

Transportation 2040 Amendment #2 for Public Review and Comment

The Lawrence - Douglas County Metropolitan Planning Organization (MPO) Policy Board approved Transportation 2040 on March 15, 2018¹ and amended it on February 18, 2021. Transportation 2040 is the blueprint for our future Transportation system. It is a vision for a healthy, safe, and efficient Transportation system, which adequately serves Lawrence, Eudora, Baldwin City, Lecompton, and unincorporated areas of Douglas County. Transportation 2040 forecasts \$1.503 billion in funding for Transportation operations/maintenance and projects addressing Transportation needs throughout Douglas County between 2017 and 2040. The plan can be amended as new projects, funding, or programs occur. The MPO's Public Participation Plan requires proposed amendments to Transportation 2040 be released for 30-day public comment and review.²

The Kansas Department of Transportation (KDOT) has requested an amendment to Transportation 2040 for one project that is included in the Kansas Department of Transportation Eisenhower Legacy Transportation Program IKE Development Pipeline Project.^{3 & 4}

- The addition of **K-33 Douglas County Reconstruction (Franklin County Line to US-56, KA-???-??, MPO #147)** is being requested to be added to the Transportation 2040 fiscally constrained project list.

Public Comment Period

All amendments to Transportation 2040 require a 30-day public comment period. The public may comment on changes being made in the amendment.

The 30-day public comment period is scheduled for January 24 to February 23, 2022.

Comments received on or before February 19 will be considered for the final document, to be presented to the Lawrence-Douglas County Metropolitan Planning Organization (MPO) Policy Board for consideration at their March 17 regular meeting, 3 pm to be hosted virtually.

The draft Transportation 2040 Amendment 2 will be available for public review at:

Online at: <https://lawrenceks.org/mpo/t2040>

Lecompton City Hall
327 Elmore Street

Lawrence Public Library
707 Vermont Street

Baldwin City Public Library
800 7th Street

Lawrence City Hall Riverfront - Planning &
Development Services Office
1 Riverfront Plaza, Suite 320

Eudora City Hall
4 E 7th Street

Written comments can be sent to mpo@lawrenceks.org or Lawrence-Douglas County Metropolitan Planning Organization, PO Box 708, Lawrence, KS 66044-0708.

¹ Access Transportation 2040 at: <https://lawrenceks.org/mpo/t2040>

² Access the Public Participation Plan at: https://lawrenceks.org/mpo/public_participation

³ Access the Kansas Department of Transportation Eisenhower Legacy Transportation Program (IKE) <https://www.ksdotike.org/>

⁴ Access the District 1 list of IKE Development Pipeline Projects at: <https://ikewebstorage.blob.core.windows.net/files/Development-Announcements-2021/D1-northeast-regional-summary.pdf>

Financial Capacity

Transportation 2040's financial plan must be fiscally constrained, which is intended to ensure the plan reflects realistic assumptions about future revenues and revenues are "reasonably expected to be available" to implement projects identified. Transportation 2040 can only include projects that can be constructed given the total funding reasonably expected to be available through 2040. Projects outside of this fiscal constraint can be included in long range plan, but only as illustrative projects for consideration with future funding sources. The development of a project to reconstruct K-33 has been identified since Transportation 2040 was adopted and needs to be added to proceed with the reconstruction.

Transportation 2040's KDOT revenue forecast anticipated an average of \$2.51 million per year over a 10-year period to complete state projects based on historical projections. Since adoption of Transportation 2040, the Kansas Legislature passed a new 10-year rolling Transportation program. The Eisenhower Legacy Transportation Program (IKE) identifies 10 years' worth funding and programs. IKE projects are different from past KDOT funding programs. IKE has a Development Pipeline so preliminary engineering work (the design and additional advance work) can begin. However, not all projects that are in the Development Pipeline are committed to be constructed. The K-33 Reconstruction project was selected to be in the IKE Development Pipeline as modernization projects.⁵

What is the IKE Development Pipeline?

IKE is a rolling program, which means major highway modernization and expansion projects will be selected every two years rather than once a decade as previous programs did. This ensures the State can address the most pressing needs and adjust to fluctuating revenues.

The IKE Development Pipeline is the name of projects which are having preliminary engineering (the design and additional advance work) completed. This is necessary before projects are committed to be constructed. Learn more about the IKE Development Pipeline at:

<https://www.ksdotike.org>

Selection of projects into the IKE Development Pipeline includes project funding outside of the anticipated revenues originally projected, so these projects are fiscally constrained when amended into Transportation 2040.

K-33 Douglas County Reconstruction (Franklin County Line to US-56, KA-??-??, MPO #147)

Description: 2.01 miles of this project are within Douglas County. Additional sections of this project are outside of the Lawrence Douglas County MPO area and therefore not included as part of this project listing. This project replaces aging pavement and widens shoulders. K-33 is seeing increased traffic due to intermodal facility truck traffic and continued development in Wellsville, KS. This segment completes the K-33 corridor and serves both KDOT District 1 and District 4.

Preliminary Engineering for the project will begin when this project is included in the Federal Fiscal Year (FFY) 2021-2024 Transportation Improvement Program (TIP).⁶ However, the project cannot be amended into the TIP until it is included in the fiscally constrained portion of Transportation 2040. This project is for the full the full reconstruction of the corridor. Total cost of the project is estimated to be \$22 million, but the segment in the L-DC MPO region is estimated to be \$5 million. The remaining \$17 million estimated cost of the project will occur in Franklin County.

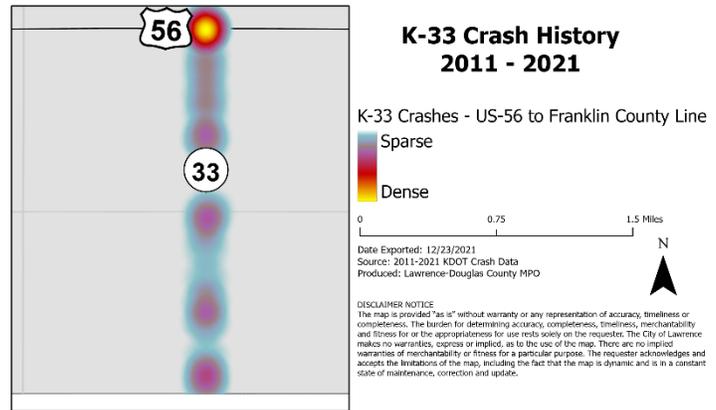
⁵ Access the Douglas County projects in the District 1 summary: <https://ikewebstorage.blob.core.windows.net/files/Development-Announcements-2021/D1-northeast-regional-summary.pdf>

⁶ Access the Transportation Improvement Program at: <https://lawrenceks.org/mpo/tip>

The K-33 Reconstruction meets the following Transportation 2040 goals:

- Preservation, Safety, & Security:** This project will replace aging pavement and widen shoulders. The addition of shoulders will improve safety along this stretch of highway. The expansion of the shoulders will provide space for people to bicycle on the shoulder removing them from moving traffic. A minimum 8 feet shoulder is recommended for this facility in the Countywide Bike Plan approved in July 2021. The 2011-2021 crash history along K-33 is shown in the heat map in Figure 1; 9 injury crashes and 26 property damage only crashes occurred. The pavement investigation conducted by the Construction and Materials division of KDOT determined pavement needed to be replaced.
- Efficient Movement of People, Goods, and Freight:** This project will provide efficient movement of people, goods, and freight as a large truck stop was constructed along K-33 north of I-35. Further, there is a new steel fabrication plan operation south of the BNSF RR on the east side of K-33.

Figure 1: K-33 Crash History



K-33 Douglas County Reconstruction (Franklin County Line to US-56)

FFY	Fund Source	Phase	Federal	State	Authorized
				\$ 5,000	DGCO portion
				\$ 17,000	FRCO portion
Federal Total:		Non-Federal Total:	\$ 22,000	Grand Total:	\$ 22,000

*The right-of-way, utility, and construction phases are not authorized at this time, meaning they are not guaranteed to be completed until funding is committed. Additional phase, year and funding source information will be updated with future TIP amendments.

Assessing Implementation

The project included in the amendment was analyzed using the newest Environmental Justice (EJ) criteria from the Federal Fiscal Year (FFY) 2021-2024 Transportation Improvement Program (TIP).⁷ This Environmental Justice criteria has been updated with the newest available data since Transportation 2040 was adopted in March of 2018.

Figure 2 shows the project and the EJ zone. Project #147 is not in proximity to the EJ zone. People who use this roadway will experience improvement pavement conditions and wider shoulders for roadside safety and which will provide space for bicycle riding. A deeper evaluation of potential environmental impacts should be conducted by KDOT as design elements are considered and implemented for the

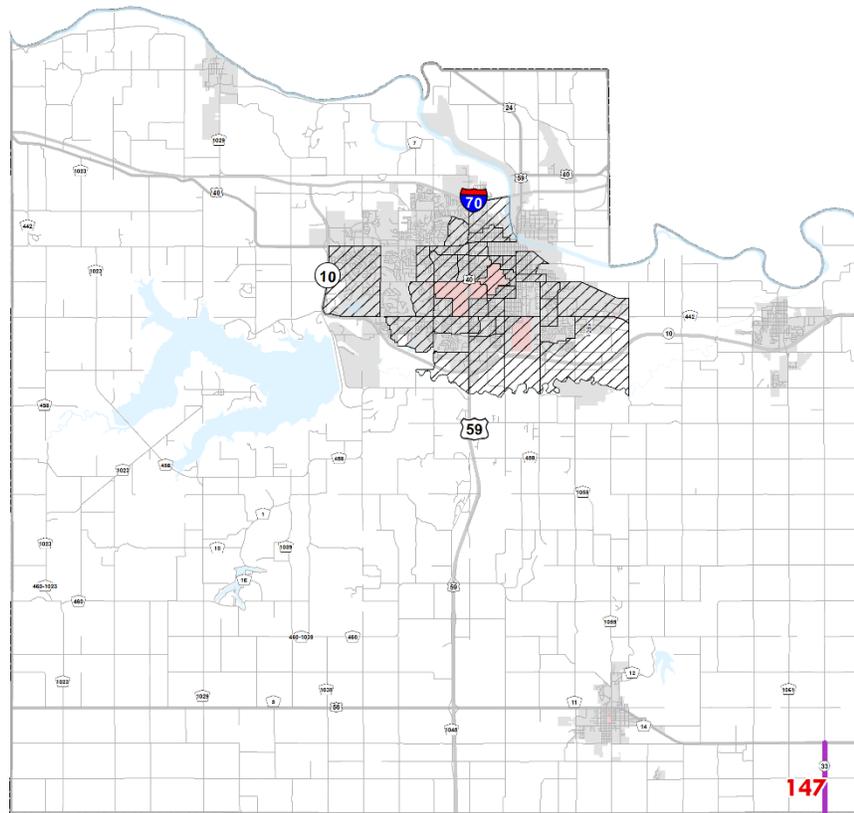
⁷ <https://assets.lawrenceks.org/mpo/tip/2021-2024TIP.pdf#page=30>

projects. It is not anticipated for the project to have any adverse disproportionate impacts on the EJ population after construction. KDOT should be sensitive to possible impacts of access for traffic control, noise, and downstream watersheds during construction.

What is Environmental Justice?

Environmental Justice (EJ) is a federal requirement that projects using federal funds be selected and distributed fairly to all people regardless of income or race, color, or national origin and that all people have equal access to the benefits afforded by federally funded projects as

Figure 2: EJ Zone and Project 147



0 3.25 6.5 Miles

— Expansion County Limits
— Modernization University
— Preservation City Limits

FFY21 TIP Environmental Justice Zone 1055 of 1055

Source: Lawrence-Douglas County MPO (2021)
 Produced: Lawrence-Douglas County MPO (2022)

Note: Project 147 (K-33 Douglas County from the Franklin County Line to US-56) is being added to Transportation 2040 in Amendment 2. The projects were evaluated with the newest Environmental Justice data from the Federal Fiscal Year (FFY) 2021 Transportation Improvement Program (TIP). The Transportation 2040 Environmental Justice zone would not have included this project in Amendment 2.

Planning Process

This amendment is the first step to begin design of the project. Before KDOT can spend funding on designing and engineering the project, the project needs to be included on the Transportation 2040 fiscally constrained project list. Projects in Transportation 2040 can be included in the Federal Fiscal Year (FFY) 2021-2024 Transportation Improvement Program (TIP), which is the short-range listing of transportation projects in Douglas County. Once the project is in the TIP, KDOT can proceed with the design phase.

Construction is not currently authorized for the project. Once KDOT is ready to move forward with constructing the project, the construction phase will be amended into a future TIP.

Transportation 2040 Pages Changing in Amendment 2

Update	Existing Page #	New Page #
Table 5.9: Historical Road & Bridge Revenues	146	146
Figure 6.8c/7.1c: Transportation 2040 Amendment 2 Mapped Projects and the EJ Zone	173 & 187	New page after 173 & New page after 188
Table 6.4: Fiscally Constrained Road and Bridge Projects – KDOT	179	180
Figure 7.6: Floodplains and Wetlands and Mapped Projects	196	196
Figure 7.7: Other Environmentally Sensitive Areas and Mapped Projects	197	197
Figure 7.8: Threatened and Endangered Species and Mapped Projects	198	198
Table 7.4: Summary of Road and Bridge Projects and EJ/Environmental Mitigation Concerns	199	200

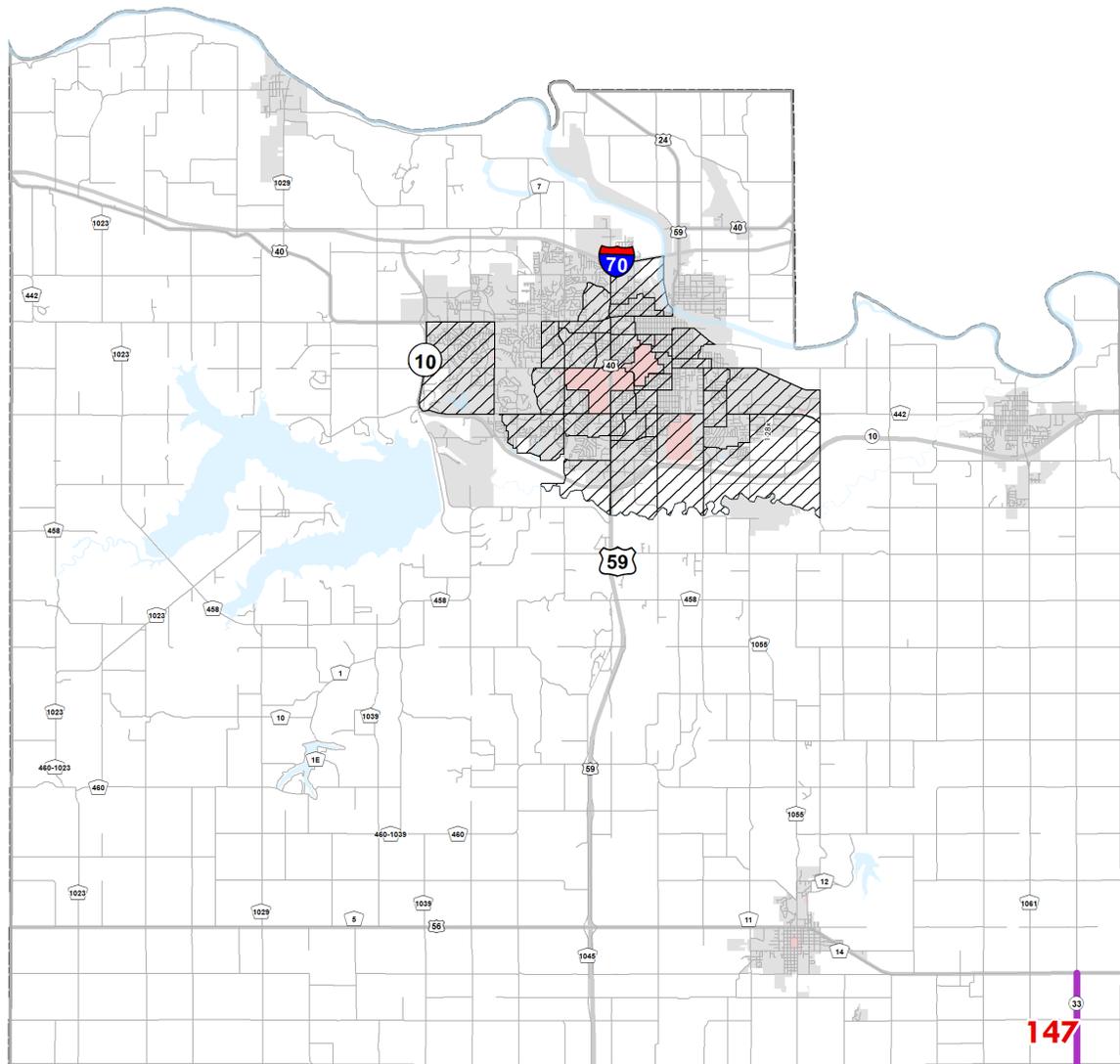
Table 5.9: Historical Road & Bridge Revenues

Table 5.9: Historical Road & Bridge Revenues

Lawrence	FY2012	FY2013	FY2014	FY2015	FY2016	5-Year Average
Surface Transportation Program	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000
Highway Safety Improvement Program	\$-	\$1,200,000	\$715,000	\$-	\$-	\$383,000
State	\$-	\$2,000,000	\$1,605,000	\$6,000	\$-	\$722,200
State Gas Tax (Special City/County Highway Fund)	\$2,525,368	\$2,491,425	\$2,575,910	\$2,669,620	\$2,708,951	\$2,594,300
Stormwater Fund	\$140,000	\$140,000	\$140,000	\$140,000	\$140,000	\$140,000
General Fund Support	\$3,824,149	\$3,956,461	\$3,894,927	\$4,038,428	\$3,966,866	\$3,936,200
Eudora						
Federal Funds Exchange	\$-	\$-	\$170,436	\$64,285	\$65,024	\$59,900
Motor Fuel Tax - State	\$160,026	\$156,224	\$160,427	\$164,399	\$168,272	\$161,900
Motor Fuel Tax - County	\$16,846	\$16,609	\$16,465	\$16,503	\$15,116	\$16,300
Mud Bond Fees	\$-	\$-	\$2,500	\$2,500	\$1,500	\$1,300
Misc	\$65	\$-	\$-	\$-	\$-	\$-
Special Highway Reserve	\$38,017	\$13,845	\$-	\$-	\$32,786	\$16,900
General Fund	\$449,370	\$343,019	\$356,438	\$356,438	\$319,119	\$364,900
Storm Drainage	\$93,235	\$27,241	\$33,784	\$33,784	\$84,324	\$54,500
Baldwin City						
Motor Fuel Tax - State	\$119,543	\$114,973	\$118,824	\$119,869	\$122,808	\$119,200
Motor Fuel Tax - County	\$12,395	\$12,187	\$10,558	\$12,034	\$111,028	\$31,600
General Fund Support	\$301,455	\$351,581	\$313,481	\$442,497	\$306,435	\$343,100
Special Highway Fund - Cash Carry	\$295,372	\$269,514	\$340,311	\$214,067	\$124,296	\$248,700
Lecompton						
Local	\$6,769	\$15,860	\$16,705	\$16,705	\$16,943	\$14,600
Douglas County						
Surface Transportation Program	\$1,879,000	\$-	\$-	\$-	\$-	\$375,800
Federal Lands Access Program	\$-	\$-	\$500,000	\$-	\$-	\$100,000
U.S. Fish and Wildlife Service	\$-	\$-	\$75,000	\$165,000	\$-	\$48,000
Kansas Local Bridge Improvement Program	\$-	\$-	\$-	\$-	\$120,000	\$24,000
State - Federal Funds Exchange	\$-	\$-	\$-	\$1,200,918	\$1,224,613	\$485,100
Local	\$3,469,300	\$3,742,679	\$3,955,242	\$4,076,797	\$4,423,101	\$3,933,400
Capital Improvement Program Allocation	\$2,625,000	\$2,582,729	\$3,554,137	\$3,666,161	\$2,070,075	\$2,899,600
State Gas Tax (Special City/County Highway Fund)	\$1,717,048	\$1,699,441	\$1,702,557	\$1,722,947	\$1,750,250	\$1,718,400
KDOT						
State Annual Average	See KDOT Table 5.10					\$2,510,000
Project Specific Funding	Funding comes with the project - a large influx of Federal and State funding is expected for the K-10/SLT projects (Project 236 & 237) in 2017-2020 and 2026-2030, as well as 2021-2025 for the IKE Development Pipeline Projects in Amendment 1 (Projects 142 & 143) & Amendment 2 (Project 147)					
KTA						
Toll Revenues	Funding comes with the projects - See Table 5.11					

Note: 5-Year Averages are rounded to nearest 100.

Figure 6.8c & 7.1c: Amendment 2 Mapped Projects and the EJ Zone



Source: Lawrence-Douglas County MPO (2021)
 Produced: Lawrence-Douglas County MPO (2021)

- Expansion
- Modernization
- Preservation
- County Limits
- University
- City Limits
- FFY21 TIP Environmental Justice Zone

Note: Project 147 (K-33 Douglas County from the Franklin County Line to US-56) is being added to Transportation 2040 in Amendment 2. The projects were evaluated with the newest Environmental Justice data from the Federal Fiscal Year (FFY) 2021 Transportation Improvement Program (TIP). The Transportation 2040 Environmental Justice zone would not have included this project in Amendment 2.

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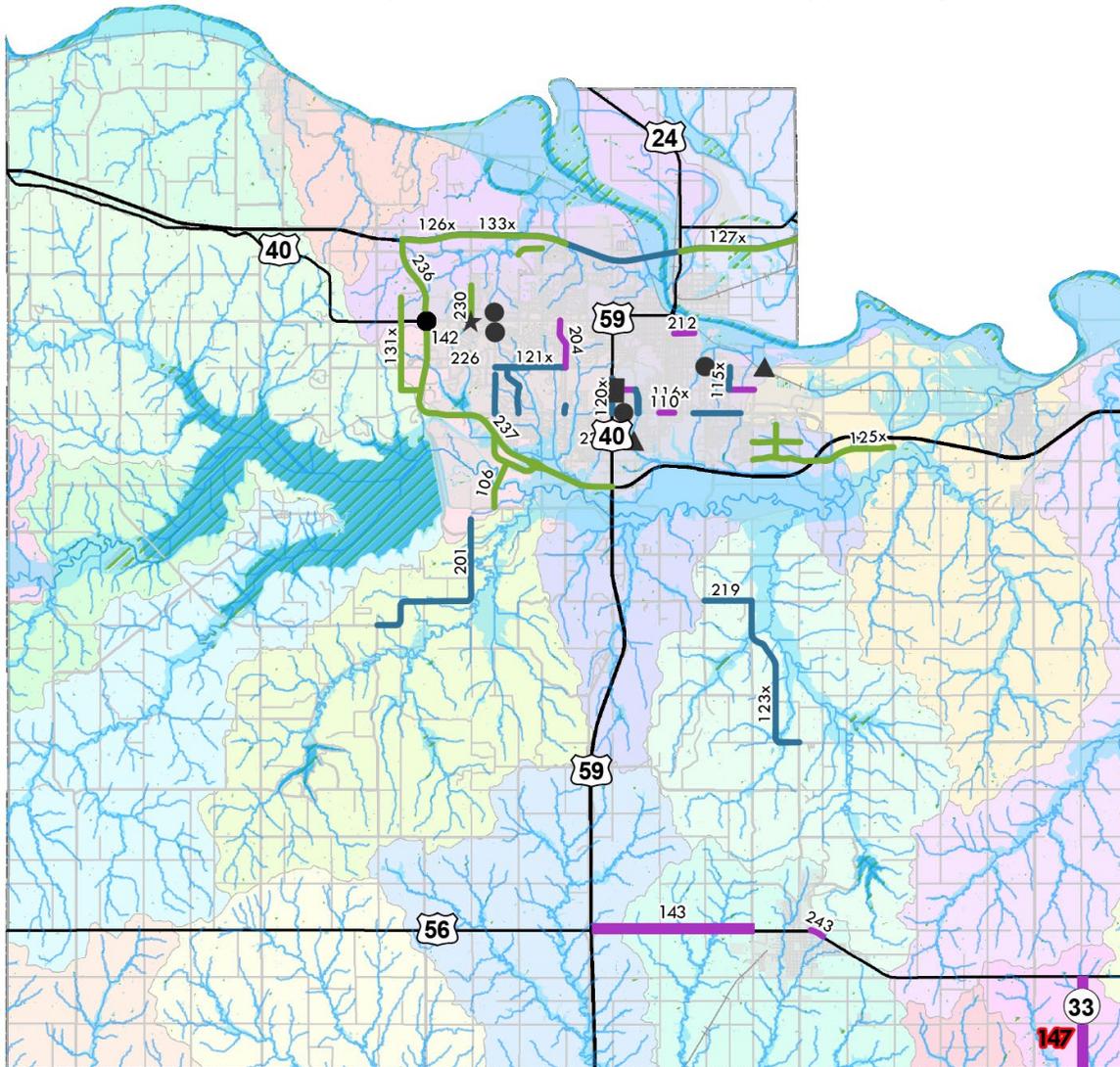
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Table 6.4: Fiscally Constrained Road and Bridge Projects

Table 6.4: Fiscally Constrained Road and Bridge Projects Continued

Kansas Department of Transportation								
#	Name	Description	FY2017-2020	FY2021-2025	FY2026-2030	FY2031-2035	FY2036-2040	Total
142	US-40/K-10 Interchange Improvement (Diverging Diamond Interchange, DD) (W. 6th St) at Lawrence	Construct a Diverging Diamond Interchange (DD)	\$-	\$12,350,000	\$-	\$-	\$-	\$12,350,000
143	US-56 Reconstruction: US-56/US-59 Junction east to 1600 Rd.	Roadway reconstruction based on 44 ft roadway with 10 ft. shoulders. Add acceleration/ deceleration lanes as warranted.	\$-	\$14,820,000	\$-	\$-	\$-	\$14,820,000
147	K-33 Douglas County Reconstruction: Franklin County Line to US-56	Reconstruct mainline and widen shoulders. Additional sections of this project are outside of the Lawrence Douglas County MPO area and therefore not included as part of this project listing. This segment completes the K-33 corridor and serves both District 1 and District 4. The total project cost is \$22,000,000	\$-	\$5,000,000	\$-	\$-	\$-	\$5,000,000
236	K-10/South Lawrence Trfwy. West Leg: I-70/K10 Junction South to 3500 ft N of K-10/US-40 Junction (KA-3634-02)	Add 2-lanes to the existing 2-lanes for a 4-Lane Freeway section. This will include reconstruction of existing interchange at I-70 (KTA). A mainline ORT (Open Road Tolling) toll plaza on K-10 is included in reconstruction of the interchange at I-70. Design not finalized.	\$4,200,000	\$-	\$68,575,000	\$-	\$-	\$73,775,000
237	K-10/South Lawrence Trfwy. West Leg: 3500 ft N of K-10/US-40 Junction, to K-10/US-59/Iowa St. Junction (KA-3634-03)	Add 2-lanes to the existing 2-lanes for a 4-Lane Freeway section. This will include existing interchanges at US-40 (6th St.), Bob Billings Pkwy., Clinton Pkwy. and US-59 (Iowa St.) There will be a new interchange approximately 0.8 miles east of the Wakarusa/27th St. intersection. The Kasold Dr./E 1200 Rd. intersection will be closed. Design not finalized.	\$10,800,000	\$-	\$149,000,000	\$-	\$-	\$159,800,000
-	O&M	General Operations & Maintenance activities	\$2,509,100	\$3,662,900	\$4,349,500	\$5,389,448	\$6,401,200	\$22,312,148
		Total Project Cost	\$17,509,100	\$35,832,900	\$222,924,500	\$5,389,448	\$6,401,200	\$288,057,148
		Projected Revenues	\$17,509,100	\$35,832,900	\$222,924,500	\$15,931,000	\$17,162,300	\$309,359,800
		Remaining Unprogrammed Revenues	\$-	\$-	\$-	\$10,541,552	\$10,761,100	\$21,302,652
		Fiscally Constrained	Yes	Yes	Yes	Yes	Yes	Yes

Figure 7.6: Floodplains and Wetlands and Mapped Projects



0 3 6 Miles

N

▲ Bridge	— Waterways	— Railroads
● Intersection	■ Water Bodies	— Highway
★ Signal	▨ Wetlands	⬡ County Limits
■ Underpass	■ 100 Year Flood Plain	⬡ City Limits
— Expansion	— Watersheds	
— Modernization		
— Preservation		

Source: Lawrence GIS & Douglas County GIS (2017), USGS National Hydrology Dataset (2014), FEMA (2015), Lawrence-Douglas County MPO (2017)
 Produced: Lawrence-Douglas County MPO (2021)

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Figure 7.7: Other Environmentally Sensitive Areas and Mapped Projects

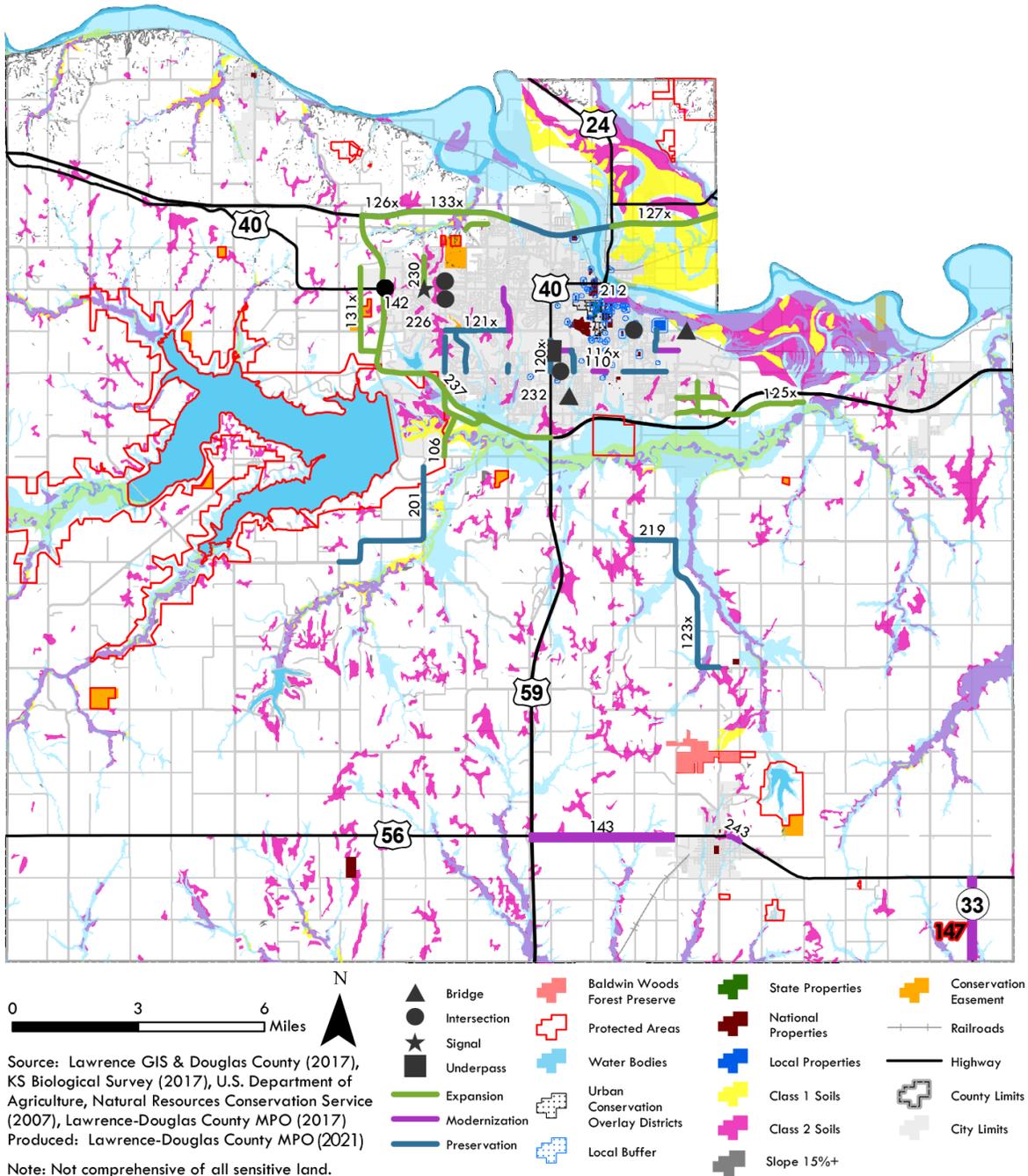
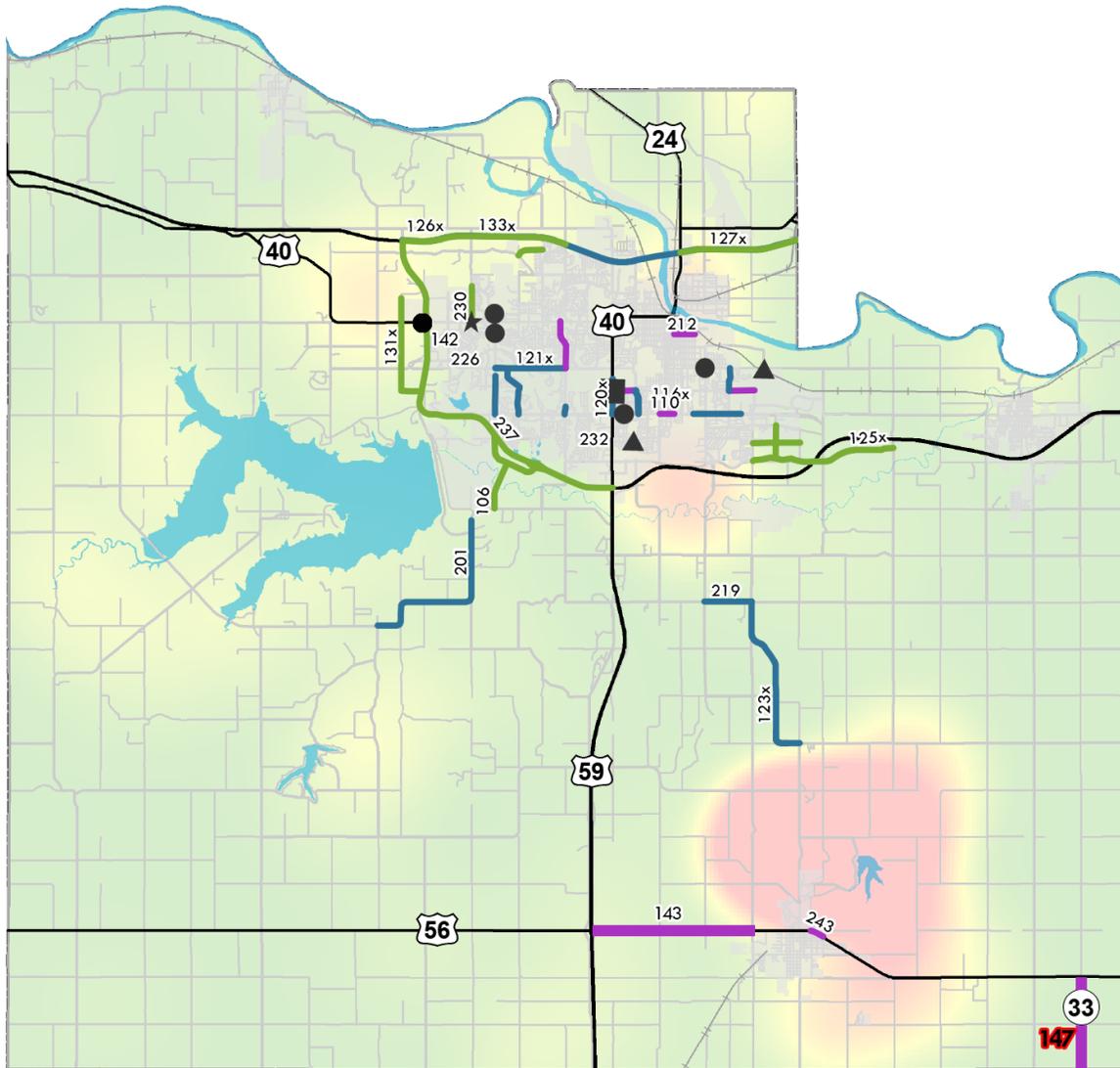


Figure 7.8: Threatened and Endangered Species and Mapped Projects



0 3 6 Miles

Threatened & Endangered Species
 High Intensity
 Low Intensity

▲ Bridge
 ● Intersection
 ★ Signal
 ■ Underpass
 — Expansion
 — Modernization
 — Preservation

— Railroads
 — Highway
 — County Limits
 — City Limits
 — Water Bodies

Source: Lawrence GIS & Douglas County GIS (2017)
 Produced: Lawrence-Douglas County MPO (2021)

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Table 7.4: Summary of Road and Bridge Projects and EJ/Environmental Mitigation Concerns

#	Name	Type	EJ Zone	Protected Area	High/Medium Threatened & Endangered Species	100 Year Floodplain	Historical Resource
106	Wakarusa Dr. Extension: Rte. 458 to planned K-10 interchange	Expansion		X		X	
107	Kasold Dr.: Clinton Pkwy. to Hyvee	Preservation					
108	Wakarusa Dr.: 18th St. to 23rd St.	Preservation					
110	23rd St.: Louisiana St. to Massachusetts St.	Modernization	X		X		X
111	23rd St.: Iowa St. to Ousdahl Rd.	Preservation	X				
142	US-40/K-10 Interchange Improvement (Diverging Diamond Interchange, at W. 6th St, Lawrence)	Intersection	X*				
143	US-56 Reconstruction: US-56/US-59 Junction east to 1600 Rd.	Modernization					
147	K-33 Douglas County: Franklin County Line to US-56	Modernization					
201	Rte. 458: E 800 Rd. to N 1175 Rd.	Preservation		X		X	
203	19th St.: Naismith Dr. to Iowa St./US-59	Modernization	X				
204	Kasold Dr.: W. 6th St. to Bob Billings Pkwy.	Modernization	X				
208	Rte. 1055 at North 700 Curve: Rte. 1055 from N 725 Rd. to E 1675 Rd.	Preservation				X	
212	9th St.: Massachusetts St. to Delaware St.	Modernization	X		X		X
214	Wakarusa Dr. (South): Research Pkwy. to 18th St.	Preservation					
219	Rte. 458: East 1500 Rd. to E 1600 Rd.	Preservation					
225	Culvert 1500-1624: N 1500 Rd./E 15th St. at E 1625 Rd. Intersection	Bridge				X	
226	Harvard Rd./Wakarusa Dr. Roundabout	Intersection					
229	19th St.: O'Connell Rd. to Harper St.	Modernization	X				
230	Queens Rd.: 6th St. to North City Limits	Expansion					

*Project 142 and 143 are included in Transportation 2040 through Amendment 1. The Environmental Justice (EJ) zones have been updated since Transportation 2040 was completed. This project was evaluated with the EJ zone developed for the Federal Fiscal Year (FFY) 2021 Transportation Improvement Program (TIP). Project 142 is adjacent to the FFY 21 TIP EJ zone as shown in Figure 7.1b. The Transportation 2040 Environmental Justice zone would not have included either project in Amendment 1. Project 147 was added in Amendment 2.