the results of the Preferred Alternative and the preliminary design. MoDOT used the Highway Safety Manual, the Highway Capacity Manual (HCM), and Vissim software during the development of the I-270 North EA to establish the performance measures and to determine if the alternate configuration meets a similar level of performance. Since the completion of the EA, the data available for the determining the speed and volume of the existing facilities has increased greatly. Additionally, the Vissim software has been updated, and the software provider no longer supports the version that had been used for the I-270 North EA. During development of the EA, there were a limited number of data points available to compare the existing conditions model with actual existing traffic patterns throughout the I-270 corridor. As a result of advancements in technology, MoDOT had access to continuous data along the corridor for comparison purposes. Recalibrating the existing model in the new software showed better baseline performance measures in the existing conditions than the previous modeling. The calibrations were transferred to the 2040 preferred alternative model in the updated software; however, due to schedule constraints the 2040 no-build model was not adjusted. See the attached AJR white paper for additional information. Therefore, the comparisons between the 2040 no-build baseline and the 2040 preferred alternative were determined to be no longer valid, but the full extent of the difference was unknown. MoDOT and FHWA decided it should be addressed in this reevaluation to document the changes to the model and show that the preliminary design had measures of effectiveness that were comparable to the preferred alternative. Table 1: Corridor-Wide Performance Measures compares the preferred alternative performance measures with the preliminary design's performance. Through the comparison, preliminary design compares favorably to the preferred alternative from the EA.

The performance measure of "Vehicle Hours of Delay (VHD): Reduction in Design Year VHD over No-Build" for the EA Preferred Alternative had a reduction of 61.0% in the AM and 70.0% in the PM. The Preliminary Design has a reduction of 61.3% in the AM peak and 70.6% in the PM peak. The performance measure of "Average Speed: Increase in Design Year Average Speed over No-Build" for the EA Preferred Alternative had an increase of 30.3% in the AM and a 59.0% increase in the PM. The Preliminary Design increases average speeds by 30.4% in the AM peak and 59.3% in the PM peak. The performance measures in the EA for "Vehicle Hours of Delay (VHD): Reduction in Design Year VHD over No-Build" and "Average Speed: Increase in Design Year Average Speed over No-Build" had mixed up the "Alternate Configuration Criteria" column of Table 3-5 of the EA. It had VHD related to AM and PM Peak increase in average speed and Average Speed related to AM and PM Peak reduction of VHD. In Table 1: Corridor-Wide Performance Measures this error has been corrected so that the performance measure corresponds to the correct alternative configuration criteria.

Table 1: Corridor-Wide Performance Measures			
Performance Measures	Alternative Configuration Criteria	EA Preferred Alternative	Preliminary Design
Severe Crashes: Percent Reduction over Design Year No-Build	Should achieve a reduction in Severe Crashes in all subareas compared to the No-Build as measured by following the Highway Safety Manual procedures and/or using the ISATe tool.	Reduced severe crashes	• Reduced by 14% overall on freeway, ramps, and ramp terminals (ISATe) • Reduced by 8.7% on the freeway (ISATe) • Reduced by 6% on ramps and ramp terminals (ISATe) • Total reduction in fatal and injury crashes in the full network by 11% (ISATe and HSM)
Fatal Crashes: Percent Reduction over Design Year No-Build	Should achieve a reduction in Fatal Crashes in all subareas compared to the No-Build as measured by following the Highway Safety Manual procedures and/or using the ISATe tool.	Reduced fatal crashes	• Reduced by 8.8% overall on freeway, on the ramps, and at the ramp terminals (ISATe) • Reduced by 7.8% on the freeway (ISATe) • Reduced by 18% on ramps and ramp terminals (ISATe) • Total reduction in fatal and injury crashes in the full network (including freeway and outer roads) by 11% (ISATe and HSM)
Level of Service: Design Year LOS E or better during Peak Hour	Should achieve LOS E on all mainline, ramps, and crossroad intersections during Peak Periods. LOS measured by applying Highway Capacity Manual (HCM) 2010 thresholds to density and delay results from the Vissim model.	LOS E or better during peak periods during the 2040 design year, except EB I-270 at Hanley on-ramp merge which operates at LOS F**	Achieve LOS E or better during peak periods during the 2040 design year.
Mainline Weaves: Design Year LOS E or better during Peak Hour	Should achieve LOS E or better for all mainline weaves as measured by applying HCM 2010 thresholds to density results from Vissim model.	LOS E or better during peak periods during the 2040 design year	Achieve LOS E or better during peak periods during the 2040 design year.
Vehicle Hours of Delay (VHD): Reduction in Design Year VHD over No-Build	AM Peak and PM Peak reduction of VHD by at least 70%. Corridor-wide VHD reported directly from Vissim.*	AM: 61.0% reduction** PM: 70.0% reduction**	VHD reduced by 61.3% in the AM peak and 70.6% in the PM peak.
Average Speed: Increase in Design Year Average Speed over No-Build	AM Peak increase in average speed of at least 30%. PM Peak increase in average speed of at least 60%. Average speed is defined by corridor wide VMT/VHT. Corridor-wide VMT and VHT are reported directly from Vissim.*	AM: 30.3% increase** PM: 59.0% increase**	Increased by 30.4% in the AM peak and 59.3% in the PM peak.

*Alternate Configuration Criteria have been corrected to the intended meaning in this table.

** EA Preferred Alternative performance after Vissim and current data updates.

Site-Specific Measures from EA

The EA specified site-specific measures for various locations that were also used in the development of the preferred alternative included in the EA. These measures listed below helped to provide direction as to what a successful final design may include.

Location	Site-Specific Measures	Preliminary Design
Mainline I-270 (between I-70 and Hanley/Graham Road)	Four basic lanes in each direction with auxiliary lanes as necessary to maintain I-270 operations	Updates meet site-specific measure within project limits. Updates begin on mainline I-270 near Lindbergh Blvd. Improvements west of limits are not being addressed at this time.
Dunn/Pershall Road (between I-70 and Hanley/Graham Road)	Two-way Dunn and Pershall Roads in existing or realigned locations as required for mainline and crossroad operations and access	Updates meet site-specific measure within project limits.
St. Charles Rock Road Interchange	Improved interchange providing full access to/from I-270	Not addressed at this time.
MO 370 Interchange	• Improve eastbound (EB) I-270 exits for westbound (WB) MO 370 and Missouri Bottom Road. • Maintain all existing access to/from I-270.	Not addressed at this time.
Missouri Bottom Road Interchange	• Improve EB I-270 exits for WB MO 370 and Missouri Bottom Road • Maintain all existing access to/from I-270	Not addressed at this time.
McDonnell Boulevard Interchange	Improved interchange providing full access to/from I-270	Not addressed at this time.

Lindbergh Boulevard Interchange	• Improved interchange providing full access to/from I-270 • Improve traffic traveling to/from Lindbergh Boulevard from/to I-270 from the Taylor/Lynn Haven interchange • Continuous two-way Dunn Road through interchange with grade separation from Lindbergh Boulevard • Continuous two-way Pershall Road from Lindbergh Boulevard to the east.	• Improved interchange providing full access to/from I-270 • Improve traffic traveling to/from Lindbergh Boulevard from/to I-270 from the Taylor/Lynn Haven interchange. • Northbound (NB) Lindbergh is grade separated from Dunn Road. Southbound (SB) Lindbergh and Dunn Road will intersect at a signalized intersection. • Continuous two-way Pershall Road from Lindbergh Boulevard to the east.
I-170 Interchange	• Access to WB I-270 from both directions of Dunn Road • Maintain all existing access to/from I-270	Updates meet site-specific measures.
Mainline I-270 (between Hanley/Graham Road and MO 367)	Four basic lanes in each direction with auxiliary lanes as necessary to maintain I-270 operations	Updates meet site-specific measures.
Dunn/Pershall Road (between Hanley/Graham Road and MO 367)	One-way Dunn and Pershall Roads in existing or realigned locations between Hanley/Graham Road and New Halls Ferry Road and two-way Dunn and Pershall in existing or realigned locations east of New Halls Ferry Road as required for operations and access.	Updates make Dunn Road One-way between Hanley/Graham Road and Linnell Drive, east of Old Halls Ferry Road. Pershall Road will be one-way between Hanley/Graham Road and Old Halls Ferry Road. Two-way Dunn and Pershall in existing locations east of Linnell Drive and Old Halls Ferry Road respectively.

Hanley/Graham Road to New Halls Ferry Road Interchanges	• Balanced/complementary ramp pairs • Access to/from each crossroad from/to I-270 with travel through two or fewer signals • Turnarounds as necessary to achieve the LOS and other study requirements	Preliminary design changes the ramp configuration in this location. See description below.
MO 367 Interchange	• Improved interchange providing full access to/from I-270 • Free flow EB I-270 movements to NB MO 367 • Eliminate weaving movements within the interchange • Free flow SB MO 367 movements to I-270	Updates meet site-specific measures.
Mainline I-270 (between MO 367 and Mississippi River)	Three basic lanes in each direction with auxiliary lanes as necessary to maintain I-270 operations	Not addressed at this time.
Dunn/Pershall Road (between MO 367 and Mississippi River)	Two-way Dunn and Pershall Roads in existing or realigned locations as required for mainline and crossroad operations and access	Not addressed at this time.
Bellefontaine Road Interchange	Improved interchange providing full access to/from I-270	Updates meet site-specific measures.
Lilac Avenue Interchange	Improved interchange providing full access to/from I-270	Not addressed at this time.
Riverview Drive Interchange	Improved interchange providing full access to/from I-270	Not addressed at this time.

The anticipated changes from the above listed site-specific measures are discussed next. The preliminary design lists what is proposed for each corresponding locations to those listed above.

Preliminary Design

The limits of J6I3020B are approximately 2,000 feet west of the I-270/US 67 interchange to the Bellefontaine Road Interchange. Other improvements are being made outside of these limits including ADA compliant updates to existing pedestrian facilities and applying retroreflective signal backplates at St. Charles Rock Road/Pennridge intersection, McDonnell/Brown intersection, and US 67/Fee Fee intersection. All other improvements addressed in the EA will be implemented in future projects and programmed MoDOT's annual STIP and TIP.

Mainline I-270 between I-70 and Hanley/Graham Road
This project will install four basic lanes, 12 feet wide unless stated otherwise, in each direction with auxiliary lanes between US 67 and Hanley Road/Graham Road beginning approximately 2000 feet west of the I-270/US 67 interchange. The inside shoulder will be 5 feet wide as documented in a design exception. The outside shoulder in the area of the newly constructed lanes will be 12 feet wide except for locations as documented in design exceptions. Locations with reduced shoulder width include I-270 throughout the I-170 interchange connections with 4-foot inside and outside shoulders and I-270 over Hanley/Graham with have 11-foot lanes and 4-foot inside and outside shoulders.

Dunn/Pershall Road between I-70 and Hanley/Graham Road
Two-way Dunn and Pershall Roads in existing or realigned locations will be maintained in this section of the outer roads. Dunn road from US 67 to the Hanley/Graham Road intersection will have 11-foot wide lanes with an adjacent eight feet wide shared-use path. Pershall Road Bridge over Coldwater Creek will be replaced and five foot sidewalk will be installed between the bridge and Hazelwood Road. No work will occur to the Pershall Road pavement. Additional work to provide sidewalks and improve pavement conditions will be implemented in future projects and programmed through MoDOT's annual STIP and TIP process. This work is not precluded due to this design.

St. Charles Rock Road Interchange
No work will occur outside of retroreflective signal backplates installed at the St. Charles Rock Road and Pennridge intersection. Work in this area is not addressed by this project but is not precluded due to this design.

MO 370 Interchange
No work will occur at the MO 370 interchange. Work in this area is not addressed by this project but is not precluded due to this design.

Missouri Bottom Road Interchange
No work will occur at the MO 370 interchange. Work in this area is not addressed by this project but is not precluded due to this design.

McDonnell Boulevard Interchange
No work will occur outside of retroreflective signal backplates installed at the McDonnell and Brown intersection. Work in this area is not addressed by this project but is not precluded due to this design.

Lindbergh Boulevard Interchange
The project will address operational and safety concerns at the Lindbergh Boulevard interchange. The separation between NB and SB Lindbergh will be increased, forming a one-way road grid network with the freeway ramps and connector roads. This configuration eliminates the loop ramps and replaces them with straight diagonal ramps. Dunn Road will be realigned to provide a continuous route with grade separation under the NB lanes and signalized intersection for the SB lanes. These adjustments to the interchange also address improving traffic to and from US 67 and Taylor Road/Lynn Haven Lane. US 67 SB to I-270 WB traffic and I-270 WB to US 67 NB will no longer be forced through the intersections on Taylor Road/Lynn Haven Lane. The SB on-ramp from Taylor Road/Lynn Haven Lane to US 67 is removed and Dunn Road west of Lindbergh Boulevard is relocated to align with the SB-off ramp from US 67. This eliminates the westernmost signal along Taylor Road/Lynn Haven Lane. The eliminated movement is relocated to the new Dunn Road and SB US 67 intersection. A new u-turning movement is provided between NB US 67 and SB US 67 north of I-270. This movement provides access between NB US 67 and the relocated Dunn Road. The existing connections and u-turns between two-way Pershall Road east of Lindbergh and the Lindbergh at Utz and Fee Fee Hills intersections are maintained.

I-170 Interchange
The project will maintain all existing access to and from I-270 at the I-170 interchange. The I-270 EB to I-170 SB ramp will have the auxiliary lane from US 67 as an exit-only lane and an option lane that merges into one lane on the ramp. Access to WB I-270 from both directions of Dunn Road is provided by a roundabout that will be placed in roughly the same location as the existing slip ramp. The project will also address the operational issues that currently exist in the AM and PM peak hours on I-270 EB approaching I-170.I-170 will be widened to three lanes between the current merge to two lanes south of the I-270 EB to I-170 SB ramp and the Frost Avenue on-ramp. Pavement improvements will occur within the existing roadbed width, and shoulders will be narrowed to eliminate construction impacts outside of the current paved footprint of I-170. These improvements are approximately ½ mile long and fall within the one-mile cleared footprint established in the EA.

Mainline I-270 between Hanley/Graham Road and MO 367
The project will provide four basic lanes in each direction with a continuous auxiliary in the following locations: from I-170 to Washington/Elizabeth EB and WB, from Hanley/Graham to Route N EB and WB, from Washington/Elizabeth to Route AC EB, from Old Halls Ferry to MO 367 EB and WB, and from West Florissant Avenue to Washington/Elizabeth WB.

Dunn Road/Pershall Road between Hanley/Graham Road and MO 367
Dunn Road and Pershall Road between Hanley Road/Graham Road and Old Halls Ferry Road will become a one-way outer road system. Dunn Road will have 11-foot lanes from Hanley Road/Graham Road to MO 367 and an adjacent eight-foot wide shared-use path from Hanley Road/Graham Road to Breezy Point Lane located west of MO 367/Dunn Road interchange. Dunn Road returns to a two-way roadway at Linnell Drive, east of Old Halls Ferry Road, which will allow the off-ramp to access Old Halls Ferry Road in its existing location. This will also allow access to be maintained in a similar way as the existing but without crossing two-way Dunn Road traffic. Pershall Road will have 11-foot lanes from Hanley Road/Graham Road to the new bridge that crosses I-270 west of Breezy Point Lane. Pershall Road will return to a two-way roadway at the Old Halls Ferry intersection. Dunn Road and Pershall Road pavement will be replaced in locations that require realignment or reconfiguration based on the preliminary design and will be rehabilitated in areas that remain in existing locations.

Hanley/Graham Road to Old Halls Ferry Road Interchanges
Ramp locations between Hanley/Graham Road and Old Halls Ferry Road interchanges were relocated from the existing locations to maintain access, but provide corridor-wide operational improvements. EB I-270 on-ramps will be located east of Hanley/Graham Road, between Washington/Elizabeth and West Florissant Avenue, and east of Old Halls Ferry Road. EB I-270 off-ramps will be located west of New Florissant Road, west of Washington/Elizabeth, and between Washington/Elizabeth and West Florissant Avenue. WB I-270 on ramps will be located west of New Halls Ferry Road, west of West Florissant Avenue, west of Washington/Elizabeth, and west of New Florissant Road. WB I-270 off ramps will be located east of Old Halls Ferry Road, east of New Florissant Road, and east of Hanley/Graham Road. The relocation of the on- and off-ramps to east of Old Hall Ferry Road creates a split diamond interchange. This provides a more logical progression through the entire network and decreases the need to use local streets to make movements between the crossroads. To accomplish this, some travelers will be required to go through three signals. The network will include two turnarounds: one located west of Washington/Elizabeth and the other located at West Florissant Avenue. The new bridge crossing near Breezy Point Lane also provides improved access to the eastern end of the corridor. A Level of Service (LOS) of E or better is met on mainline, all mainline weaves, ramps, and crossroad interchanges.

MO 367 Interchange
The project will implement a partial turbine interchange at the I-270/MO 367 interchange. The interchange design will eliminate three of the four loop ramps and all four short weaving segments. It also addresses bottlenecks on I-270 and prevents queuing from ramps into mainline traffic. The interchange provides free flow movements from I-270 EB to MO 367 NB and MO 367 SB to I-270 WB. The MO 367 NB to I-270 WB and MO 367 SB to I-270 EB movements will be made through a signalized intersection. The existing free flow movements from I-270 EB to MO 367 SB, I-270 WB to MO 367 NB, and MO 367 NB to I-270 EB are maintained.

Mainline I-270 between MO 367 and Mississippi River
No work will occur on mainline I-270 between MO 367 and the Mississippi River. Work in this area is not addressed by this project but is not precluded due to this design.

Dunn/Pershall Road between MO 367 and Mississippi River
No work will occur to Dunn and Pershall Road east of MO 367. Work in this area is not addressed by this project but is not precluded due to this design.

Bellefontaine Road Interchange
The project will eliminate the unsignalized crossover slip ramp from WB I-270 off-ramp to Dunn Road and the signalized intersection on Dunn Road to the I-270 WB on-ramp. This will be accomplished by combining the two ramps into a roundabout located at the current signalized intersection. This addresses safety and operations concerns and eliminates the future need to relocate Dunn Road or install a new signalized intersection north of I-270 on Bellefontaine Road as is shown in the preferred alternative.

Lilac Avenue Interchange
No work will occur at the Lilac Avenue interchange. Work in this area is not addressed by this project but is not precluded due to this design.

Riverview Drive Interchange
The Riverview Drive interchange will be addressed by a separate project currently on the STIP/TIP. MoDOT project J6I3020C will improve the Riverview Drive and I-270 interchange and provide the connection between the existing I-270 North corridor and the new I-270 Mississippi River crossing at Chain of Rocks Bridge which is being designed and administered by Illinois Department of Transportation.

Environmental Impacts

The table below summarizes the comparison of environmental impacts for the 23 resource categories analyzed in the EA for the preferred alternative design and the preliminary design. Each revised resource category is then discussed in further detail. For resources to which impact changes will occur, tables summarizing these changes are provided at the beginning of each of the resource sections.

EA Section	Resource Category	Comparison of Preliminary Design to Preferred Alternative	Mitigation Measure
1	Air Quality	No Change	N/A
2	Community Resources	Revised Impacts	See below
3	Construction Operations	No Change	N/A
4	Cultural Resources	Reduction of Impacts	No update
5	Demographics	Reduction of Impacts	No update
6	Endangered and Threatened Species	Minor Update	No update
7	Environmental Justice	Reduction of Impacts	No update
8	Farmland	No Change	N/A
9	Geological Setting	No Change	N/A
10	Hazardous Materials	Reduction of Impacts	No update
11	Land Use	Reduction of Impacts	No update
12	Noise	Revised Analysis and Impacts	See below
13	Right of Way	Reduction of Impacts	N/A
14	Secondary and Cumulative Impacts	Minor Change	No update
15	Section 4(f)	No Change	N/A
16	Section 6 (f)	No Change	N/A
17	Socio-Economic Resources	Reduction of Impacts	N/A
18	Travel Patterns	Minor Change	See below
19	Visual Resources	No Change	N/A
20	Water – Floodplain	Update	N/A
21	Water – Streams and Watersheds	Update	N/A
22	Water – Wetlands	No Change	N/A
23	Water – Water Quality	Update	N/A

2. Community Resources – **Revised Impacts.**

Summary of Changes				
Resource	EA Right of Way	Preliminary Design Right of Way	EA Access Changes	Preliminary Design Access Changes
Garrett Elementary School	Strip acquisition	Not impacted	N/A	N/A
Little Creek Nature Center	Strip acquisition	No acquisition	Minimal impact	Minimal impact
North County Christian School	Strip acquisition	No acquisition	Minimal impact	Minimal Impact
McCluer High School	No acquisition	No acquisition	N/A	N/A
School bus routes	N/A	N/A	Minimal impact	Revised Minimal Impact - See below
Emergency services routes	N/A	N/A	Minimal impact	Revised Minimal Impact - See below
Christian Hospital	No acquisition	No acquisition	No impact	Minimal Impact - See below
Metro Transit Bus routes	N/A	N/A	Significant Impact - See below	Reduced Impact – See below

The preferred alternative has no direct impacts to fire stations, police stations, hospitals, and only minimal impacts to schools. The preliminary design does not include improvements near Garrett Elementary School; therefore, there is no need to acquire a narrow strip of land from the school at this time. All work to connect Pershall Road behind McCluer High School will be completed within the existing right-of-way. Access to the school from New Florissant Road and Elizabeth Street will not be modified. Improvements in front of Little Creek Nature Center will be completed within the existing right-of-way; therefore, there is no need to acquire a strip of right-of-way as identified in the EA.

The EA found the preferred alternative conversion of the outer roads from two-way to one-way between Hanley Road/Graham Road and Old Halls Ferry Road may have minimal impacts in access to North County Christian School, Little Creek Nature Center, emergency services routes, and school bus routes. The preliminary design is expected to have similar impacts to North County Christian School and Little Creek Nature Center. The conversion of the section of Dunn Road between Old Halls Ferry Road and Linnell Drive to one-way will have additional impacts to emergency services routes, school bus routes, and access to Christian Hospital. These impacts are mitigated by the addition of a bridge across I-270 west of Breezy Point Lane and an extension of Pershall Road east to the new bridge to provide a local connection east of Old Halls Ferry Road.

The EA found the preferred alternative conversion of the outer roads from two-way to one-way between Hanley Road/Graham Road and Old Hall Ferry Road could have a potential impact to Metro Transit Bus operations, increasing travel up to 300 miles per day. While the overall system was expected to operate more efficiently, the impacts were anticipated to cost Metro approximately $800,000 per year. Part of mitigating impacts to Metro Transit Bus routes was the inclusion of a U-turn near Knollway Drive from Dunn Rod to Pershall Road and a U-turn at Rte AC from Pershall Road to Dunn Road. The preliminary design would not construct either of these U-turns. Instead, a bus only lane would be created from the North County Transit Center back west counter the flow of one-way traffic to West Florissant Road and to St. Louis Community College Florissant Valley. This reduces travel distance for some of the busiest bus routes. It is also anticipated to result in fewer total bus miles traveled and less increase in cost to Metro Transit Bus over the preferred alternative design. Metro Transit Bus is impacted similarly to the EA design between Hanley Road/Graham Road and St. Louis Community College Florissant Valley and New Halls Ferry Road to Old Halls Ferry Road.

4. Cultural Resources – **Reduction of Impacts.**

Summary of Changes		
Resource	EA Impact	Preliminary Design Impact
Myers Residence	Indirect erosion impacts	Reduced indirect erosion impacts due to narrower template of shared use path
Taille de Noyer	No Impact	No Impact
Gittemeier House	Indirect erosion impacts	Reduced indirect erosion impacts due to narrower template of shared use path
Utz-Tesson House	No Impact	No Impact
Ferguson Pine Meadows 1st Addition District	Right of way acquisitions & addition of U-turn bridge	Reduced impact - See below.
Archaeological Sites 23SL545, 23SL547 & 23SL548	Unknown until archaeologists can safely access the sites	No Impact

The preliminary design has been configured to avoid known cultural resources. Relative to the NRHP architectural parcels, impacts are minimal:

- For the Myers residence, the parcel lines are the significant boundary. The preliminary design avoids acquisition of new right-of-way. Therefore, the proposed improvements to I-270 North may cause only indirect erosion effects on the area of the property adjacent to Dunn Road. The preliminary design template for the shared use path is narrower than the preferred alternative by four feet so the preliminary design is expected to have less impact than the preferred alternative.
- For the Gittemeier House, the parcel lines are the significant boundary. The preliminary design avoids acquisition of new right-of-way. Consequently, it will only cause indirect erosion effects on the south and east sides of the property. The preliminary design template for the shared use path is narrower than the preferred

alternative by four feet so the preliminary design is expected to have less impact than the preferred alternative.

- The Ferguson Pine Meadows 1st Addition District was predominately impacted in the preferred alternative by the addition of bridge across I-270 at Knollway Drive. This bridge is not being constructed in the preliminary design. Therefore, impacts associated with relocating and raising Pershall Road have been eliminated. Additionally, the preliminary design template for the shared use path is narrower than the preferred alternative by four feet so the preliminary design is expected to have even less impact than the preferred alternative. The preliminary design does relocate the ramp from Elizabeth Street to in front of Ferguson Pine Meadows 1st Addition District, but there are no direct impacts from the ramp to the District.

5. Demographics – **Reduction of Impacts.**

The preferred alternative was not expected to have a direct impact on the local population, except for the relocation of a number of residents and businesses. Acquisition and relocation of affected residential and commercial properties will be in accordance with the relocation procedures established in the Uniform Act (Section 13, Right of Way). The preliminary design reduces the number of relocation of residents and eliminates the need for the relocation of any business in the vicinity of the improvements. With the improvement to traffic LOS on local roadways, it is possible that the project would encourage new residents and businesses to relocate into the project area and have a positive impact on the local population.

6. Endangered and Threatened Species – **Minor Update.**

The EA accessed the USFWS online Information and Planning for Conservation (IPaC) database to obtain an official species list (Consultation Code 03E14000-2016-SLI 2103) on 8/31/2016. The list identified five species that may occur within Saint Louis County, Missouri, that need to be considered in an effects analysis for this project. There are no federally designated critical habitats within the project corridor. Those 5 species were: Pallid Sturgeon, Decurrent False Aster, Gray Bat, Indiana Bat, and Northern Long-eared Bat. A determination of No Effect has been made for the Pallid Sturgeon, Decurrent False Aster, and the Gray Bat because the project does not impact any known populations of the species, and suitable habitat is not present within the project corridor. The Indiana Bat and Northern Long-eared Bat determinations of "may effect, not likely to adversely affect" were made during the EA. In order to mitigate the impacts a commitment was made that tree clearing must be done in winter months and coordination with both MDC and the USFWS will take place to verify that the "not likely to adversely affect" determinations for listed bats remain valid. An updated official species list was obtained (Consultation Code 03E14000-2018-SLI-1435) on 2/13/2019, it is included in the attachments to this reevaluation. MoDOT will continue to coordinate with MDC and USFWS at every stage of the project as specified in Commitment 6 of the EA/FONSI.

7. Environmental Justice (EJ) – **Reduction of Impacts**

Summary of Changes		
Resource	Preferred Alternative	Preliminary Design
EJ Poverty Populations	2 Residential acquisitions 1 Commercial acquisition	0 Residential acquisitions 0 Commercial acquisitions
EJ Minority Populations	25 Residential acquisitions 3 Commercial acquisitions	5 Residential acquisitions 0 Commercial acquisitions
Transit Access	Significant Impact to Metro bus routes	Reduced impact to Metro bus routes

The EA found three total acquisitions (including two residential properties along Landseer Drive and one commercial property) that fall in block groups above the threshold for EJ poverty populations. The preliminary design does not require the total acquisition of any commercial properties. None of the five required total acquisitions include the two properties along Landseer Drive. Therefore, the preliminary design has a reduced impact on EJ poverty populations as compared to the preferred alternative.

Relative to minority populations, the EA found numerous block groups along the I-270 corridor which exceeded the EJ threshold, and several exceeded 50% minority populations. The block groups where most total acquisitions would occur for the preferred alternative between Graham Road and New Florissant Road, range from less than 14% minority populations north of I-270 to greater than 45% minority populations south of I-270. Acquisitions associated with the preferred alternative were nearly equally distributed in this area along both sides of I-270. Where other residential and commercial total acquisitions would occur, near New Halls Ferry Road, Bellefontaine Road, and near Missouri Bottom Road, minority populations exceed the threshold along both sides of I-270. Based on this data, any improvement beyond the existing right-of-way would potentially affect these populations. Therefore, impacts to minority populations could occur regardless of the alternative selected because of the prevalence of these populations in the study area. Further, there are no reasonable alternatives that would meet the project's Purpose and Need and avoid impacts to neighboring properties. The preferred alternative was determined to not have disproportionately high or adverse impact to minority populations. The preliminary design has reduced the total number of acquisitions required along Pershall Road between Hanley Road/Graham Road and New Florissant Road from 17 to five. MoDOT previously acquired one additional parcel in this area as a hardship buyout. Therefore, the preliminary design has further reduced the impact to potential minority populations.

The EA found that the preferred alternative conversion of the outer roads from two-way to one-way between Hanley Road/Graham Road and Old Hall Ferry Road could have a potential impact on Metro Transit Bus operations of an increase in travel of 300 miles per day. While the overall system was expected to operate more efficiently, the impacts were expected to cost Metro approximately $800,000 per year. Part of mitigating impacts to Metro's routes was the inclusion of a u-turn near Knollway Drive from Dunn Rod to Pershall Road and a u-turn at Rte AC. The preliminary design constructs neither of these u-turns. Instead, a bus only lane is created from the North County Transit Center back

west counter the flow of one-way traffic to West Florissant Road and to St. Louis Community College Florissant Valley. This reduces travel distance for some of Metro's busiest routes and should result in less total bus miles traveled and less increase in cost to Metro over the preferred alternative design. Metro is impacted similarly to the EA design between Hanley Road/Graham Road and St. Louis Community College Florissant Valley and New Halls Ferry Road to Old Halls Ferry Road.

10. Hazardous Materials – **Reduction of Impacts.**

Summary of Changes		
Resource	Preferred Alternative	Preliminary Design
Sites of Potential Concern	20 Sites identified that pose potential for environmental concern and possible contamination.	Reduction in ROW decreases risk of impacting sites. No change to report.
Westlake Landfill Superfund Site	Located 1 mile north of the I-70 interchange within the city limits of Bridgeton, Missouri.	Due to the project limits, there will be no impacts to Westlake Landfill.
Saint Louis Airport/Coldwater Creek	EPA conducted a radiological survey in 2013 to identify areas of elevated gamma radiation in the Coldwater Creek area. The study showed surface gamma emissions consistent with background levels throughout the Coldwater Creek survey area. Coldwater Creek passes under I-270 in the corridor.	No Change
Wells	If impacted any wells would be properly abandoned in accordance with Missouri Well Construction Rules	Reduction in ROW decreases risk of impacting wells. No change to report.

Due to the reduced footprint of the preliminary design there will be a reduction in potential impacts. The project currently does not affect any potential sites found in the EA. Coordination with the U.S. Army Corps of Engineers is ongoing to minimize and mitigate the hazardous waste that is in the Coldwater Creek area. Wells that are impacted by the project will be properly abandoned in accordance with Missouri Well Construction Rules.

11. Land Use **– Reduction of Impacts.**

Summary of Changes				
Area	EA Full Acquisitions	EA Partial Acquisitions	Preliminary Design Full Acquisitions	Preliminary Design Partial Acquisitions
2: McDonnell to Hanley/Graham	0	46	0	0, future phases still needed
3: Hanley/Graham to Old Halls Ferry	30	137	5	14
4: Old Halls Ferry to Riverview	5	14	0 plus reduction of need in future phases	0 plus reduction of need in future phases

The EA found that the preferred alternative would not be expected to change the land use of the properties within the footprint but localized changes to individual parcels might occur as a result of the project. The predominant impact to land use would be associated with right-of-way acquisitions. Since right-of-way acquisitions have been minimized, but the overall preliminary design performs substantially similarly in terms of traffic operations and access, the overall impact to land use is expected to be reduced.

12. Noise – **Revised Analysis and Impacts.**

Summary of Changes			
Noise Study Area	EA Reasonable and Feasible Determination	Subsequent Reasonable and Feasible Determination	Preliminary Design Reasonable and Feasible Determination
Carrollton Village Condominiums	Yes	No	N/A
Villa Maria Subdivision	Yes	No	N/A
Northwest Quadrant Lindbergh Boulevard Interchange	Yes	No	N/A
Brookes Park	Yes	Yes	Yes
Maryville Subdivision	Yes	No	No
Grandview Gardens	No	Yes	Yes
Hathaway Manor North	No	No	Yes
Hathaway Manor South	Yes	Yes	Yes
I-170	Not Included	Not Included	To Be Studied

The EA found that six noise walls were considered reasonable and feasible based on the modeling associated with the preferred design. Subsequent review of the noise model identified issues with the assumptions and modeling in certain areas which impacted the determination as to which walls were reasonable and feasible. See the three attached Noise Modeling Reports for specific details. One feature of the reasonable and feasible determination at all stages of the analysis has been that many locations are borderline either just over or just under the 1300 square foot threshold determination for reasonableness. Slight changes to the plan and profile alignment and traffic volumes can affect whether any given wall could be built reasonably. The preliminary design as analyzed resulted in a finding of four reasonable and feasible alternatives in the vicinity of the project. The noise models will continue to be updated as design progresses to ensure that all reasonable and feasible walls are being constructed. MoDOT will work the contractor to study the area along I-170 impacted by the conversion to a three lane section. A preliminary review of land uses adjacent to the new three lane section shows that the corridor along both sides of I-170 is industrial and therefore would have no qualifying noise sensitive land uses. The table above compares the EA results, to subsequent modeling, to the preliminary design..

13. Right-of-Way – **Reduction of Impacts.**

Summary of Changes				
Area	EA Full Acquisitions	EA Partial Acquisitions	Preliminary Design Full Acquisitions	Preliminary Design Partial Acquisitions
2: McDonnell to Hanley/Graham	0	46	0	0, future phases still needed
3: Hanley/Graham to Old Halls Ferry	30	137	5	14
4: Old Halls Ferry to Riverview	5	14	0 plus reduction of need in future phases	0 plus reduction of need in future phases

The preliminary design requires less horizontal and vertical realignment of Dunn and Pershall Roads than was assumed in the preferred alternative. The preliminary design template for the shared use path is four feet narrower than the preferred alternative. The combination of these minimizations to the design results in fewer acquisitions and/or acquisitions of smaller footprint than the preferred alternative. All of the total acquisitions associated with the preliminary design are residential properties, and the partial acquisitions consist of six residential and eight commercial properties. The table above shows a summary of the revisions to the right-of-way acquisitions in segments impacted by the preliminary design. A full analysis of the actual size of the acquisitions is not available at this time. MoDOT previously acquired one parcel along Pershall Road between Hanley Road/Graham Road and New Florissant Road as a hardship buyout. Not all of the work of the preferred alternative is being accomplished between McDonnell Boulevard and Hanley Road/Graham Road. As a result, it is anticipated that 6 parcels may still require partial acquisitions. The work being completed at the Route 367 interchange does not require the acquisitions previously identified in the EA. The work at

the Bellefontaine interchange will not complete of all of the requirements of EA. While the work being undertaken at this time does not currently require any acquisitions, additional work from Old Halls Ferry Road to Riverview Drive is still required to fulfill the EA. However, the work at Bellefontaine does eliminate the need to acquire any parcels associated with the Dunn Road relocation addressed in the EA. Therefore, no future acquisition of right-of-way is required from Old Halls Ferry Road to Riverview Drive.

14. Secondary and Cumulative Impacts – **Minor Change.**

Summary of Changes			
Impact	Category	Preferred Alternative	Preliminary Design
Secondary Impact	Design Standards	12’ Inside I-270 Shoulder	5’ Inside I-270 Shoulder with Design Exception with Design Exception
Secondary Impact	I-170/Design Standards	No work	2’ Inside and Outside Shoulders with Design Exception

The EA found that the preferred alternative will generally provide the same access as the existing conditions while substantially improving the operations and safety of the corridor by adding capacity to the interstate, improving the major interchanges at US 67 and MO 367 interchanges, and eliminating the cross slip ramps to and from I-270 at Dunn Road. The preliminary design accomplishes all three of these improvements, therefore, the overall impacts are expected to be the same. The preferred alternative did assume a design that matched current federal and state standards or at a minimum matched existing conditions using a design exception. The preferred alternative did identify a design exception for work near I-170. The preliminary design will utilize the previously identified design exception near I-170 and require an additional design exception to maintain the existing 5 foot inside shoulder on I-270. Secondary impacts related to construction identified in the EA remain unchanged as detailed in Section 3.

Further investigations into the traffic operations of the corridor revealed the current reduction from three lanes to two lanes on I-170 immediately south of I-270 caused reductions to the level of service of I-270. These reductions could not be mitigated enough in the short term on I-270 to improve operations. Therefore, this project will reconstruct the shoulders of I-270 from the current merge south to the Frost Avenue on-ramp to maintain three through lanes of traffic. In order to accomplish this, a design exception for 2 foot inside and outside shoulders is required.

The EA found that cumulative impacts would primarily occur during construction. Because there is no change to the construction impacts as detailed in Section 3, there should also be no change to the cumulative impacts.

17. Socio-Economic Resources – **Reduction of Impacts.**

Summary of Changes		
EA Right of Way Areas	Preferred Alternative Total Commercial Acquisitions	Preliminary Design Total Commercial Acquisitions
Partial 2, 3, & Partial 4	3	0 plus future need eliminated

The EA found the preferred alternative would not directly affect any major employers identified in the study area. The reconstruction of some interchanges may have a temporary effect on commuters and freight delivery, but access to all major employers will remain through construction. The preferred alternative would not acquire large commercial facilities, such as shopping centers or department stores, so that most commerce will remain in the area. Roadway improvements will be designed to minimize impacts to access drives and traffic movement to and from the commercial operations along frontage roads and cross roads. The preliminary design makes improvements similar to the preferred alternative and will not directly affect any major employers or acquire any commercial facilities. The preliminary designed has minimized impacts to access drives and traffic movement, but construction of the improvements will have a temporary impact on commuters and freight delivery.

The preferred alternative required acquisition of select commercial properties. As described in Section 13, Right of Way, the preliminary design does not require the total acquisition of any commercial properties. Additionally, the modifications at the Bellefontaine interchange eliminate the need to acquire commercial properties for the relocation of Dunn Road.

18. Travel Patterns – **Minor Change.**

Summary of Changes		
Location	Preferred Alternative	Preliminary Design
Interstate Access at West Florissant Road	WB access from I-270 consolidated with New Halls Ferry Road as split diamond type. EB access to I-270 consolidated with New Halls Ferry Road as split diamond type.	WB access from I-270 consolidated with Old Halls Ferry Road and New Halls Ferry Road as split diamond type. EB access to I-270 consolidated with New Halls Ferry Road and Old Halls Ferry Road as split diamond type.
Interstate Access at New Halls Ferry Road	Addition of EB I-270 on ramp from Pershall Road to complete diamond type interchange	Maintains existing condition of split diamond type interchange with Old Halls Ferry Road.

Interstate Access at Old Halls Ferry	Existing direct connections eliminated and consolidated with Diamond type Interchange at New Halls Ferry Road with U-turn bridge and utilizing one-way outer roads for access between New Halls Ferry Road and Old Halls Ferry Road	Split diamond type interchange with New Halls Ferry Road keeps ramps from WB and to EB I-270 on the east of Old Halls Ferry and eliminated U-turn bridge.
Dunn Road from Old Halls Ferry Road to Linnell Drive	Two-way road – See Below	One-way road – See Below

The preliminary design performs similarly to preferred alternative design and maintains a Level of Service of E throughout the corridor and at all intersections. The preliminary design maintains the existing WB off ramp to Old Halls Ferry Road and the EB on ramp from Old Halls Ferry Road in approximately their current locations. The existing WB I-270 off-ramp to New Halls Ferry Road is eliminated. The configuration of ramps in this manner is more intuitive for drivers trying to access Old Halls Ferry Road and will require less significant signing on the outer roads to direct traffic. Traffic exiting WB for West Florissant Road would be required to go through three signals; traffic entering Persall Road between Knollway Drive and West Florissant would also be required to travel through three signals. Improvements to traffic flow at the signals due to the one-way system will offset some of the negative impact of these movements.

The conversion of the section of Dunn Road between Old Halls Ferry Road and Linnell Drive to one-way will have additional impacts to travel patterns as identified in the EA. These impacts are mitigated by the addition of a bridge across I-270 west of Breezy Point Lane and an extension of Pershall Road east to the new bridge to provide a local connection east of Old Halls Ferry Road. Overall, the impact of these changes is anticipated to be minimal.

20. Water – Floodplains – **Update.**
This project will impact four floodplains: Coldwater Creek, Fountain Creek, Blackjack Creek and Halls Ferry Creek. The contractor is required to provide the required information for MoDOT to obtain a Floodplain Development Permit. The contractor will be required to obtain a No Rise Certification based on the final design.

21. Water – Streams and Watersheds – **Update.**
MoDOT has obtained a Section 404 Nationwide Permit (NWP) for the bridge reconstruction at Coldwater Creek. The current permit covers the Pershall Bridge and I-270 bridges that will be replaced in this project. The contractor is required to modify the current permit or obtain a separate permit to address the replacement of Dunn Road Bridge over Coldwater Creek.

The work at Cowmire Creek, Fountain Creek, Halls Ferry Creek, Blackjack Creek, and Watkins Creek will be minimal. The work falls under MoDOT's NWP 3 and NWP 14 Permits; all work must comply with all General and Regional Conditions and follow the General Conditions for the Section 401 Memorandum of Understanding with the Missouri Department of Natural Resources.

23. Water – Water Quality – **Update.**

MoDOT is authorized by State Operating Permit MO-0137910 to discharge stormwater from its Transportation Separate Stormwater Sewer System (TS4). The contractor is required to follow all requirements of MoDOT's permit and to work with the Metropolitan St. Louis Sewer (MSD) to meet the requirements for detention when linking into its system. Coldwater Creek and Watkins Creek watersheds are subject to an approved and effective Total Maximum Daily Load (TMDL). The Contractor shall include permanent stormwater BMP's, where feasible and appropriate, to potentially treat quality and/or quantity of new stormwater from the Project. Methods for stormwater management, during and after construction, will be in accordance with the MoDOT's Standard Specifications Book for Highway Construction and the project's National Pollutant Discharge Elimination System permit that will be obtained by the contractor.

EA Commitments

There are 18 commitments and 5 required permits in the final EA/FONSI documents. This section describes how this project will meet those commitments.

1. *MoDOT will coordinate with local emergency services, Metro, and schools in advance of any roadway changes that would disrupt normal travel patterns.*
   - The contractor and MoDOT will work together to implement the communications plan to inform emergency responders, Metro, and area schools regarding changes in travel patterns caused by construction activities.

2. *MoDOT will ensure that the contractor develops a MoDOT approved maintenance of traffic plan.*
   - Commitment 2 revision:
     MoDOT will ensure that the contractor develops a MoDOT approved maintenance of traffic plan.
     - *MoDOT will ensure that the maintenance of traffic plan will maintain access to all properties.*
   - The contractor submitted a draft MOT plan that will be refined as design continues. A main point of the plan is to maintain 3 lanes of traffic in each direction during peak periods.

3. *MoDOT will coordinate, cooperate, and communicate, as required, with the representatives of the railroads located in the corridor throughout the study.*
   - This project will not impact existing railroad facilities.

4. *MoDOT will coordinate, cooperate, and communicate with affected utility companies located in the corridor throughout the study.*
    - MoDOT began coordination with the impacted utility companies before procurement, included a one-on-one meeting for the proposing teams with the highest risk utilities, and the contractor has developed a utility plan to continue coordination through design and construction.

5. *MoDOT will continue coordination with the State Historic Preservation Office related to the Section 106 process should design modifications and/or construction activities result in impacts to the following properties:*
    - *The Myers residence (180 Dunn Road) is a house and barn with the National Register of Historic Places (NRHP) boundary as the parcel lines.*
    - *The Gittemeier House (1067 Dunn Road) is two-story German vernacular residence with the NRHP boundary as the parcel lines.*
    - *The historic district at the Ferguson Pine Meadows 1st Addition subdivision (approximately 0.75 mile east of the Washington/Elizabeth interchange).*
    - *Archaeological sites SL545, SL547, and SL548 are located in the northeastern portion of the I-270/MO 370 interchange. These sites could not be safely accessed to determine if previous road construction had destroyed them. Before contractor ground-disturbing activities occur in this area and after safety precautions are implemented, archaeologists will need to verify the conditions of these sites. Historic burials are reported near SL 545 and if encountered fall under Missouri's Cemeteries Law (Chapter 214. RSMo)."*
    - *New property acquisitions with a moderate potential for intact cultural remains identified in the Section 106 report (E1 areas) that were not accessible in the study due to landowner refusal need to be surveyed after being purchased. These are shown on Table 2 of the study's Archaeological Survey.*
    - *MoDOT will assist FHWA with continued Native American Tribal coordination.*
    - *If human remains or cultural resources that may be eligible for listing on the National Register of Historic Places are encountered during construction, their treatment will be handled in accordance with Missouri Unmarked Human Burial Sites Act, §§ 194.400 – 194.410, RSMo, as amended. When encountered, the Contractor shall first stop all work within a 50-foot radius of the remains/site, and secondly, shall notify the MoDOT Resident Engineer and/or Construction Inspector who will contact the MoDOT Historic Preservation (HP) section.*
    - The project has no known adverse effects to any of the Section 106 properties identified in the EA. MoDOT will continue coordination with SHPO on new property acquisitions with a moderate potential for intact cultural remains that were not accessible during the EA study due to landowner refusal. A supplemental submittal will need to be made to SHPO after such parcels have been acquired and surveyed. These investigations will be completed and

SHPO commented on findings before any ground-disturbing activities occur on those properties.

6. *Regarding endangered species coordination, MoDOT will work with the U.S. Fish and Wildlife Service to ensure the following:*
    - *All tree clearing will be conducted in the winter months when bats are in hibernation (November 1 – March 31).*
    - *During the study development process for each phase, potential impacts to threatened and endangered species will be re-evaluated, and coordination with both MDC and the USFWS will take place to determine if the "not likely to adversely affect" determinations for listed bats remain valid.*
    - Commitment 6 revision:
      Regarding endangered species coordination, MoDOT will work with the U.S. Fish and Wildlife Service to ensure the following:
        - *MoDOT will continue to coordinate during the development process for each phase to re-evaluate potential impacts to federally listed bat species prior to any tree clearing.*
        - *During the study development process for each phase, potential impacts to threatened and endangered species will be re-evaluated, and coordination with both MDC and the USFWS will take place to determine if the "not likely to adversely affect" determinations for listed bats remain valid.*
    - During procurement MODOT performed site inspections and required the contractor to prepare a tree clearing map during the development of the design. This map includes all clearing activities required for permanent, proposed construction, or for utility relocations. MoDOT will re-evaluate impacts and coordinate with USFWS and MDC as appropriate. The contractor is required to clear trees between November 1 and March 31 for project J6I3020B. MoDOT will continue to coordinate with USFWS and MDC during the development process for each phase to re-evaluate potential impacts to federally listed bat species prior to any tree clearing.

7. *MoDOT will ensure that all structures scheduled for demolition are inspected for asbestos containing material and lead-based paint. MoDOT and the contractor shall submit all required demolition notices, abatements notices, and study notifications to MDNR as required by regulation prior to beginning demolition activities. Asbestos-containing material and demolition debris will be disposed of according to state and federal regulations. The reports of these inspections for asbestos and the presence of lead-based paint will be included in the construction bid proposal.*
    - For identified buildings or structures that will need to be demolished or removed due to the project's ROW impacts Missouri Department of Natural Resources (MDNR)will be notified 10 days before the demolition of any structure where asbestos-containing material (ACM) is encountered. MDNR will also be notified 10 days before the rehabilitation or demolition of existing

structures that have ACM and/or heavy metal paint. All applicable laws and MoDOT standards will be followed.

8. *MoDOT will ensure that any known and unknown hazardous waste sites that are found during study construction are handled in accordance with Federal and State laws and regulations. If regulated solid or hazardous wastes are found during construction activities, the MoDOT construction inspector will direct the contractor to cease work at the suspect site. The construction inspector will contact the appropriate environmental specialist to discuss options for remediation. The environmental specialist, the construction office, and the contractor shall develop a plan for sampling, remediation and continuation of study construction. Independent consulting, analytical and remediation services shall be contracted if necessary. As necessary, the MDNR and USEPA will be contacted for coordination and approval of required remediation activities.*
   - MoDOT will ensure compliance.

9. *MoDOT will coordinate with the USACE related to any required excavation or other land disturbance within the St. Louis Airport Sites FUSRAP ROD boundary. Coordination will begin prior to the commencement of construction for each study phase that affects the Decision boundary and will continue through the duration of construction activities.*
   - It is anticipated that the project will encounter low-level radioactive contamination during the demolition and construction of the Coldwater Creek bridge. Coordination has already begun and will continue throughout design and construction. The contractor will coordinate directly with MoDOT and FUSRAP for the excavation, removal, and remediation of all contaminated soil. The preliminary design has been developed to minimize the amount excavated material required.

10. *MoDOT will upgrade existing pedestrian facilities to be ADA-compliant and provide additional pedestrian and bicycle connectivity where reasonable.*
   - It is a contract requirement that any noncompliant existing sidewalks or bicycle/pedestrian facilities will be upgraded to meet ADA standards from Woodford Way Drive to Lilac Avenue. The project will provide a multi-use path from US 67 to east of Old Halls Ferry Road to Breezy Point Lane on Dunn Road and from Hanley/Graham to Old Halls Ferry Road on Pershall Road, a sidewalk from Coldwater Creek to Hazelwood Drive on Pershall Road, as well as improving bike/ped facilities on or under crossroad structures.

11. *MoDOT will provide feasible and reasonable noise abatement for areas along the corridor that are considered impacted. A preliminary (NEPA stage) noise analysis was conducted as part of this study. That analysis recommended noise barriers at six locations along the corridor. Further analysis may be needed depending upon alignment changes. MoDOT will use the Noise Policy in place at that time to conduct the analysis and final recommendations will be made at a*

later design stage. At that time, if noise abatement is found to be feasible and reasonable, MoDOT will seek the input of impacted property owners and residents before deciding on building noise barriers. As construction will likely be phased, feasible and reasonable noise abatement will be provided based on the location and limits of I-270 construction in each phase. For a given area, noise abatement will be constructed in parallel with the roadway improvements for the corresponding area.

- The project will update the traffic noise model and construct the reasonable and feasible sound walls that are voted to be included by the benefited receptors.

12. *MoDOT will administer the acquisition and relocation of affected residential, non-profit, and commercial properties in accordance with the relocation procedures established in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.*
    - The contractor will identify the parcels that need to be acquired and MoDOT will administer the acquisition of property and the relocation of affected property owners in accordance to MoDOT procedures and the Uniform Act.

13. *MoDOT will consider options to minimize new right-of-way acquisition.*
    - The project greatly reduces the amount of ROW needed from the preferred alternative. Further refinements will be made in final design to continue to minimize impacts.

14. *MoDOT will closely monitor study changes that may result in Section 4(f) impacts. Section 4(f) resources adjacent to the I-270 North corridor are as follows:*
    - ***Carrollton Disc Park:*** *Located on Lambert Airport buy-out land between St. Charles Rock Road and Woodford Way (south side of I-270), this disc golf course was developed using Land and Water Conservation Funds.*
    - ***Playground at Garrett Elementary School:*** *Located adjacent to Garrett Elementary School (1400 Ville Rosa Lane, Hazelwood). The extent of the Section 4(f) resource is limited to the immediate area of the school.*
    - ***Gardens at Prairie Commons Library:*** *Located at 915 Utz Lane, Hazelwood. This public library has a public garden, a picnic area, and park benches. It appears that some of the garden is actually in MoDOT right-of-way. Because the roadway/intersection re-configuration in this area is minimal, it is not expected that the garden will require disruption. If impacted, MoDOT will coordinate with the library relative to appropriate relocation measures.*
    - ***Brookes Park:*** *Located in the southwestern quadrant of the I-270/Lindbergh Boulevard interchange, Brookes Park is administered by the City of Hazelwood.*
    - ***Bellefontaine Conservation Area:*** *Bellefontaine Conservation Area is in the southeastern quadrant of the I-270/MO 367 interchange. The site is administered by the Missouri Department of Conservation Department.*

- ***The Utz-Tesson House:*** *The Utz-Tesson House is located in Brookes Park. Right-of-way acquisition and disruptions affecting usage should be avoided.*
- ***The Taille de Noyer House:*** *The Taille de Noyer House currently resides on the McCluer High School campus, hundreds of feet from I-270.*
- ***The John B. Myers House:*** *The John B. Myers House is located at 180 Dunn Road (northwestern quadrant of the Graham Road intersection). The parcel lines are the significance boundary.*
- ***The Gittemeier House:*** *The Gittemeier House is located at 1067 Dunn Road (northwestern quadrant of the New Florissant Road intersection). The parcel lines are the significance boundary.*
- ***The Ferguson Pine Meadows 1st Addition District****: This NRHP district is located along Starlight Drive in Ferguson. The boundaries of the district are Pershall Road to the north, Moonlight Drive to the west, and the Saint Louis Community College-Florissant Valley campus to the east.*

  - The project does not acquire Section 4(f) or Section 6(f) properties and reduces indirect impacts to those properties.

15. *MoDOT will work with the administrators of the Little Creek Nature Area, a non-Section 4(f) resource, to investigate opportunities to minimize impacts, provide a visual buffer of trees/shrubs, and incorporate potential driveway improvements.*
    - The project will coordinate with the administrators of the Little Creek Nature Area to provide 10 trees along the ROW line and reconstruct the entrance to the Little Creek Nature Area between Dunn Road and the ROW line.

16. *MoDOT will work with Metro to investigate reasonable roadway modifications that further improve efficiencies for Metro's operations.*
    - The project will coordinate with Metro throughout design and construction to improve efficiencies for Metro's operations.

17. *Pursuant to coordination with the MSD, MoDOT will continue to consult with MSD staff as early in the preliminary design phases as possible so that potential design issues and coordination opportunities can be identified and planned for.*
    - MoDOT began coordination with MSD before procurement and included two one-on-one discussions with the proposing teams and MSD to assist in developing the preliminary design. That coordination will continue throughout design and construction.

18. *This portion of I-270 is within the aboriginal homelands of the Miami Tribe, if any human remains or Native American cultural items are discovered during any phase of this study, the Miami Tribe will be consulted. The Tribal Historic Preservation Officer is Diane Hunter. She can be contacted at 918-541-8966, or by email at dhunter@miamination.com. If human remains or cultural resources are encountered during construction, their treatment will be handled in accordance with Missouri Unmarked Human Burial Sites Act (see commitment #5)*

- Work activities will cease if human remains or cultural resources are discovered, and coordination with MoDOT will be initiated. Should human remains or cultural resources be identified, MoDOT will assist on coordination with the Miami Tribe.

Permit	Project Approach to Permit
Permit 1: MoDOT will coordinate the Final Design with the Federal Aviation Administration (FAA) to complete necessary permitting.	MoDOT has received clearance for grade changes associated for mainline I-270. The contractor is required to submit information to FAA for any construction impacts, outer road and cross road grade changes, and ancillary roadside structures above 17'-6" to FAA for clearance determinations.
Permit 2: MoDOT will adhere to the conditions of the TS4 permit.	MoDOT has coordinated with MSD to coordinate appropriate intersections of MoDOT's TS4 permit with MSD's MS4 permit. MoDOT will oversee design and construction to ensure compliance with MoDOT's TS4 permit by the contractor. The Contractor is also required to get a permit from MSD, which includes complying with provisions of its MS4 permit.
Permit 3: MoDOT will conduct an engineering analysis for the build alternative prior to submission of floodplain development permit application to the Missouri State Emergence Management Agency. The Contractor shall obtain a floodplain development permit and "no-rise" certification.	MoDOT has conducted a preliminary analysis of the preferred alternative design. The contractor is required to revise the analysis on the basis of its design and obtain the necessary floodplain development permits and no-rise certifications. Impacts are anticipated in the Coldwater Creek, Fountain Creek, Blackjack Creek and Halls Ferry Creek.

Permit 4: MoDOT will obtain a Clean Water Act Section 404 Permit from USACE, including Section 401 Water Quality Certification from MDNR.	MoDOT has obtained a Nationwide Clean Water Act Section 404 Permit (NWP) for work near Coldwater Creek, and other locations that fall under MoDOT's Nationwide Section 404 Permit, and Section 401 Water Quality Certification. The contractor may use the Nationwide 404 and 401 Conditions if disturbed areas for each water of the US location does not exceed the estimated quantities described in the permit application. If the contractor's plan for bridges or culverts are different then the Contractor may have to apply for a modification of the NWP. If impacts exceed the threshold for NWP, the Contractor may have to apply for an Individual Clean Water Act Section 404 Permit and 401 Certification.
Permit 5: MoDOT will follow the requirements, including a Stormwater Pollution Prevention Plan, for the required National Pollutant Discharge Elimination System permit for stormwater discharges from the construction site.	The contractor shall obtain the required National Pollutant Discharge Elimination System permit and create and follow the required Stormwater Pollution Prevention Plan. MoDOT will oversee and assist where necessary to ensure compliance with contractor obtained permits.

Attachment: AJR Whitepaper