Project No. 10-23 KA-3634-01

SLT South Lawrence Trafficway

FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (FSEIS) & RECORD OF DECISION (ROD)

Kansas Department of Transportation

U.S. Department of Transportation
Federal Highway Administration

KDOT IKE THE EISENHOWER LEGACY TRANSPORTATION PROGRAM

MARCH 2022

KDOT Project No. 10-23 KA-3634-01

South Lawrence Trafficway

Lawrence, Douglas County, Kansas

RECORD OF DECISION

Submitted Pursuant to 42 U.S.C. 4332 (2)(c)

by the

U.S. Department of Transportation, Federal Highway Administration
and
Kansas Department of Transportation

Cooperating Agencies
U.S. Environmental Protection Agency
U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service

Record of Decision

FHWA-KS-SEIS-20210047

South Lawrence Trafficway Project
Supplemental Environmental Impact Statement
Lawrence, Douglas County, Kansas

A. Decision

The Federal Highway Administration (FHWA) approves the selection of the Add Capacity Freeway (West Section) Build Alternative as the Preferred Alternative to upgrade and widen the West Section of the South Lawrence Trafficway (SLT), located within the south and west limits of the City of Lawrence, in Douglas County, Kansas. The Supplemental Environmental Impact Statement (SEIS) study considered long-term, broad-based transportation improvements along the existing west section of K-10 Highway between I-70 and U.S. 59 that would reduce congestion, enhance safety, promote a multimodal transportation system, and support local and regional growth.

FHWA also approves the decisions to provide new full access or reconfigured full access interchanges at I-70 and K-10 (reconfigure), K-10 and Clinton Parkway (reconfigure) K-10 and Wakarusa (new), and K-10 and US 59 (reconfigure). Existing full access interchanges at K-10 and 6th Street/US-40, and K-10 and Bob Billings Parkway will maintain full access and will be upgraded to accommodate the Preferred Alternative.

This Record of Decision (ROD) concludes the SLT SEIS process. The SLT SEIS included an examination of the study area's transportation needs, a study of alternatives, including a No-Action Alternative, to satisfy them, and consideration of potential environmental and social impacts. The SLT SEIS evaluation consisted of a sufficient level of engineering and environmental detail to assist decision makers in selecting a preferred transportation Build Alternative.

A Draft SEIS was developed and was approved by FHWA and Kansas DOT (KDOT) in April 2021. The Draft SEIS was published May 7, 2021 and comments on the Draft SEIS were initially accepted through June 21, 2021. Due to a request for additional time to provide comments due to complications from the ongoing COVID-19 pandemic, the public comment period was extended to September 30, 2021. The Draft SEIS summarized the alternatives that were considered to address the transportation needs of the SLT and greater Lawrence area; identified the Add Capacity Freeway (West Section) Build Alternative as the Preferred Alternative; and invited comment on the issues. The Final SEIS (FSEIS) further documented the Add Capacity Freeway (West Section) Build Alternative as the Preferred Alternative and identified the recommended decisions for the SLT corridor interchanges.

B. Alternatives Considered

The process leading to the decision to select the Add Capacity Freeway (West Section) Build Alternative as the Preferred Alternative for the SLT Project involved the consideration of a variety of alternatives, starting with work completed in the *K-10 West Leg Concept Study*, conducted from 2014-2016 for KDOT. This study investigated the current and future needs and functions in the SLT West Section and served as the basis for development of Build Alternatives for this project. This study considered alternatives for the future widening and upgrade of the corridor, which modified the current two-lane expressway design to a four-lane freeway design with limited access, and grade separated interchanges in place of existing at-grade intersections. The concept study was used as a reference document during the preparation of the SEIS.

Using the K-10 West Leg Concept Study as a baseline, an initial alternatives development and screening process included examining multimodal, transportation system management (TSM), and transportation system demand (TDM) alternatives in addition to expressway, freeway, and tolled alternatives. A summary of all alternatives considered for this SEIS include:

1) **No-Action Alternative** - The No Action Alternative makes no capacity improvements on the existing West Section of the SLT beyond improvements that are directly related to ongoing rehabilitation and maintenance of the facility or projects that are already committed or programmed in the State Transportation Improvement Program (STIP) or the Lawrence - Douglas County Metropolitan Planning Organization (MPO) Long Range Transportation Plan (LRTP), designated as *Transportation 2040 (T2040)*. The No-Action Alternative also includes planned or programmed multimodal projects such as transit and bicycle and pedestrian facilities. The No-Action Alternative is not a no cost alternative.

2) **Transportation System Management (TSM)/Transportation Demand Management (TDM) Alternative** - The TSM/TDM Alternative is designed to maximize the efficiency of the existing transportation system by improving capacity and reducing the effects of bottlenecks and chokepoints. These strategies are relatively low-cost, low-impact strategies geared toward enhancing mobility on the SLT without adding new travel lanes or upgrading the facility to a freeway. TSM improvements may include a wide range of strategies, including: coordinated signal timings, intelligent transportation systems (ITS), ramp metering, queue warning systems or minor intersection improvements. TDM strategies typically attempt to modify travel behaviors to benefit capacity, such as carpooling, staggered work shifts, telecommuting, and promoting transit use.

3) **Multimodal Alternative** - The Multimodal Alternative includes reasonable measures to enhance crossing of the corridor for non-motorized travel such as bicycle and pedestrian movements. The Multimodal Alternative also includes movements along the corridor such as freight and increases the effectiveness of transit options in the corridor. Elements of this alternative allows for the existing transit agencies in the state or Lawrence region to increase transit routes or enhance transit service by providing roadway improvements that allow for more efficient local and regional transit connections. Transit elements such as Bus-on-Shoulder that enhance the reliability and reduce congestion of the corridor are also included in this alternative. Bus-on-shoulder improvements may include pavement improvements and

minor widening of existing shoulders on the SLT corridor to accommodate Bus-on-Shoulder operations.

4) **Build Alternative – Add Capacity Expressway (West Section)** - This alternative would upgrade the existing two-lane undivided West Section of the SLT to a median divided expressway facility with four lanes. It would also include the reconstruction of the existing two lanes. This alternative was the approved Preferred Alternative from the 1990 EIS. Existing interchanges at West 6th StreetUS-40, Bob Billings Parkway, Clinton Parkway, and U.S. 59/Iowa Street will remain interchanges with ramp modifications or reconfigurations to accommodate additional expressway travel lanes.

   Under an expressway concept, existing at-grade intersections located along the SLT West Section, such as the West 27th Street/Wakarusa Drive signalized intersection and the I-70 interchange ramp terminals would remain in-place but would have various intersection improvements to enhance safety and mobility. In a separate project, E 1050 Road (Wakarusa Drive) will be extended to provide connection between N 1200 Road (County Road 458) and the future SLT improvements.

5) **Build Alternative – Add Capacity Freeway (West Section) – SELECTED PREFERRED ALTERNATIVE** - This alternative would upgrade the existing two-lane undivided West Section of the SLT to a median divided fully access-controlled freeway facility with four lanes. The freeway section would be consistent with the SLT East Section, which is currently four lanes and planned to accommodate six lanes in the future if needed, to provide system continuity for travelers. Existing interchanges at West 6th Street/US-40, Bob Billings Parkway, Clinton Parkway, and US-59/Iowa Street would remain interchanges with modifications to accommodate additional freeway travel lanes. Farmers Turnpike will maintain full access to K-10 through an at-grade intersection.

   Under a freeway concept, existing at-grade intersections located along the SLT West Section, such as the West 27th Street/Wakarusa Drive signalized intersection and the I-70 interchange ramp terminals, would no longer remain in-place. This at-grade intersection would be improved to new grade-separated access, to enhance safety and mobility along and across the SLT corridor. Alternatives for a new system interchange with I-70 were considered; some of these alternatives include new service interchanges at I-70/East 600 Road/Lecompton Road and K-10/I-70/North 1800 Road to provide local access. In a separate project, N 1200 Road (County Road 458) would be connected to the future SLT improvements at the Wakarusa Drive grade separated interchange via an extension of Wakarusa Drive.

6) **Build Alternative – Add Capacity Tolled Highway (East & West Sections)** - This alternative is similar to the previous 'add capacity freeway' Build Alternative, however it includes the ability to collect tolls along the SLT highway through all-electronic tolling (AET). The tolled highway section would be consistent with the SLT East Section, in regard to the number of travel lanes, to provide system continuity for travelers.

   Under AET, no physical toll plazas to stop and pay tolls with cash would be constructed along the SLT corridor. Rather, overhead gantries would be constructed at various points throughout the corridor to collect tolls through the AET method. Due to existing Kansas State legislation, only new capacity can be tolled. Therefore, a tolling alternative considered a hybrid of an existing non-tolled lane and tolled lane in each direction.

Express toll lanes were considered as a method of tolling for the project. This includes consideration of tolling only the new, additional lanes constructed along the SLT; one lane in each direction of travel will continue to be toll-free.

The alternative also upgrades the existing two-lane undivided West Section of the SLT to a divided four or six lane fully access-controlled freeway facility. Existing interchanges at West 6th Street/US-40, Bob Billings Parkway, Clinton Parkway, and US-59/Iowa Street remain interchanges with ramp modifications to accommodate the median divided freeway. Existing at-grade intersections located along the SLT West Section, such as the West 27th Street/Wakarusa Drive signalized intersection, would no longer remain in-place. This at-grade intersection would be improved to new grade-separated access, to enhance safety and mobility along and across the SLT corridor.

The East Section of the SLT is included in this alternative because tolling the entire SLT facility (West and East Sections) was evaluated as part of the project. Therefore, the entire SLT corridor was evaluated to assess potential impacts of tolling. It is not anticipated that there would be any physical roadway improvements or modifications that require additional right-of-way on the East Section.

During the SLT SEIS, the alternatives screening process entailed determining which alternatives warranted further consideration for the project. Based on the screening of the Initial Alternatives, the alternatives development process defined and evaluated the range of No-Action and Build Alternatives in sufficient detail to identify the feasible and prudent alternatives (i.e., Reasonable Alternatives). The Reasonable Alternatives were then carried forward and evaluated regarding the acceptability of the environmental and social impacts, as presented within the Affected Environment and Environmental Consequences section (Chapters 3 and 4) of the SEIS. The more detailed evaluation of the Reasonable Alternatives then identified the alternative that best accomplishes the Purpose and Need for the proposed project while providing acceptable impacts to both the natural and human environment. This alternative, the Add Capacity Freeway (West Section) Build Alternative is designated as the ***Preferred Alternative***. The Preferred Alternative is presented within the FSEIS and was presented at the Public Hearing for agency and public review and comment. The other alternatives evaluated by this SEIS were eliminated from consideration or not selected as the Preferred Alternative for the following reasons:

- The No-Action Alternative did not meet the Purpose and Need for the project and was not selected as the Preferred Alternative due to the presence of a constructible, fundable, and viable Build Alternative that met the Purpose and Need for the project.
- The TSM/TDM Alternative was eliminated from consideration as a stand-alone alternative due to its relatively low ability to reduce congestion and enhance safety in comparison to the other Build Alternatives.
- The Multimodal Alternative was eliminated as a stand-alone alternative due to its lack of ability to meet the Purpose and Need of the project through reducing congestion and enhancing safety in comparison to Build Alternatives that add capacity.
- The Add Capacity Expressway (West Section) Alternative was eliminated from further consideration primarily due to its inability to enhance safety in comparison to the Build - Add Capacity Freeway and Build- Add Capacity Tolled Highway alternatives. The primary difference between these alternatives was the retention of at-grade intersections in the Expressway alternative, while all at-grade intersections were converted to limited access full interchanges in the Freeway and Tolled Highway alternatives. At-grade intersections within

the existing corridor are locations with high frequencies of crashes and those intersection configurations perform poorly in safety evaluations in comparison to limited access interchanges.

- The Add Capacity Tolled Highway Alternative failed to attract enough traffic to the Express Toll Lanes (ETLs) in the initial opening years of the project to make this option a viable alternative. Additionally, this alternative generated substantial public comments in opposition to tolling the facility. Environmental justice issues with toll charges and the presence of low-income populations also created concerns with this alternative, although the environmental justice concerns could potentially be mitigated through availability of non-tolled general-purpose freeway lanes.

As previously mentioned, the Add Capacity Freeway (West Section) was selected as the Preferred Alternative. This alternative was selected due to its ability to meet the Purpose and Need for the project, provide acceptable levels of traffic operations through, and beyond, the design year, and limit environmental impacts. The Add Capacity Freeway (West Section) Alternative met the Purpose and Need for the project by:

- *Reducing congestion* – In the design year 2045 AM peak travel period, 77 of 78 segments (99 percent) were in the acceptable level of service range, while the PM peak travel period saw 76 of 78 segments (97 percent) fall within the acceptable level of service range. In comparison, the No-Action alternative saw only 62 percent in the AM peak period and 54 percent of segments in the PM peak period fall within the acceptable level of service range.

- *Enhancing safety* – The implementation of full access control (upgrading the Wakarusa/SLT and I-70/K-10 intersections to grade-separated interchanges), addressing horizontal deficiencies in the existing SLT alignment (through the Clinton Parkway area), and upgrading the facility from a two-lane undivided facility to a four-lane divided facility will enhance safety within the SLT corridor.

- *Promoting a multimodal transportation system* – The Add Capacity Freeway Build Alternative (West Section) accommodates opportunities for enhancing the pedestrian and bicycling environment by maintaining existing trail connections across the SLT facility and providing opportunities for additional trail connections across SLT at the new Wakarusa Drive interchange. Transit, freight, and other mobility services will see benefits through reduced congestion in the corridor and improvements that enhance user safety.

- *Supporting local and regional growth* – An upgraded SLT with additional capacity, improved operations, reduced delay, and enhanced safety design elements supports both local and regional growth through overall improved mobility.

C. Section 4(f)

Construction of the Preferred Alternative would impact six Section 4(f) properties; no Section 6(f) properties will be impacted by the proposed project. FHWA has concurred with the eligibility of these properties for protections under Section 4(f). The impacts to Section 4(f) properties are *de minimis* impacts, meaning the features, attributes, or activities qualifying for protection under Section 4(f) would not be adversely affected by the project. FHWA and KDOT coordinated with U.S. Army Corps of Engineers (USACE) and the City of Lawrence regarding Section 4(f) *de minimis* eligibility and

impacts to the properties. USACE concurred with the *de minimis* impacts to USACE property via letter on March 19, 2021, and the City of Lawrence concurred via letter on March 25, 2021. Comments from the public were solicited via the SEIS public comment period and public hearing regarding the de minimis finding. No comments were received. The potential park and recreation facility impacts resulting from the implementation of the Preferred Alternative include:

USACE Property – The Preferred Alternative would require the permanent acquisition and temporary impact of approximately 13.2 acres of USACE owned property for additional right-of-way and temporary grading, construction staging, and reconstruction of existing roadways. The USACE Property is located along both sides of the SLT with approximately 8.3 acres of impacts occurring on the south side of the Clinton Parkway interchange and approximately 4.9 acres of impacts occurring on a remnant parcel on the north side of the SLT across from the Clinton Lake Softball Complex and the Rotary Arboretum. The impacts to the property on the south side of the Clinton Parkway interchange will contain approximately 1,161 feet of impacts to the SLT Trail and 59 feet of impacts to the Clinton Parkway Trail, both trails are 10-foot wide concrete paths. These impacts are required to reconfigure and reconstruct the Clinton Parkway interchange and will also involve partial reconstruction of E 900th Road. USACE property impacted at this location is used as passive open space and does not contain amenities. The impacts to the USACE remnant parcel on the north side of the SLT are located on vacant property and no developments or amenities will be impacted. These impacts are considered *de minimis* impacts.

Rotary Arboretum – The Preferred Alternative would require the acquisition of approximately 634 ft^2 of property at the southeast corner of the Rotary Arboretum property boundary and will be incorporated into KDOT right of way. The impacts are considered *de minimis* as there would be no impacts to any amenities within the Rotary Arboretum.

Youth Sports Complex – The Preferred Alternative would impact approximately 5.5 acres of undeveloped Youth Sports Complex property through the construction and extension of a drainage diversion channel from West Branch Yankee Tank Creek to the Wakarusa River for flood impact relief. The impacts are considered *de minimis* as there would be no impacts to any of the ball fields or other amenities of the Youth Sports Complex.

Eagle Bend Golf Course – The Preferred Alternative would impact approximately 5.8 acres of Eagle Bend Golf Course property. The impacts would be on undeveloped property on the north side of the Wakarusa River where the extension of an existing drainage pilot channel will be constructed. The impacts are considered *de minimis* as no features, attributes, or activities of the golf course would be adversely affected.

Kanza Southwind Nature Preserve (KSNP) – The Preferred Alternative would incorporate approximately 14.0 ft^2 of undeveloped property along the southern border of the KSNP into KDOT right of way. There would be no impacts to any amenities within the KSNP; however, approximately 324.7 feet of mowed paths associated with the KSNP would be impacted by the Preferred Alternative. These impacts are considered *de minimis*.

D. Measures to Minimize Harm

Through a comprehensive review of the potentially affected environment and environmental consequences, no known issues were identified that would necessarily preclude or prevent the

implementation of the Preferred Alternative.

The Preferred Alternative seeks to avoid and minimize impacts to the socioeconomic and natural environment while providing the benefits of the proposed action. Population and employment growth, as well as development in the Lawrence region is expected to continue, regardless of whether major transportation improvements are implemented. Existing right-of-way would be used throughout much of the corridor because the proposed improvements would be made to an existing transportation facility. Where right-of-way would be acquired in areas of mainline widening and interchange reconstruction, the transportation use would be consistent with the local land use plans for the area. As the project consists almost entirely of improvements to the existing and immediately adjacent roadway corridor, much of the access and continuity would remain virtually unchanged or be improved by the project.

For these reasons, very few businesses and residents should face hardship due to proximity impacts. Many businesses, residents, and the traveling public would benefit from the improved safety and operational conditions along the mainline of the corridor through increased traffic capacity and improved traffic flow.

Impacts to natural resources such as wetlands and floodplains will likely occur; as will urban environmental impacts such as noise impacts. Traffic noise above criteria levels will likely occur for residential structures located near the roadway. However, most of those structures are already experiencing traffic noise impacts. A traffic noise analysis was conducted as part of the detailed resource studies for the project, and a noise abatement and mitigation analysis determined that while construction of noise barriers was reasonable or feasible in some cases, they were not both reasonable and feasible based on current KDOT Noise Policy. KDOT, in partnership with FHWA, is currently reviewing its noise policy and may make changes to existing criteria. Should the current KDOT Noise Policy be changed, KDOT will reassess noise impacts and mitigation for the Preferred Alternative during the design phase of the project. The noise mitigation analyses under a new noise policy may result in the construction of noise walls as a reasonable and feasible mitigation strategy for anticipated noise impacts.

Additional environmental resources that will need further investigation as the project progresses into the design phase include a Phase II archeological study and formal wetlands, streams, and pond delineations. These detailed investigations will be focused on areas of impact as determined by preliminary engineering grading and construction limits. Considerations of avoidance, minimization of impacts, and appropriate mitigation will be included in the studies. Several tribes have requested or indicated interest in the results of the Phase II archeological study. KDOT and FHWA will continue consultation and coordination with those tribes as the project progresses to construction.

During subsequent design development phases, regulatory and construction permits will be required to be obtained prior to construction. Necessary regulatory permits include, but are not limited to, Section 404 and 401 of the Clean Water Act, administered by USACE. Wetland impact mitigation is proposed to take place through the purchase of credits from a mitigation bank or in-lieu fee program. On-site mitigation is not a viable option due to the lack of available appropriate land within the project study area.

Construction will adhere to existing agreements between KDOT and Kansas Division of Water Resources (KDWR) and Kansas Department of Health and Environment (KDHE). KDOT will obtain a National Pollutant Discharge Elimination System (NPDES) stormwater construction permit and

employ a Storm Water Pollution Prevention Plan (SWPPP) that utilizes Best Management Practices (BMPs). If required, a Section 401 Water Quality Certification and adequate mitigation measures

where necessary would be completed prior to issuance of a construction permit for the Preferred Alternative. KDOT must also provide certification to the local FEMA sponsor (KDWR) that the project complies with FEMA's Flood Insurance Program guidelines, and prior to the placement of fill within a FEMA floodplain, a waiver will be requested by KDOT for the backwater at the West Branch Diversion Channel entrance and Floodplain Development Permit applications will be submitted to the appropriate jurisdictions.

E. Monitoring and Enforcement

KDOT is committed to implementing the Preferred Alternative in accordance with the recommendations and requirements contained within the FSEIS. When completed, the details from the anticipated additional noise, wetlands, and archeological studies, and any potential impacts will be provided for consideration by the general public and the applicable resource agencies.

KDOT is committed to implementing the SLT improvements in a prudent and responsible sequence. Construction will be conducted in a manner consistent with the Purpose and Need as the existing and projected problems within the SLT corridor continue to worsen. The timing of the construction will depend on the availability of funding, the respective priorities within the corridor itself, balanced with other KDOT commitments and needs within the state.

F. Conclusion

The selection of the Preferred Alternative is made following a collaborative decision-making process that included a thorough consideration of all social, and environmental factors with an extensive outreach of resource agency coordination and public involvement. The Preferred Alternative and the environmental consequences associated with its selection are accurately presented in the FSEIS.

Completion of the FSEIS and ROD for the SLT project denotes completion of the NEPA phase of project development. Advanced preliminary design, final design, right-of-way acquisition, and construction phases will follow. As the development of the project continues, FHWA will monitor changes during the final design process so that appropriate follow-up evaluations are completed, if necessary, and NEPA compliance is maintained.

RICHARD E BACKLUND

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Federal Highway Administration

Date of Approval

FHWA SEIS No. 20210047
KDOT Project No. 10-23 KA-3634-01

South Lawrence Trafficway

Lawrence, Douglas County, Kansas

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3-1-2022
date of approval *for KDOT*

RICHARD E BACKLUND Digitally signed by RICHARD E BACKLUND Date: 2022.03.21 11:24:37 -05'00'

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Copies of this Final Supplemental Environmental Impact Statement, Record of Decision, and supporting technical information may be found on the project website at https://slt-ks.org

SLT SEIS Summary

This document summarizes the major conclusions, areas of controversy, and issues yet to be resolved as of the date of the approval of the combined Final SEIS and Record of Decision. Further detail regarding points in this summary may be found within the specific Final SEIS sections.

What is being proposed and why?

The Kansas Department of Transportation (KDOT) and the Federal Highway Administration (FHWA) are proposing to upgrade and widen the West Section of the SLT, located within the south and west limits of the City of Lawrence, in Douglas County, Kansas.

A previous EIS was prepared in 1990 for the overall SLT study area. The primary need for the project as stated in that EIS was to relieve congestion on existing 23rd Street/Clinton Parkway and Iowa Street by diverting through and local traffic from these two existing streets, thereby achieving an improved level of service on the local street network. As an outcome of the approved 1990 EIS, two expressway lanes of the West Section (I-70 to U.S. 59) were constructed and opened to traffic in 1996.

The East Section was not constructed at that time, and the SLT corridor terminated at U.S. 59. A subsequent EIS, in conjunction with the U.S. Army Corps of Engineers (USACE) was completed and the East Section (U.S. 59 east to the existing K-10 freeway) four-lane fully access-controlled freeway was constructed and opened to traffic in 2016. The resulting SLT transportation corridor is a 2-lane partially access-controlled expressway from I-70 south and east to U.S. 59, which directly connects to the fully access controlled freeway from U.S. 59 east to K-10.

The purpose of the SLT is to provide the traveling public with an efficient and cost-effective transportation facility for users of K-10 Highway and the connected state highway system that reduces congestion, enhances safety, promotes a multimodal transportation system and supports local and regional growth. In addition, the purpose and need established in the 1990 EIS was carried forward for the SEIS, which is to relieve congestion on the local street network within the City of Lawrence.

The proposed project is needed because the capacity of the SLT West Section has become insufficient to meet current and future traffic volumes, resulting in increased congestion and safety issues now that the facility connects to a four-lane freeway with controlled access on the East Section. Additionally, a continuous highway connection now exists between K-10 Highway in the Kansas City metro area and I-70 and has attracted a significant amount of regional traffic to the SLT corridor. In summary, the proposed project is needed to:

- ***Reduce congestion*** and improve the traffic capacity to meet existing and future travel demands,
- ***Enhance safety*** to help address high crash locations within the study area,

- ***Promote a multimodal transportation system*** by ensuring the project accommodates the needs of other transportation modes, and
- ***Support local and regional growth*** by providing and coordinating transportation connections to be consistent with planned and proposed community land use and development.

The proposed project is consistent with the identified needs and goals of KDOT's Kansas Long-Range Transportation Plan and the Lawrence-Douglas County Metropolitan Planning Organization, as outlined in the *Transportation 2040 Lawrence-Douglas County Metropolitan Transportation Plan* (2018 version). The study area boundaries represent the logical limits for the infrastructure improvements and environmental review. The overall project study limits begin just north of Interstate 70 at North 1800 Road/Farmer's Turnpike and extend to just east of the existing SLT/23rd Street system interchange. The overall length is 19.0 miles and is subdivided into sections as follows:

- The West Section begins just north of Interstate 70 at North 1800 Road/Farmer's Turnpike and continues to U.S.59/Iowa Street (approximately 8.7 miles);
- The East Section begins at U.S.-59/Iowa Street and continues to the existing SLT/23rd Street system interchange (approximately 6.3 miles); and
- The project study area also includes East 600 Road/Lecompton Road at Interstate 70 (approximately 0.6 mile), and U.S. 40 from K-10 to E 600 Road (approximately 4.1 miles).

What are the possible solutions (alternatives) to meet the project purpose and needs?

The *K-10 West Leg Concept Study*, conducted from 2014-2016 for KDOT, investigated the current and future needs and functions in the SLT West Section and served as the basis for development of Build Alternatives for this project. This study considered alternatives for the future widening and upgrade of the corridor, which modified the current two-lane expressway design to a four-lane freeway design with limited access, and grade separated interchanges in place of existing at-grade intersections. The concept study was used as a reference document during the preparation of the SEIS.

Using the K-10 West Leg Concept Study as a baseline, an initial alternatives development and screening process included examining multimodal, transportation system management (TSM), and transportation system demand (TDM) alternatives in addition to expressway, freeway, and tolled alternatives.

The TSM/TDM alternative was eliminated from consideration as a stand-alone alternative due to its relatively low ability to reduce congestion and enhance safety in comparison to the other build alternatives. Although this alternative is eliminated from consideration as a stand-alone solution to congestion and safety in the SLT corridor, individual elements of the alternative may be incorporated into the Build Alternatives that have been retained for further development.

Similar to the TSM/TDM Alternative, the Multimodal alternative was eliminated as a stand-alone alternative due to its lack of ability to meet the purpose and need of the project through reducing congestion and enhancing safety in comparison to Build Alternatives that add capacity. Likewise,

individual elements of this alternative, in combination with elements of the TSM/TDM Alternative, may be incorporated into the build alternatives retained for further development to maximize alternative performance.

The Add Capacity – Expressway alternative was eliminated from further consideration primarily due to its inability to enhance safety in comparison to the Build - Add Capacity Freeway and Build-Add Capacity Tolled Highway alternatives. The primary difference between these alternatives is the retention of at-grade intersections in the expressway alternative, while all at-grade intersections were converted to limited access, full interchanges in the Freeway and Tolled Highway alternatives. At-grade intersections within the existing corridor are locations with high frequencies of crashes and those intersection configurations perform poorly in safety evaluations in comparison to limited access interchanges.

The resulting screening process arrived at three reasonable alternatives for consideration for SLT. These alternatives are the No-Action Alternative, Add Capacity Freeway Alternative and Add Capacity Tolled Highway Alternative.

No-Action Alternative
The No-Action Alternative makes no capacity improvements on the existing West Section of the SLT beyond improvements that are directly related to ongoing rehabilitation and maintenance of the facility or projects that are already committed or programmed in the State Transportation Improvement Program (STIP) or the Lawrence - Douglas County MPO Long Range Transportation Plan (LRTP), designated as *Transportation 2040 (T2040)*. The No-Action Alternative is not a no cost alternative. There are several committed or programmed roadway or bridge projects identified that have been included in the No-Action Alternative. Those projects include 6th Street/K-10 Interchange, E 1200 Road (Kasold Drive)/K-10 Intersection closure, I-70 Acceleration/Deceleration Lane Improvements and Interim Safety Improvements.

The No-Action Alternative also includes planned or programmed multimodal projects such as transit and bicycle and pedestrian facilities. Identified planned facilities within the SLT ROW include potential crossings at: N 1750 Road; 6th Street; N 1800 Road at Lecompton Road/E 600 Road; along US-40; and Wakarusa Drive south of W 27th Street. While several existing Lawrence or RideKC transit routes are in proximity to the SLT corridor, no routes currently cross, or are planned to cross, SLT.

Build Alternative – Add Capacity Freeway (West Section)
This alternative would upgrade the existing two-lane undivided West Section of the SLT to a median divided fully access-controlled freeway facility with either four or six lanes, as predicated on future need. The freeway section would be consistent with the SLT East Section to provide system continuity for travelers. Existing interchanges at West 6th Street/US-40, Bob Billings Parkway, Clinton Parkway, and U.S. 59/Iowa Street would remain interchanges with ramp modifications to accommodate additional freeway travel lanes.

Under a freeway concept, existing at-grade intersections located along the SLT West Section, such as the West 27th Street/Wakarusa Drive signalized intersection, would no longer remain in-place. These at-grade intersections would be improved to new grade-separated access, to enhance safety and mobility along and across the SLT corridor. Alternatives for a new system

interchange with I-70 were considered; some of these alternatives include new service interchanges at I-70/East 600 Road/Lecompton Road and K-10/I-70/North 1800 Road to provide local access. In a separate project, N 1200 Road (County Road 458) would be connected to the future SLT improvements.

Build Alternative – Add Capacity Tolled Highway (East & West Sections)
This alternative is like the previous 'add capacity freeway' Build Alternative, however it includes the ability to collect tolls along the SLT highway through all-electronic tolling (AET). The tolled highway section would be consistent with the SLT East Section to provide system continuity for travelers. The alternative upgrades the existing two-lane undivided West Section of the SLT to a divided four or six lane fully access-controlled freeway facility. Existing interchanges at West 6th Street/US-40, Bob Billings Parkway, Clinton Parkway, and U.S.59/Iowa Street remain interchanges with ramp modifications to accommodate the median divided freeway.

Under a tolled highway concept, existing at-grade intersections located along the SLT West Section, such as the West 27th Street/Wakarusa Drive signalized intersection, would no longer remain in-place. These at-grade intersections would be improved to new grade-separated access, to enhance safety and mobility along and across the SLT corridor. Alternatives for a new system interchange with I-70 were considered; some of these alternatives consider new interchanges at I-70/East 600 Road/Lecompton Road and K-10/I-70/North 1800 Road to provide local access. In a separate project, N 1200 Road (County Road 458) would be connected to the future SLT improvements at the selected access point.

AET does not require that physical toll plazas be constructed along the SLT corridor. Rather, overhead gantries would be constructed at various points throughout the corridor to collect tolls through the AET method. Tolling concepts, such as express toll lanes, were considered as a method of tolling for the project. This includes consideration of tolling only the new, additional lanes constructed along the SLT; one lane in each direction of travel will continue to be toll-free.

The East Section of the SLT is included in this alternative because tolling the entire facility is being evaluated as part of the project. Therefore, the entire SLT corridor was evaluated to assess potential impacts of tolling as a congestion management tool. It is not anticipated that there would be any physical roadway improvements or modifications that require additional ROW on the East Section.

Preferred Alternative – Following the preparation and publication of the Draft SEIS and the public and agency comment period and consideration of the comments and input received, FHWA and KDOT selected the Add Capacity Freeway (West Section) Alternative as the Preferred Alternative. This alternative was selected due to its ability to meet the Purpose and Need for the project, provide acceptable levels of traffic operations through, and beyond, the design year, limit environmental impacts, and achieve the lowest cost solution. The Add Capacity Freeway (West Section) Alternative met the Purpose and Need for the project by:

- *Reducing congestion* – In the design year 2045 AM peak travel period, 77 of 78 segments (99 percent) were in the acceptable level of service range, while the PM peak travel period saw 76 of 78 segments fall within the acceptable level of service range. In comparison, the No-Action alternative saw only 62 percent in the AM peak period and 54

percent of segments in the PM peak period fall within the acceptable level of service range.

- *Enhancing safety* – The implementation of full access control (upgrading the Wakarusa/SLT and I-70/K-10 intersections to grade-separated interchanges), addressing horizontal deficiencies in the existing SLT alignment (through the Clinton Parkway area), and upgrading the facility from a two-lane undivided facility to a four-lane divided facility will enhance safety within the SLT corridor.

- *Promoting a multimodal transportation system* – The Add Capacity Freeway Build Alternative accommodates opportunities for enhancing the pedestrian and bicycling environment by maintaining existing trail connections across the SLT facility and providing opportunities for additional trail connections across SLT at the new Wakarusa Drive interchange. Transit, freight, and other mobility services will see benefits through reduced future congestion in the corridor and improvements that enhance user safety.

- *Supporting local and regional growth* – An upgraded SLT with additional capacity, improved operations, reduced delay, and enhanced safety design elements supports both local and regional growth through overall improved mobility.

What are people's concerns with the project? Is there controversy?

The public, stakeholders, and broader community were provided multiple opportunities to provide input and express concerns regarding this project. Public outreach has included:

- The formation of an Advisory Group made up of representatives from businesses and organizations near the corridor and those stakeholders within the community who hold interest in the future of the corridor. This group has met four separate times to discuss project progress and alternatives development, screening, and impacts;
- Five elected officials' briefings with the intent to engage the City of Lawrence, Douglas County, and City of Lecompton to keep elected officials aware of the study process and to disseminate information throughout the communities;
- Individual stakeholder meetings for those specifically impacted or concerned about the SEIS process, alignment alternatives, or project impacts;
- Four public meetings conducted to share information and gather public comments coupled with a project website that allowed submittal of public comments and concerns regarding the project;
- Focus groups were held to gather project feedback from randomly selected participants in targeted zip codes surrounding the project area; and
- Four presentations to civic and community groups as requested by interested groups.

While no areas of substantial and sustained controversy were identified with the proposed project prior to the public and agency comment period, several areas of concern were expressed through various communication channels:

- **Safety at the Wakarusa Drive/SLT intersection** - Improving safety and reducing crash severity at this intersection is a point of concern for many public meeting attendees, local residents, and local government officials.
- **Traffic noise** – Individual property owners, public meeting attendees, and Advisory Group members have expressed concern with existing noise levels generated by SLT traffic and the potential for increased noise levels with the addition of travel lanes.
- **Tolling** – Tolling generated substantial comments in opposition as a congestion management tool from attendees at public meetings, local residents, and focus group members.

During the agency and public comment period for the Draft SEIS, two groups expressed concern over traffic noise impacts and the proximity of their property, and the reasonable and feasibleness of noise barriers to mitigate for noise impacts. To address this issue, the KDOT project study team met Haskell Indian Nations University and Stoneback Homeowners Association stakeholders to discuss their concerns. As a result of these groups' concerns and other issues on similar projects in the State of Kansas, KDOT, in partnership with FHWA, is currently reviewing the KDOT noise policy and may make changes to the guiding criteria.

Are there any unresolved issues with the project? What is the approach to resolve those issues?

The proposed project is fiscally constrained, and all phases of the project are shown in the Lawrence-Douglas County MPO Transportation Plan and is planned for the 2026-2030 timeframe. However, based on future projected traffic demand and the current available funding, the Identified Preferred Alternative could be constructed in phases. Traffic forecasts assumed an opening year for the SLT corridor improvements to be 2025 and the design year to be 2045. Some proposed corridor improvements may not be warranted by future projected traffic demand until closer to the design year 2045.

As previously mentioned KDOT and FHWA, at the time of the approval of the combined Final SEIS and Record of Decision, are reviewing the KDOT noise policy and may make changes to existing criteria that determine the reasonableness and/or feasibility of the construction of noise barriers. Should the current KDOT noise policy be changed, KDOT will reassess noise impacts and mitigation for the Preferred Alternative during future design phases of the project. Noise mitigation analyses for this project under a revised KDOT noise policy may result in the construction of noise barriers as a reasonable and feasible mitigation strategy for predicted noise impacts.

Several Tribes have requested or indicated interest in the results of the Phase II archeological study to be completed during later design phases of the project. KDOT and FHWA will continue consultation and coordination with those Tribes as the project progresses to construction and will inform interested Tribes of the results of the Phase II archeological investigations.

An exact approach to phasing the improvements was not determined as part of the Final SEIS. KDOT and the study partners will continue to evaluate approaches along with options for funding the improvements as design of the project progresses. The phasing approaches will not change

the ultimate improvements comprising the Preferred Alternative, once fully implemented. If phased construction of the Preferred Alternative does occur over an extended timeframe, regular NEPA re-evaluations will be performed to determine potential environmental effects of the phased construction.

The SLT study team also recognizes the emerging and evolving technological environment that currently exists with respect to congestion management, intelligent transportation systems, and vehicular safety measures. In order to preserve flexibility for the SLT corridor for the long-term, the study team recommended preserving a right-of-way footprint in the SLT corridor to accommodate and allow the ability to implement future transportation and technology solutions. The 128-foot ROW footprint being cleared through this study and SEIS will provide that flexibility and aligns with the existing SLT East Section ROW and median. The current KDOT-controlled ROW corridor that already exists in both the SLT East and West Section corridors accommodates the 128-foot typical section with few exceptions where minor amounts of additional ROW will be acquired to achieve rural freeway geometric design standards.

Ultimately, the 128-foot wide typical section utilized for the Preferred Alternative provides the flexibility to widen and improve the SLT Corridor to an ultimate six lanes beyond the design year 2045. While only four lanes are needed to meet traffic demand through the design year, this footprint leaves flexibility to widen to six lanes when warranted in the future. This footprint is consistent with the configuration of the median area for the SLT East Section from the U.S.59/Iowa Street interchange to the 23rd Street/SLT interchange. A NEPA re-evaluation would be required before a six-lane roadway could be constructed.

While this SEIS documents the potential impacts of tolling the SLT corridor as a tool for congestion management, the study team determined that the future forecasted traffic demand does not warrant the construction of ETLs by the anticipated 2025 opening day of the SLT Corridor improvements. However, a future transportation improvement area was reserved in the median of the four-lane freeway so that ETLs could be evaluated and potentially constructed when warranted. This leaves flexibility in the corridor for the long-term by implementing ETLs or other forms of lane management strategies. This same strategy could be applied to the median of the SLT East Section so that a future ETL in each direction in the median could span both the East and West Section, as well as potentially connect to a future ETL if warranted from Lawrence to the Kansas City metro area. The consideration of ETLs in the future will require an additional separate environmental review as required by NEPA, including the consideration of potential tolling impacts at that time.

What are the major conclusions of the SEIS? Does the SEIS identify a Preferred Alternative?

The three reasonable alternatives – the No Action, Add Capacity Freeway, and Add Capacity Tolled Highway - were screened and evaluated on their ability to meet the purpose and need for the project and compared against each other based on qualitative and quantifiable engineering performance data, and traffic, safety, and social, natural, and physical environment impacts. The evaluation process revealed that in general, engineering, traffic, safety, and natural and physical environmental impacts were similar between the tolled and toll-free Build Alternatives. The

comparative evaluation process also demonstrated similar achievement and impacts between the toll-free and tolled alternatives including similar levels of traffic operations and safety achievement. The No Action alternative did not meet the purpose and need for the project and was not considered as viable for selection due to the two otherwise implementable alternatives that did meet the purpose and need for the project.

Further evaluation and comparison of the non-tolled freeway and the tolled highway build alternative demonstrated that the tolled alternative performed slightly worse than the non-tolled build alternative in a few areas:

- The tolled alternative required additional infrastructure and long-term maintenance investment, leading to lower ratings in the long-term maintenance rating and higher costs overall. However, toll revenues may offset some or all the anticipated additional costs.
- The tolled alternative had anticipated social environment impacts due to potential environmental justice concerns related to toll charges and the presence of low-income populations near the corridor, although the provision of free general purpose lanes may mitigate for potential impacts.
- The public engagement conducted through the course of the Reasonable Alternative process revealed concern over the tolled alternative and a strong preference towards the non-tolled freeway alternative.

As a result of these evaluations, the SLT Study Team recommended the **Add Capacity Non-Tolled Freeway Build Alternative** as the Identified Preferred Alternative in the Draft SEIS published for agency and public comment. After receiving comments from agencies, the public, and stakeholders, KDOT and FHWA have approved the Add Capacity Non-Tolled Freeway Build Alterative as the Preferred Alternative.

The Add Capacity Freeway alternative was selected as the Preferred Alternative due to its ability to meet the Purpose and Need for the project, provide acceptable levels of traffic operations through, and beyond, the design year, and limit environmental impacts. The Add Capacity Freeway Build Alternative met the Purpose and Need for the project by reducing congestion, enhancing safety, promoting a multimodal transportation system and supporting local and regional growth.

The Add Capacity Freeway Alternative provides a four-lane freeway facility and a full system to system interchange with access to/from I-70, SLT and Farmer's Turnpike, with free-flow movement for all ramps. It is a 128-foot wide facility that includes two 12-foot travel lanes in each direction, six-foot inside and 10-foot outside shoulders, and a 60-foot undeveloped median. The median is consistent with the East Section and is reserved for implementation of additional travel lanes in the future if warranted by traffic demand. The SLT Identified Preferred Alternative includes the following design and construction elements:

- Construction of a fully access controlled four-lane freeway by realigning and widening the existing SLT West Section with two eastbound lanes and two westbound lanes.
- Re-alignment of the SLT West Section through Clinton Parkway area (south of Bob Billings Parkway to north of Wakarusa Drive/27th Street) to remediate the existing curve geometry.

- Reconfiguration of the SLT/U.S.59 interchange to accommodate proposed future development plans in the vicinity of the existing interchange.
- Removal of the at-grade Wakarusa/27th Street intersection and replacement with a grade-separated access-controlled service interchange at a location at or near the existing at-grade intersection.
- Aligning the new, grade-separated Wakarusa interchange to connect to new Wakarusa Drive extension to County Road 458 (Wakarusa Drive extension to be constructed by others).
- Accommodation of multimodal, TSM/TDM and ITS technologies as part of SLT corridor-wide improvements.
- Potential to widen the corridor to six lanes in the future, and flexibility in future tolling and alternative approaches to lane congestion management in the median, when traffic demand warrants, as well as the opportunity to implement new or emerging transportation technologies.

The Preferred Alternative was estimated to cost $175 million in 2020 dollars. Estimated yearly life-cycle cost to maintain the proposed improvements between 2025 and 2045 is $8 million.

Three potential residential displacements and no commercial displacements are anticipated with the implementation of the Preferred Alternative. Acquisition of approximately 212 acres of partial takings and 27 acres of full takings in agricultural zoned areas are also anticipated. At this stage of design, construction easements are estimated to require the use of approximately 12 acres of agricultural zoned property.

Construction of the Preferred Alternative would impact six potentially eligible Section 4(f) properties; and no Section 6(f) properties. FHWA has concurred with the eligibility of these properties for protections under Section 4(f). The impacts to Section 4(f) properties are *de minimis* impacts, meaning the features, attributes, or activities qualifying for protection under Section 4(f) would not be adversely affected by the project. The Preferred Alternative's specific parks/recreational impacts include 13.2 acres of USACE Property, 633.8 ft^2 of Rotary Arboretum property, 5.5 acres of the Youth Sports Complex, 5.8 acres of Eagle Bend Golf Course, 14.0 ft^2 of Kanza Southwind Nature Preserve, and 31,316.8 ft of trails.

Traffic noise is predicted to result in 128 total impacts in the 2045 Design Year with implementation of the Preferred Alternative. Noise barriers were analyzed for every receptor predicted to be impacted in the Preferred Alternative. No noise barriers were determined to be both feasible and reasonable per KDOT's current traffic noise policy. Two of the noise walls were determined to not be feasible as they were unable to sufficiently provide a benefit to the impacted receptors. The remaining barriers were determined to be feasible but not reasonable, with a vast majority exceeding the maximum of $30,000 allotted per benefitted receptor. As previously noted, KDOT and FHWA are currently reviewing KDOT's noise policy and may make changes to existing criteria. Should the current KDOT Noise Policy be changed, KDOT will reassess noise impacts and mitigation for the Preferred Alternative during the design phase of the project.

Construction would permanently impact approximately 68 acres of wetlands. Wetland mitigation is proposed to take place through the purchase of credits from a mitigation bank or in-lieu fee program. On-site mitigation is not a viable option due to the lack of available appropriate land within the project study area.

The Preferred Alternative would impact approximately 29.8 acres of potential habitat for the federally threatened Northern Long-eared Bat (NLEB). Prior to construction, a bat habitat survey will be conducted, and the results submitted to the USFWS. To minimize potential impacts to the NLEB, tree clearing would take place between November 1 and March 31, outside of the NLEB roosting period.

Lastly, it is expected the Preferred Alternative will impact approximately 20 acres of floodway, 115 acres of 100-year floodplains, and 61 acres of 500-year floodplains. Floodplain impacts will be addressed during preliminary and final design of the project. Designs will comply with City of Lawrence no-rise floodplain policies.

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