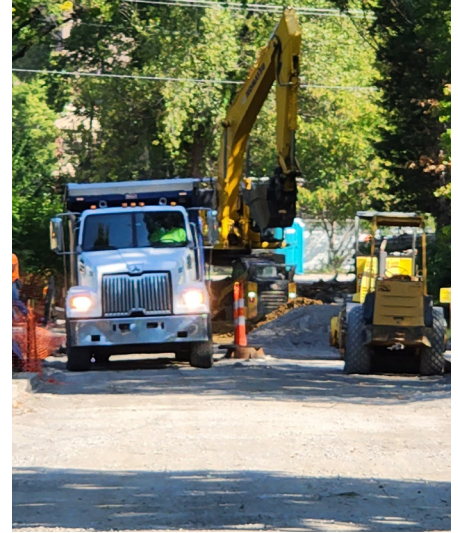


FFY 2023-2026 Transportation Improvement Program



LAWRENCE - DOUGLAS COUNTY

MPO



METROPOLITAN PLANNING ORGANIZATION

**MPO Policy Board Approval
October 27, 2022**

**Amendment 1: April 20, 2023
Amendment 2: June 15, 2023
Amendment 3: August 17, 2023**

MPO SELF-CERTIFICATION

The Kansas Department of Transportation (KDOT) and the Lawrence - Douglas County Metropolitan Planning Organization (MPO) certify that the metropolitan transportation planning process is being carried out in accordance with all applicable requirements including the following:

1. 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart; All core documents are current;
2. In nonattainment and maintenance areas, Sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 USC 7504, 7506 (c) and (d)) and 40 CFR Part 93;
3. Title VI of the Civil Rights Act of 1964, as amended (42 USC 2000d-1) and 49 CFR Part 21;
4. 49 USC 5332, prohibiting discrimination on the basis of race, color, religion, national origin, sex, disability, or age in employment or business opportunity;
5. Section 1101(e) of the Infrastructure Investment and Jobs Act (IIJA) (Pub. L. 117-58) and 49 CFR Part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
6. 23 CFR Part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts,
7. The provisions of the Americans with Disabilities Act of 1990 (42 USC 12101 et seq.) and 49 CFR Parts 27, 37, and 38;
8. The Older Americans Act, as amended (42 USC 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
9. Section 324 of Title 23 USC regarding the prohibition of discrimination based on gender; and
10. Section 504 of the Rehabilitation Act of 1973 (29 USC 794) and 49 CFR Part 27 regarding discrimination against individuals with disabilities.



Courtney Shipley, Chair

Lawrence-Douglas County MPO



Michael J Moriarty

Bureau Chief of Transportation Planning

Kansas Department of Transportation

DEFINITIONS

ADA	ADA- Americans with Disabilities Act of 1990 (P.L. 101-336) and ADA Amendment Act of 2008 (P.L. 110-325)
CAPITAL	Purchase of equipment
CDBG	Community Development Block Grant
CFR	Code of Federal Regulations
CIP	Capital Improvement Plan
CONST	Construction
EJ	Environmental Justice
FAST Act	Fixing America's Surface Transportation Act (P.L. 114-94) (Signed by President Obama on December 4, 2015)
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
ITS	Intelligent Transportation Systems
KDOT	Kansas Department of Transportation
KTA	Kansas Turnpike Authority
KU	University of Kansas, Lawrence
KUOW	KU on Wheels Transit Service
MPO	Metropolitan Planning Organization, such as the Lawrence-Douglas County Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
NHS	National Highway System
O&M	Operation and Maintenance
OPERATING	Operation of transit
PE	Preliminary Engineering
PPP	Public Participation Plan
ROW	Right-of-Way
RTAC	Regional Transit Advisory Committee
STBG	Surface Transportation Block Grant Program
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
T2040	Transportation 2040 - the Long Range Transportation Plan for the Lawrence-Douglas County region
TAC	Technical Advisory Committee
TA	Transportation Alternatives (federal grant administered by KDOT)
TIP	Transportation Improvement Program
UPWP	Unified Planning Work Program
USC	United States Code
UTIL	Utilities

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Funding Note: This report was funded in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation. The views and opinions of the authors [or agency] expressed herein do not necessarily state or reflect those of the U. S. Department of Transportation.

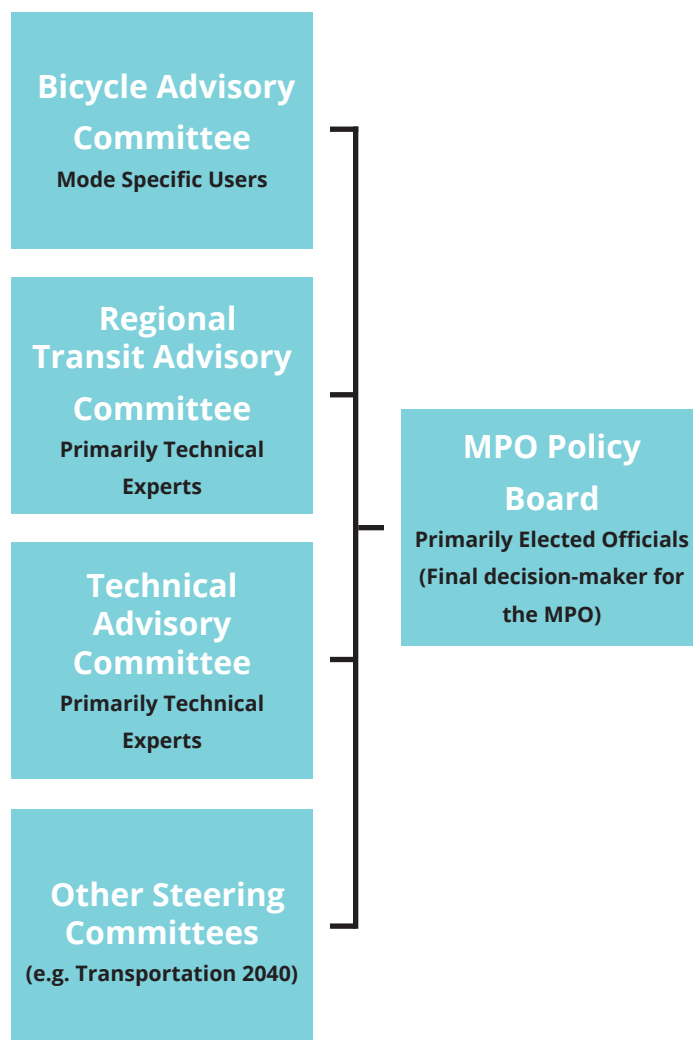
Title VI Note: The L-DC MPO hereby gives public notice that it is the policy of the agency to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice, and related statutes and regulations in all programs and activities. Title VI requires that no person in the United States of America shall, on the grounds of race, color, or national origin, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the L-DC MPO receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice under Title VI has a right to file a formal complaint with the L-DC MPO. Any such complaint must be in writing and filed with the L-DC MPO's Title VI Coordinator within one hundred and eighty (180) days following the date of the alleged discriminatory occurrence. For more information, or to obtain a Title VI Discriminatory Complaint Form, please see our website at <https://lawrenceks.org/mpo/title6>.

INTRODUCTION

...WHAT IS AN MPO?

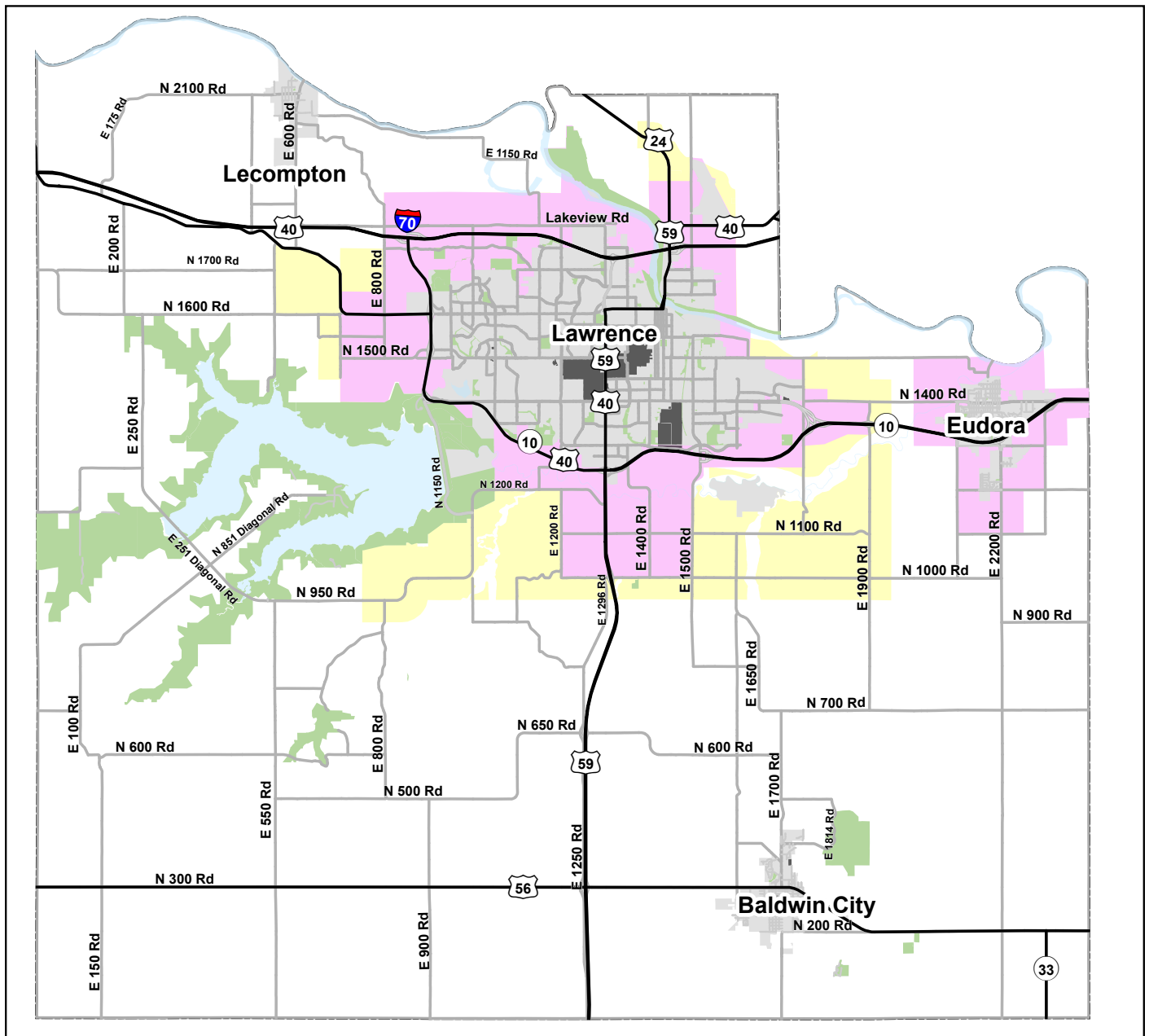
A Metropolitan Planning Organization (MPO) is a regional decision making body charged with developing a transportation plan and related policy and programming documents. The MPO is a group that is composed of representatives from many local governments that collectively discusses the transportation issues facing the metropolitan area and then makes decisions about how to address those issues. The Lawrence-Douglas County MPO is comprised of a Policy Board mainly composed of elected officials, a Technical Advisory Committee (TAC) made up of transportation and engineering professionals, the MPO Staff, and various other advisory groups that the MPO forms. Figure 1 displays the MPO structure. The MPO develops four core documents that create a regional vision for how the multimodal transportation system will function and grow – now and into the future. The MPO's core documents are the Metropolitan Transportation Plan (MTP), Transportation Improvement Program (TIP), the Unified Planning Work Program (UPWP), and the Public Participation Plan (PPP).

Figure 1: MPO Structure



The Lawrence-Douglas County Metropolitan Planning Organization (MPO) serves all of Douglas County, Kansas including Baldwin City, Eudora, Lawrence, and Lecompton (see Figure 2).

Figure 2: Lawrence-Douglas County Metropolitan Planning Area (MPA)



- Parks
- Water
- FHWA Adjusted Urban Area Boundary (UAB)
- County Limits
- University
- City Limits
- Plan 2040 Growth Tier

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Source: Lawrence-Douglas County MPO
Produced: Lawrence-Douglas County MPO



What is the TIP?





The Transportation Improvement Program (TIP) documents how the region prioritizes the limited transportation resources available among the various needs of the region.

The TIP is a short-range, multi-year listing of federally funded and/or regionally significant improvements to the region's multimodal transportation system. Projects in the TIP are designed to implement the Metropolitan Transportation Plan (MTP). The TIP must be fiscally constrained and include only projects for which funding has been identified using existing or reasonably available revenue sources. The TIP must be updated at least once every four years. The Lawrence-Douglas County TIP is updated every two years.

The TIP and Transportation 2040

The TIP and Transportation 2040 (the region's Metropolitan Transportation Plan (MTP)) are linked.¹ Transportation 2040 (T2040) is the long range transportation vision; while the TIP is the short range implementation list. For projects to be included in the TIP, they must be consistent with T2040. This ensures projects are implementing the MPO's vision for a healthy, safe, and efficient transportation system, which adequately serves Lawrence, Eudora, Baldwin City, Lecompton, and unincorporated areas of Douglas County. Community input led to the development of the T2040 vision, goals, priorities, and objectives (Table 1). These goals are implemented by the TIP. The Tracking Performance Measures section provides further details on how the two documents are linked.

Table 1: Transportation 2040 Goals and Objectives

		Goals	Objectives
Access & Choices		Enhance Transportation options and choices for improved system performance	Improve regional connectivity (urban/rural) of all modes of the transportation networks including access to desired destinations.
			Enhance transit service, amenities and facilities.
Mobility & Prosperity		Efficient movement of people, goods, and freight	Implement strategies that address system performance & improve reliability, capacity and competitiveness for regional freight.
Preservation, Safety, & Security		Prioritize preservation, safety, and security of the transportation network	Support projects and policies that improve safety and security.
			Preserve and enhance transportation infrastructure and assets.
Sustain & Enhance		Minimize adverse social, economic, and environmental impacts created by transportation	Promote density to reduce transportation costs & reduce environmental impacts of transportation.
			Reduce single occupancy vehicle trips.

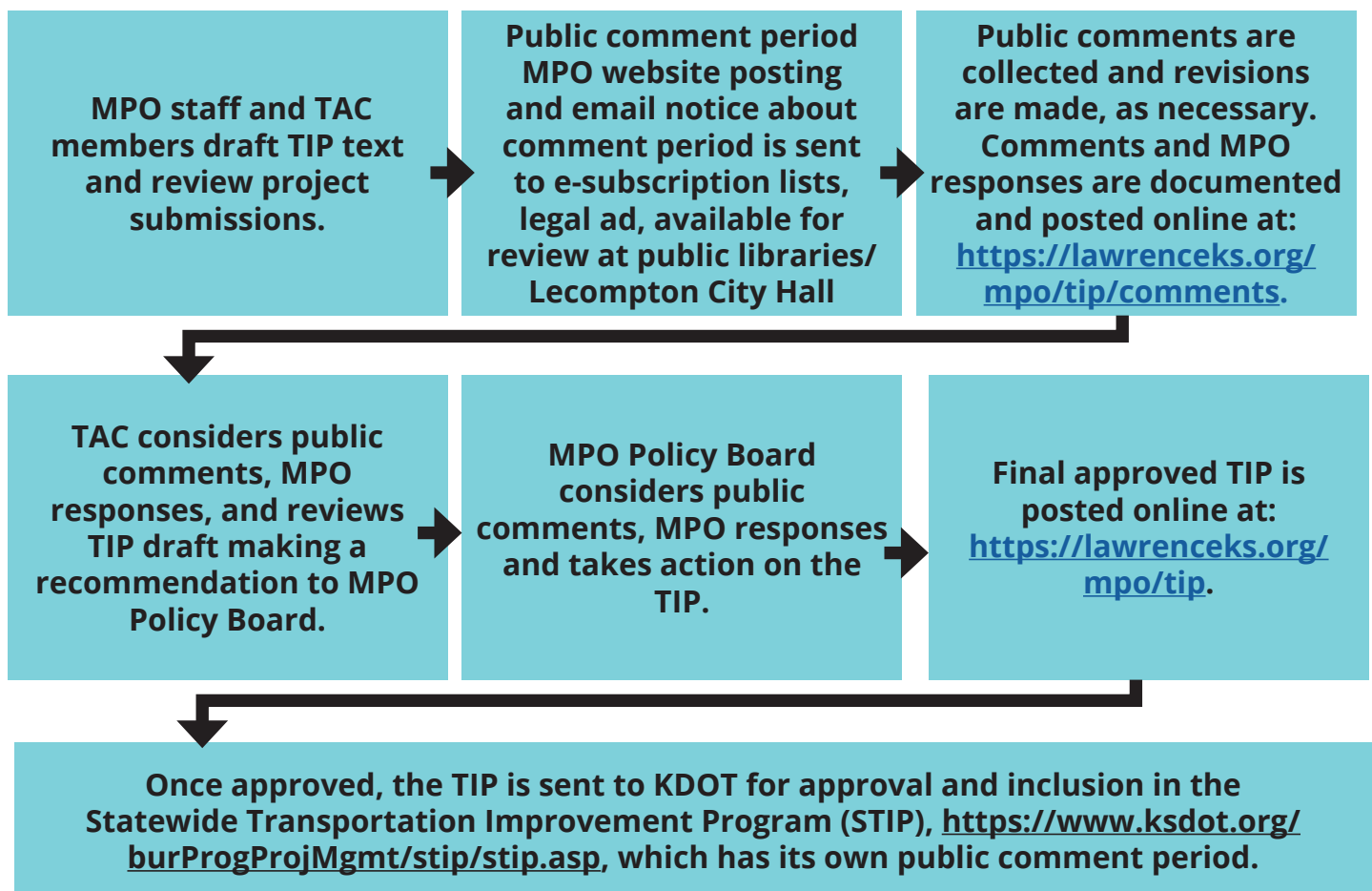
¹ <https://lawrenceks.org/mpo/t2040>

TIP Public Involvement Process

The MPO's Public Participation Plan (PPP) requires a new TIP to undergo a 30-day comment period and amendments require a 15-day public comment period.¹ The full draft TIP is available on the MPO website (www.lawrenceks.org/mpo/tip) and a printed copy is available at Lawrence City Hall, Lawrence Public Library, Eudora Public Library, Baldwin City Public Library, and Lecompton City Hall. The public is notified of the opportunities to review the draft TIP through a local newspaper advertisement, notification by email, and by staff announcements that the draft TIP is available for comment at MPO meetings. These strategies are consistent with the PPP, which addresses how everyone will be engaged in the planning process.

Public comments are posted online at www.lawrenceks.org/mpo/tip/comments and are shared with TAC and the MPO Policy Board. MPO staff reviews the comments and responds to the comment submitter and posts the MPO response in conjunction with the comment online. If comments have direct, applicable action these changes are discussed with the project sponsor (if relevant) and are incorporated into the final draft document sent to the MPO Policy Board for approval. Appendix E contains the public involvement process utilized to develop this TIP. Figure 3 displays the process.

Figure 3: TIP Public Involvement Process



¹ Details about the public participation process for the approval and amendment of the TIP can be found at www.lawrenceks.org/mpo/public_participation.

PROGRAMMING PROCESS

...HOW DO PROJECTS GET IN THE TIP?

Legislative Requirement

The current federal surface transportation legislation is called the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL). It is a five year (FFY 2022-2026) transportation program signed into law by President Biden on November 15, 2021.¹ MPOs are required to develop a TIP that is fiscally constrained and contain all capital and non-capital surface transportation projects within the MPO area that will receive federal funding, as well as other regionally significant transportation projects.²

Process for Including Projects in the TIP

The projects included in the TIP are drawn from the area's Metropolitan Transportation Plan (MTP), County and City governments' Capital Improvement Plans (CIP), as well as the State's Transportation Program known as IKE (formally called the Eisenhower Legacy Transportation Program). The MPO encourages Project Sponsors to use the factors in Appendix A to determine which projects should be prioritized for funding and inclusion in the TIP. Project Sponsors submit projects to the MPO staff for inclusion in the TIP and MPO staff work with TAC members to ensure that the projects are regionally significant and are consistent with the MTP. Figure 4 displays the process for including projects in the TIP.

The transit and paratransit projects programmed in the TIP also go through a project selection process. Lawrence Transit staff works with the MPO, FTA, KDOT, and University of Kansas - KU On Wheels (KUOW) staffs to plan and program projects in the TIP that address transit needs and issues identified in the MTP. The KDOT- Office of Public Transportation in consultation with the Urban Corridor Coordinated Transit Council makes the selection of paratransit projects to include in the TIP.

Figure 4: TIP Project Listing Submission Process



This TIP document contains projects for Lawrence Transit that collectively constitutes the Program of Projects (POP) for Lawrence Transit. This list of transit items is a prioritized list of projects used by the Lawrence Transit staff and reviewed by FTA officials. Approval of the TIP includes the approval of the POP for Lawrence Transit. The public involvement procedures used for TIP development and amendments are used to satisfy the POP requirements for FTA Section 5307 funding.

¹ IIJA was created as Public Law 117-58. The official legislation can be accessed at <https://www.congress.gov/117/plaws/publ58/PLAW-117-publ58.pdf>

² In accordance with United States Code Titles 23 and 49, the TIP document must outline at least a four-year program of: 1) All federally funded priority transportation projects, and 2) All regionally significant priority projects, regardless of funding source.

Revisions to the TIP

There are times when information about projects needs to be adjusted. Minor changes to project information are called revisions and are administrative actions with no public involvement required. Major changes are called amendments and require public involvement. Figure 5 displays the TIP amendment process.

Formal Amendments

Amendments to the TIP often consist of major changes to total project cost. Those types of fiscal changes may have impacts on the ability of the TIP and/or the MTP to remain fiscally constrained. The following types of project changes are always handled as TIP amendments:

- Addition or deletion of a project within the first four (4) years of the TIP (federal regulations require this part of the TIP to show fiscal constraint)
- Total costs of a project and/or funding amounts for a project listed in the TIP increase by more than 20% of the total project cost (in the existing TIP);
- Change to a funding source (such as changing from state funding to federal)
- Change to a project scope and/or location (project limits)

Administrative Revisions

Administrative revisions include all revisions that are not formal amendments. These revisions usually involve, but are not limited to:

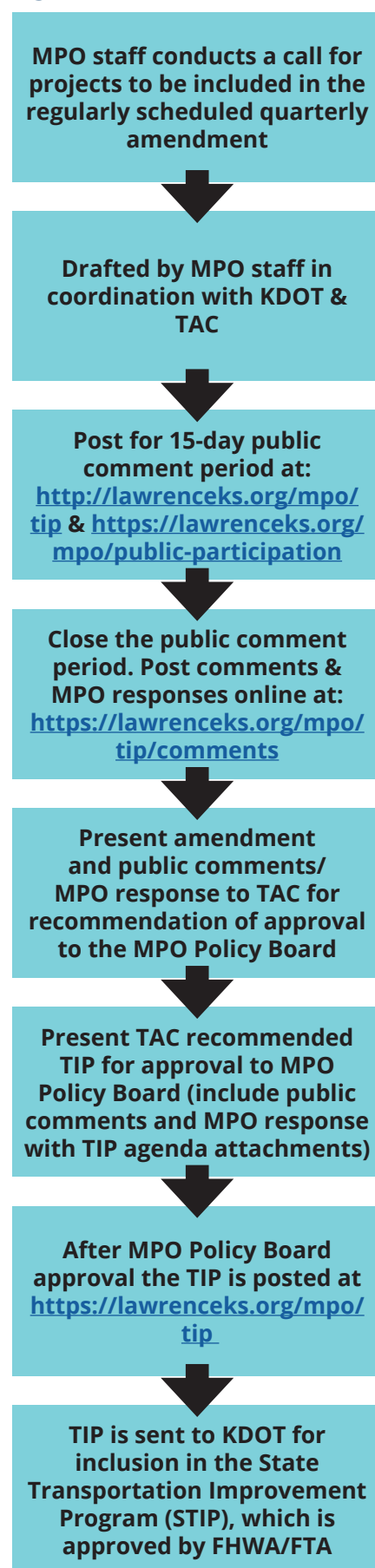
- Obvious minor data entry errors or editing corrections to text, map, and/or other graphics
- Splitting or combining projects (project scopes and costs cannot change)
- Changes or clarifying elements of a project description (with no major changes in scope)
- Change in funding program or category (such as changing from STP to HSIP funding)
- Change of program year of project within the four-year fiscally constrained TIP
- Minor change of less than 20% of total project cost

In processing administrative revisions MPO staff will:

- Enter the requested revision into the project database.
- Prepare and publish an updated TIP and post it online.
- Notify the Kansas Department of Transportation of the modifications revisions.
- Prepare a summary of the revision to be presented at the next scheduled MPO Technical Advisory Committee and Policy Board meetings (no formal action required).

Administrative Revisions require no public comment.

Figure 5: Amendment Process



Amendment Public Process

TIP amendments must be posted for public review and comment, the MPO staff must collect and review any public comments and share those comments with the TAC and MPO Policy Board to address and/or incorporate them, as necessary, before TIP approval.¹

A minimum 15-day public comment period is required for the proposed amendments, which are posted on the MPO web page. The MPO staff also places a paper copy of all TIP amendments in a binder kept at the front counter of the MPO Office for public review and comments. In addition, all TIP amendment announcements, including the printed advertisement in the newspaper, have the phone number, mailing address, and email address of the MPO staff listed on them so that anyone with questions or comments about the amendment can contact the staff to discuss it. Following the required 15-day public comment period, all comments will receive a response, either individually or in a summary form. The comments and responses will be posted at www.lawrenceks.org/mpo/tip/comments prior to distributing the TAC agenda packet (one week before the TAC meeting). The MPO staff presents these public comments and the staff response to the TAC and the MPO Policy Board before they discuss approving the amendment. There is no requirement for a public hearing.

Amendment Schedule

In order to facilitate the process of making TIP amendments, the MPO has a TIP amendment item on the TAC and Policy Board meeting agenda once each quarter (Table 2). These dates to consider TIP amendments will be coordinated with the KDOT calendar for making changes to the Statewide Transportation Improvement Program (STIP). A similar schedule will be followed for the other years covered by this TIP.

Table 2: Quarterly Schedule for TIP Amendments

TIP Amendment Request Made to MPO Staff	Public Review Period	TAC Approval	MPO Approval	STIP Approval
September 11, 2022	9/16/2022 to 10/15/2022	October 4, 2022	October 28, 2022	November 3, 2022
March 3, 2023	3/9/2023 to 3/24/2023	April 4, 2023	April 20, 2023	May 4, 2023
May 5, 2023	5/11/2023 to 5/26/2023	June 6, 2023	June 15, 2023	July 6, 2023
June 30, 2023	7/6/2023 to 7/21/2023	August 1, 2023	August 17, 2023	September 7, 2023

These dates are approximate and subject to change following discussions between MPO and KDOT staffs and/or discussions at the Technical Advisory Committee (TAC) meetings.

¹ An appropriate level of public involvement activities are outlined in the latest MPO approved Public Participation Plan found online at www.lawrenceks.org/mpo/public_participation.

FISCAL CONSTRAINT

...HOW ARE THE PROJECTS PAID FOR?

Project Funding

Projects are funded from several sources. Street and highway projects can be financed entirely by State and/or local funds or by any combination of federal, state, and local funds. The Infrastructure Investment and Jobs Act (IIJA) provides federal-aid to state and local units of government for surface transportation projects.

The use of Federal Transit Administration (FTA) funds are allocated to transit operators by formulas through the FTA Region 7 Office in Kansas City and through the KDOT Public Transportation Programs Office of Public Transit in Topeka. State transit funds from the Eisenhower Legacy Transportation (IKE) Program flows through KDOT. These funds are utilized for the operations of Lawrence Transit and various paratransit operations in the region.

KDOT administers Federal Highway Administration (FHWA) funding to local governments. The Surface Transportation Block Grant (STBG) Program and Highway Safety Improvement Program (HSIP) categories are the main federal categories or programs that cities receive through KDOT. The STBG Program combines the long-standing Surface Transportation Program and the Transportation Alternatives Program, now known as TA Set-Aside. Some of these funds provide annual allocations to cities while others require local governments to apply for project specific funding. The TA Set-Aside funds have helped build pathways, do historic preservation projects, and other projects outside the scope of traditional road and bridge improvements. They provide funding for former Transportation Alternatives (TA) program and the Safe Routes to Schools (SRTS) programs.

All of the estimated amounts of transportation project funds are included in Table 10: Estimated Revenues and Expenditures (located in the Demonstration of Fiscal Constraint section of this chapter). The estimates of reasonably expected funding levels based on financial information compiled for development of Transportation 2050 historic averages are compared to the levels of federal, state, and local funding for transportation facilities and services that are requested by KDOT and local governments for inclusion in the TIP. Comparing these expected funding levels and funding request levels allows the MPO to determine if the TIP is fiscally constrained.

Federal Funds

The federal funding for road and bridge projects in the region is generally limited to formula funding levels set by the USDOT and KDOT. Those levels have been relatively steady over the last few years with Douglas County receiving about \$440,000 and the City of Lawrence receiving about \$1.2 million annually in federal aid for roads and bridges. The three smaller cities in Douglas County (Lecompton, Eudora, and Baldwin City) have small public works departments, thus large road or bridge projects are often managed by Douglas County or KDOT.

Discretionary funding for TA Set-Aside program projects is also available on a more sporadic competitive basis. This funding is not guaranteed in any given year, but our region has received some funding and expects to receive more in the foreseeable future. These funding levels have more uncertainty and therefore, projects must have awarded funding to be included in the TIP. If and when local governments in Douglas County are awarded funding from these discretionary programs the MPO

will amend the TIP to add that funding and those projects in a timely manner.

Competitive federal transit funds are available. Lawrence Transit was awarded Low or No-Emission (Low-No) Bus funding in 2020 (\$3.76 million), 2021 (\$1.82 million), and 2023 (\$3.3 million) to purchase electric buses.

State Funds

State funds used in Douglas County for road and bridge projects are mostly limited to KDOT facilities and projects. The level of KDOT funding expended in the region varies greatly by year due largely to how much work KDOT does on the area’s major highways. Recently KDOT spent large amounts of funding to build the South Lawrence Trafficway (new K-10 alignment), and to build a new interchange along K-10 at Bob Billings Parkway/N 1500 Road. All of those projects are KDOT administered projects on KDOT routes, which typically do not significantly impact the local governments’ budgets for transportation improvements (although the City of Lawrence/Douglas County contributed \$1,000,000 for pedestrian and bicycle facility improvements to the K-10/Bob Billings Parkway interchange). Some other smaller amounts of State funding are used for local projects, such as the occasional purchase of a paratransit van with state money or a state contribution to a local bridge project.

For most local governments in the region the main KDOT funding role has been to provide federal aid to local projects, not to provide large amounts of state aid to local transportation improvements. However, the one example in the region where the state funding of a local project does make a routine and significant difference in the local budget process is state transit operating assistance. Lawrence Transit receives about \$1.3 million in state operating and capital assistance annually which is an important part of their budget.

Lawrence Transit was awarded Access Innovation and Collaboration (AIC) funding of \$677,000 for Bus Technology, Accessibility, and Branding Enhancements in 2022; \$1.6 million for construction of a Multimodal Transfer Facility in 2023, \$122,000 for construction of equitable and accessible bus stop amenities in 2023.

KDOT does not program projects in their budget documents or ask for projects to be added to the TIP unless a specific identified and reasonable funding source is identified. Therefore, KDOT requests for TIP actions represent a fiscally constrained condition for state funded and/or managed projects.

Local Funds

City of Lawrence

Local funds are comprised of the general fund, gas tax, and the ten year sales tax to improve roads/ infrastructure and transit service, which was approved in November 2008, was reapproved by Lawrence voters in November 2017. This continuation of sale taxes included 0.3% dedicated to roads/ infrastructure and fire equipment and 0.2% dedicated to funding transit service. The fire equipment portion of the 0.3% tax cannot be separated for our analysis (Table 3).

Table 3: Lawrence Sales Tax for Improvement of Roads and Transit Service Projections (Shown in \$1,000s)

Source	Tax	Actual Collection		Projected Collection			
	Percentage	2021	2022	2023	2024	2025	2026
Roads/Infrastructure & Fire Equipment	0.30%	\$6,354	\$6,989	\$7,338	\$7,485	\$7,635	\$7,785
Transit	0.20%	\$4,236	\$4,660	\$4,893	\$4,990	\$5,090	\$5,192
Total		\$10,590	\$11,649	\$12,231	\$12,475	\$12,725	\$12,977

Source: City of Lawrence Finance Department. 2022-2026 are projected. The fire equipment portion of the .30% sales tax can't be removed from the roads/infrastructure.

These sales taxes will expire in April of 2029; new referendums will need to be approved to ensure this funding is available in the future. With the addition of those taxes the City has a local dedicated funding source for road and transit improvements that has made funding more predictable. The City is utilizing the sales tax revenue to design and program some large road projects that were not financially feasible prior to the tax. Some projects are now funded with this sales tax revenue and some are still funded with a combination of federal aid and local matching funds.

The City also receives obligation authority for STP funds from KDOT. Lawrence has elected to exchange their available obligation authority of federal funds for state funds at an exchange rate of \$0.90 in state funds for every \$1.00 in federal obligation authority, per KDOT policy. On average over the last four years, the City has received \$1.1 million in KDOT's federal funds exchange program.

City of Eudora, Baldwin City, and City of Lecompton

The City of Eudora became a second class city under Kansas statutes in 2010. With the designation, Eudora now receives an annual distribution of STP funding through KDOT. Similar to the City of Lawrence, the City of Eudora County receives obligation authority for STP funds from KDOT at an exchange rate of \$0.90 in state funds for every \$1.00 in federal obligation authority. This amount of federal funding is typically small (\$75,000 on average).

Baldwin City, Eudora and Lecompton have used federal funding sporadically and worked with Douglas County staff to administer major road and bridge projects using federal aid. This cooperation between the small cities and the County for the use of federal aid is expected to continue through the life of this TIP.

Douglas County

Just like Lawrence and Eudora, Douglas County receives obligation authority for STP funds from KDOT at an exchange rate of \$0.90 in state funds for every \$1.00 in federal obligation authority. On average over the last four years, the County received \$442,000 in KDOT's federal funds exchange program, and \$50,000 in federal sources such as U.S. Fish and Wildlife Service funding.

The County can also apply for TA Set-Aside funds if it chooses to do so. The County does not operate transit service and does not receive federal or state transit funding.

Douglas County has a CIP that is updated on a regular basis and other sources of local funds. Over the last five years, local funding averages \$9.3 million a year. Due to mental health initiatives and expansion of the jail, the Board of County Commissioners reduced the annual CIP allocations for roads and bridges by \$1 million for 2019. This annual reduction is anticipated to continue through 2023. The County programs its projects in their CIP and as needed the County staff coordinates its capital planning with the MPO staff for TIP development and changes.

Transit and Paratransit Funds

The public transit operations in Lawrence are composed of a mix of services operated by the Lawrence Transit and the University of Kansas service called KU on Wheels (KUOW). KUOW transit operations are primarily supported by student fees. The City transit service uses state operating assistance, state capital assistance, federal capital assistance, and federal operating assistance to keep buses running. Lawrence also uses local sales taxes to pay for transit. Lawrence Transit is projecting to receive \$3.8 - \$4.0 million annually over the next five years in flexible federal formula Section 5307 subsidies to provide transit services. This annually allocated funding can be used for capital projects (e.g., buying new buses), but most of it has been used for operations. Due to the COVID-19 pandemic

the U.S. Congress authorized the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which is providing \$3.9 million in operating funds over four years and \$3 million in capital funds currently programmed in 2025. Lawrence Transit was awarded Low or No-Emission (Low-No) Bus funding in 2020 (\$3.76 million), 2021 (\$1.82 million), and 2023 (\$3.3 million) to purchase electric buses. Lawrence Transit was awarded Access Innovation and Collaboration (AIC) funding of \$677,000 for Bus Technology, Accessibility, and Branding Enhancements in 2022; \$1.6 million for construction of a Multimodal Transfer Facility in 2023, \$122,000 for construction of equitable and accessible bus stop amenities in 2023.

Capital assistance levels are typically much more unpredictable than operating assistance, but when the transit capital funding will be needed is fairly predictable because it is based on the life span of buses. That creates a dilemma for transit operators who in the past relied heavily on large discretionary grants from the FTA for bus fleet replacements. Now those large grants are gone and our transit operators are adjusting to buying only a few new buses at a time when funding is available instead of buying many buses on one large grant funded order.

Lawrence Transit uses a relatively constant mix of federal and local funds for operations. Under the State Eisenhower Legacy Transportation (IKE) Program some state operating assistance is received each year.

The paratransit providers in the region provide all or most of their own funds to operate their services, and in some cases they use FTA or state grants for vehicle purchases. As part of these vehicle purchases the agency requesting the federal funds is required to provide a local match, and those vehicles are programmed in the TIP.

Operation and Maintenance (O&M) Funding

The fiscal constraint analysis looks primarily at capital projects (e.g., building roads and bridges, buying buses, etc.); however, that is not a complete picture of funding for the region's multimodal transportation system. The funds needed for operating and maintaining transport facilities and services also has to be reviewed. An adequate level of Operations & Maintenance (O&M) funding needs to be budgeted to maintain the federal-aid highways and local roads in the region. Short-changing the O&M budgets to make the road improvement projects fiscally feasible is not appropriate. This funding is divided into Roads/Bridges and Transit.

Road and Bridge Operations and Maintenance Funding Estimates

The expenses for O&M work items are usually paid for by the local government that owns and operates the road and the utility providers that use the road rights-of-ways.

In the case of major highways, KDOT is the owner of the road and maintains those facilities.

The major exception to this is the Kansas

Turnpike/I-70 which is owned and operated by the Kansas Turnpike Authority. Some of the state highway mileage in Lawrence is provided on City streets through a city connecting link agreement between KDOT and the City. That agreement includes quarterly payments from KDOT to the City to pay a share of the maintenance costs for those route segments carrying a state highway. KDOT plays a role in the maintenance of some major roads in the region, but major highway mileage comprises a small percentage of total roadway mileage. Most of the road mileage in Douglas County is owned by the

O&M consists of routine things such as pothole patching, minor repairs to pavements and curbs, snow removal, striping and marking, utility work and patching, electrical repairs, tree trimming, mowing, signal repairs, sign replacement, bridge maintenance, and other minor work tasks.

County, City or Township Governments that levy local property taxes and sometimes other taxes to pay for road maintenance and operations.

The cities and county also receive a portion of the state gas tax collected in Douglas County. This amount of funding is anticipated to continue during the years covered by this TIP. The state supplied pass through gas tax funding is supplemented by local government funds to make up the bulk of Lawrence and Douglas County roadway O&M budgets.

The City of Lawrence has a 2023 O&M budget for its road system of \$14.2 million paid with by state gas tax funds, local infrastructure sales tax, general fund, and federal sources. Douglas County had a 2023 O&M budget of \$3.9 million paid with a mixture of state gas tax, Capital Improvement Program allocation, Federal Funds Exchange with the State, and local and federal sources. The City of Eudora has a 2023 O&M budget of \$1.0 million which is funded by Federal Funds Exchange with the State, motor fuel Tax, general fund, and other fees and funds. The cities of Baldwin City and Lecompton did not provide 2023 O&M figures but their 2021 budgets were \$460,000 and \$7,000, respectively. It is expected that the local governments in the region will continue to fund their O&M budgets in order to adequately maintain their transportation infrastructure during this TIP period. Table 4 shows the KDOT, Douglas County, the City of Lawrence, Eudora, Baldwin City, and Lecompton O&M expected cost per lane mile.

Table 4: Road and Bridge O&M (Shown in \$1,000s)

	KDOT	County*	Lawrence	Eudora	Baldwin City***	Lecompton	Total
Anticipated funding per lane mile	\$ 2.89	\$ 8.38	\$ 16.29	\$ 14.19	\$ -	\$ 2.36	
Lane Miles**	204	464	891	73	61	13	1,707
2023	\$ 590	\$ 3,888	\$ 14,197	\$ 1,042	\$ -	\$ 32	\$ 19,748
2024	\$ 611	\$ 4,024	\$ 12,146	\$ 1,079	\$ -	\$ 33	\$ 17,892
2025	\$ 632	\$ 4,165	\$ 12,348	\$ 1,116	\$ -	\$ 34	\$ 18,296
2026	\$ 654	\$ 4,311	\$ 14,017	\$ 1,156	\$ -	\$ 35	\$ 20,173
Total	\$ 2,487	\$ 16,388	\$ 52,708	\$ 4,393	\$ -	\$ 133	\$ 76,109

*Does not include Township roads or road maintenance funds, but County maintenance costs does include bridges and large culverts on township roads that are maintained by the County.

**Lawrence and KDOT lane miles calculated in 2022. County, Eudora, Baldwin City, and Lecompton lane miles from 2020 TIP

***No data provided

Transit Operations and Maintenance Funding Estimates

Transit operations are funded with a mix of local, state, and federal funds. The transit system in Douglas County is a coordination of services owned and operated by the City of Lawrence, the University of Kansas, social service agencies that run paratransit vehicles, and Johnson County Transit that operates a commuter bus service called the K-10 Connector, which traverses between Lawrence and locations in Johnson County. K-10 Connector funding is programmed in the TIP produced by the Mid-America Regional Council (MARC), which is the MPO for the Kansas City area.

Transit O&M is the cost of operating transit service and maintaining the transit fleet. For example, this includes fuel, driver salaries, and purchasing transit vehicles.

Lawrence Transit

Lawrence Transit service uses federal, state, and local funds for operating and routine maintenance expenses for their fixed-route and complementary paratransit services. Lawrence Transit needs to pay for its services when they are rendered (i.e., when the buses are rolling, burning fuel and labor costs are incurred) by maintaining a cash flow to pay for its vendors and staff as they work. Unlike a road or a bridge that can be bonded for twenty years and paid for over time, transit operations are typically not paid for with debt service. For 2023, Lawrence Transit has an O&M budget of approximately \$17.7 million which is funded with a mixture of federal aid, state aid, and local funds. Due to the COVID-19 pandemic the U.S. Congress authorized the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which is providing \$3.9 million in operating funds over four years. Table 5 displays the Lawrence Transit O&M. The levels of O&M expenses and revenues shown in Table 5 are anticipated to continue through the four-year fiscally constrained period (2023-2026) since the CARES act funding is being spread out over 2020-2025).

Operations and maintenance funding for Lawrence Transit is shown in Table 9: Estimated Revenues and Expenditures (located in the Demonstration of Fiscal Constraint section of this chapter).

The O&M costs are deducted from the estimated revenues; therefore, funding for O&M projects are not available for other projects and the TIP is fiscally constrained.

Table 5: Lawrence Transit O&M (Shown in \$1,000s)

FFY	2023	2024	2025	2026	Total
Total O&M	\$ 10,534	\$ 10,692	\$ 10,853	\$ 11,016	\$ 43,095

*Based on information provided by Lawrence Transit

University of Kansas (KU on Wheels) Transit Funding

The University of Kansas also provides transit services that are available to the general population as well as KU students and staff. Funding for the KU on Wheels system includes a considerable amount of funding that supports fixed route transit in Lawrence. The KU transit funding information listed in Table 6 gives a more complete and realistic account of the size and costs of the transit system in Lawrence.

The KU on Wheels (KUOW) and the Lawrence Transit services are integrated into one route and schedule system and both of these operations accept each other's bus passes. Even though these two services are coordinated into one route map and schedule book, only Lawrence Transit receives FTA funding. The KUOW part of the public transit system in Lawrence is fiscally constrained by the revenues provided by fees that support it.

Table 6: KU on Wheels (KUOW) O&M (Shown in \$1,000s)

	2023	2024	2025	2026	Total
Total O&M	\$ 2,526	\$ 2,526	\$ 2,526	\$ 2,526	\$ 10,103

*Based on information provided by KU on Wheels

Paratransit

The paratransit providers in the region mostly provide their own funds to operate their services, but in some cases receive a small amount of state operating subsidy from KDOT. Typically, this state operating assistance is only a few thousand dollars per year for each operator. Most of the federal and state aid to paratransit is for vehicle purchases. During the COVID 19 pandemic, additional funds were provided to agencies in 2020-2022. No pandemic related funding is budgeted for 2023 or beyond.

The MPO staff works closely with the KDOT transit staff, the Regional Transit Advisory Committee (RTAC), and the Urban Corridor Coordinated Transit Council members to keep informed about the status of paratransit operations and funding issues. Those paratransit issues are discussed in more detail in the Coordinated Public Transit-Human Services Transportation Plan (CPT-HSTP).¹

The combined O&M budget in the region, including Lawrence Transit, KU on Wheels, and the various paratransit providers, is \$30.3 million in 2023 (Table 7).

Table 7: Regional Transit O&M (Shown in \$1,000s)

FFY	2023	2024	2025	2026	Total
Total O&M	\$ 30.25	\$ 28.47	\$ 28.95	\$ 30.89	\$ 119

*Based on information provided by transit providers

Year of Expenditure (YOE) Inflation Factor

In addition to having a clearly identified source of funding for each roadway, bridge, transit, and enhancement project listed in the TIP, the project sponsor must also present their project costs in year of expenditure (YOE) dollars. This allows the project estimates to take into account inflation and should make them more realistic than using constant dollars. This fiscal analysis uses an annual inflation factor of 1.5% (which matches the Inflation Factor planned for T2050) for all TIP projects to determine the estimated costs in the year of expenditure. This inflation factor has been used since 2012 when it was developed by KDOT for use with federal aid projects. TAC and MPO Policy Board members agreed to the YOE inflation rate.

Demonstration of Fiscal Constraint

TIPs are required to have a four year fiscally constrained program of projects. Fiscally constrained means enough financial resources are available to fund projects listed in the TIP. Fiscal constraint also makes good sense.

The MPO accounts for O&M expenditures "Off the Top" from available funding before projects are programmed (Table 8). This ensures there is enough funding to operate, maintain, and preserve the existing transportation system (including roads, bridges, and transit services), which is a high priority of T2040.

¹ Access this plan at <https://www.lawrenceks.org/mpo/transit>.

Table 8: Funding Available for Projects after Accounting for all O&M Expenditures (in \$1,000s)

Subtracting O&M "Off the Top" (in thousands)					
	FFY 2023	FFY 2024	FFY 2025	FFY 2026	Total
Anticipated Funding	\$ 99,406	\$ 197,882	\$ 74,672	\$ 47,073	\$ 419,033
Anticipated O&M Expenditures	\$ 32,830	\$ 30,438	\$ 31,667	\$ 33,373	\$ 128,307
Funding Available for Projects	\$ 66,576	\$ 167,444	\$ 43,006	\$ 13,700	\$ 290,726

This TIP document provides realistic cost and funding estimates for improvement projects in the first two years of the fiscal constraint period (2023 and 2024). Predicting the revenues which will be available and costs for projects in the second half of that period (2025 and 2026) are a more speculative exercise.

Financial data was collected as part of development of Transportation 2050. The Funding Summary in Table 9 shows the level of projected funding from reasonable sources and the total level of project funding programmed in this TIP are balanced and this TIP is fiscally constrained. The fiscal breakdown by funding source for all roadway and transit projects listed in the 2023-2026 TIP are shown in the table. The projects are shown by year and funding source.

Table 9: Funding Summary (in \$1,000s)

Anticipated Funding (in thousands)						
Funding Source		FFY 2023	FFY 2024	FFY 2025	FFY 2026	Total
Transit	Federal	\$ 7,617	\$ 10,603	\$ 4,105	\$ 7,805	\$ 30,130
	State	\$ 6,620	\$ 1,721	\$ 3,222	\$ 1,722	\$ 13,284
	Local	\$ 23,979	\$ 10,691	\$ 11,891	\$ 11,234	\$ 57,794
Non-Transit	Federal	\$ 5,079	\$ 1,788	\$ 2,795	\$ 1,803	\$ 11,465
	State	\$ 37,847	\$ 35,559	\$ 212,442	\$ 38,733	\$ 324,580
	Local	\$ 36,235	\$ 37,865	\$ 34,043	\$ 25,937	\$ 134,080
Transit Total		\$ 38,215	\$ 23,014	\$ 19,218	\$ 20,761	\$ 101,208
Non-Transit Total		\$ 79,161	\$ 75,212	\$ 249,280	\$ 66,473	\$ 470,126
Grand Total		\$ 117,376	\$ 98,225	\$ 268,498	\$ 87,235	\$ 571,334

Anticipated funding is based on the revenue assumptions being prepared for Transportation 2050 and information provided by jurisdictions. Local transit funds include KU on Wheels funding. 1.5% growth is applied to the funding and the 2017 Lawrence sales tax referendum (funds roads/infrastructure and transit service) is assumed to be renewed thru 2050 for these projections. Advanced Construction Conversion converts state funding to federal funding.

Estimated Expenditures by Year and Funding Source (in thousands)							
Funding Source			FFY 2023	FFY 2024	FFY 2025	FFY 2026	Total
Transit	Federal Funds	FTA 5307	\$ 7,176	\$ 4,606	\$ 5,067	\$ 5,574	\$ 22,423
		FTA 5310	\$ -	\$ -	\$ -	\$ -	\$ -
		FTA 5311	\$ -	\$ -	\$ -	\$ -	\$ -
		FTA 5339	\$ 1,624	\$ -	\$ -	\$ -	\$ 1,624
	State-PT		\$ 1,155	\$ 1,155	\$ 1,155	\$ 1,155	\$ 4,620
	Local		\$ 10,526	\$ 4,590	\$ 5,261	\$ 5,340	\$ 25,717
Non-Transit	Federal Funds	CDBG	\$ 300	\$ 300	\$ -	\$ -	\$ 600
		HRRR	\$ -	\$ -	\$ -	\$ -	\$ -
		HSIP	\$ 1,500	\$ 500	\$ -	\$ -	\$ 2,000
		NHPP	\$ -	\$ -	\$ 13,739	\$ -	\$ 13,739
		STP	\$ -	\$ -	\$ -	\$ -	\$ -
		TA	\$ 1,500	\$ 2,558	\$ -	\$ -	\$ 4,058
	State		\$ 8,604	\$ 40,705	\$ (13,739)	\$ 3,000	\$ 38,570
	State AC Conversion*			\$ (500)	\$ (13,739)	\$ -	\$ (14,239)
	Local		\$ 14,580	\$ 15,306	\$ 5,400	\$ 6,000	\$ 41,286
	Transit Total			\$ 20,481	\$ 10,351	\$ 11,483	\$ 12,069
Non-Transit Total			\$ 26,484	\$ 58,869	\$ (8,339)	\$ 9,000	\$ 86,014
Grand Total			\$ 46,965	\$ 69,220	\$ 3,144	\$ 21,069	\$ 140,398

*State AC Conversions are negative because the State is receiving federal reimbursement for funds spent in previous years (as noted in the project listing).

** While CDBG funding is not required to be in this TIP, it is part of #507 which includes various bike/sidewalk/ADA ramps projects in Lawrence.

4 | PERFORMANCE MEASURES ...HOW ARE WE DOING?

The Moving Ahead for Progress in the 21st Century Act (MAP-21) and Fixing America's Surface Transportation (FAST) Act requires Performance-Based Planning and Programming (PBPP) in the development of the MTP and TIP. Transportation 2040 (T2040) is the region's MTP. The TIP acts as the implementation arm of T2040. T2040 has 26 performance measures: 12 federally mandated and 14 community established. The T2040 performance measures promote the overarching goals shown below. Table 10 illustrates which T2040 goals the TIP's projects are implementing.

Table 10: Projects addressing Transportation 2040 Goals

#	Project	Enhance transportation options & choices for improved system performance	Efficient movement of people, goods, & freight	Prioritize preservation, safety & security of the transportation system	Minimize adverse social, economic & environmental impacts created by transportation
106	Wakarusa Drive Extension	x	x	x	
117	Naismith Drive Reconstruction: 19th St. to 23rd St.	x	x	x	
142	US-40/K-10 Interchange Improvement (Diverging Diamond Interchange)	x	x	x	
143	US-56 Reconstruction: US-56/US-59 Junction east to 1600 Rd.			x	
144	South Iowa St. Traffic Signal Improvement Project	x	x		
146	11th St. - Indiana to Ohio; Louisiana - 11th to 12th Reconstruction	x		x	
147	K-33: Wellsville to U.S. 56 (N. 200th Road) junction	x	x	x	
148	Bob Billings - Kasold to Wakarusa Dr.	x	x		
149	Wakarusa Dr. Reconstruction - Harvard Rd to 6th Street	x	x		
214	Wakarusa Dr. Reconstruction: Research Pkwy to 23rd St	x	x	x	
219	Rte 458/1055 Improvements: E 1500 thru E 1600			x	
230	Queens Road: 6th to North City Limits	x	x	x	x
234	23rd Street Reconstruction: Haskell to East City Limits	x	x	x	x
236	SLT/K-10 West Leg in Douglas County	x	x	x	x
237	SLT/K-10 West Leg in Douglas County	x	x	x	x
243	US-56 Improvements: Eisenhower St to 1st St		x	x	
248	Bridge 0964-1000 replacement			x	
249	Repair bridge #071 on K-10 in Douglas County			x	
300	6th and Massachusetts St Traffic Signal Improvement Project		x		
401	Independence Inc., FTA 5311 Operating & Capital	x		x	x
403	Lawrence Transit Capital Assistance	x	x	x	x
410	Lawrence Transit Central Station	x	x	x	x
412	Lawrence Transit Operating Funds	x	x	x	x
416	Lawrence Transit Electric Buses Phase 1	x			x
417	CARES Act Operating Funds	x	x	x	x
419	American Rescue Plan (ARP) Operating Assistance	x	x	x	x
420	Lawrence Transit Electric Buses Phase II	x			x
421	Zero-Emissions Transition Plan				x
422	Equitable and Accessible Bus Stop Amenities	x	x	x	x
423	AIC - Multimodal Transfer Facility Elements	x	x	x	x
424	AIC - Bus Technology, Accessibility, and Branding Enhancements	x			
425	Electric Buses Phase III	x	x		x
426	Microtransit Pilot	x	x		
507	Various Lawrence Bike/Sidewalk/ADA Ramps Projects	x	x	x	x
509	West Baldwin Pedestrian/Bike Connectivity Project	x	x		x
513	Lawrence Safe Routes to School Phase 2 (2021)	x	x	x	x
514	Naismith Drive Mobility Enhancement	x	x		x
515	Lecompton Sidewalk Loop Project: Historic Loop & Grand Loop Connectivity	x	x	x	x
516	Lawrence Loop Shared Use Path: Michigan St. to Sandra Shaw Park	x	x	x	x
517	Baldwin City Sidewalk Gap Project	x	x	x	x
518	Eudora 10th St. Sidewalk Expansion	x	x	x	x
520	Lawrence Loop - Iowa Crossing	x		x	
521	Lawrence Loop Trail - Kaw River - 7th street to Constant Park	x			
522	Lawrence Loop Trail from Queens Rd to Kasold	x			
600	Various Railroad Safety Projects in the Region		x	x	
605	DGCO: High Friction Surface Treatment			x	
607	Massachusetts Street - 14th to 23rd Street Multi-Modal Improvements	x	x	x	x
608	Signal Improvement at US24/US40/US59 near Lawrence			x	

PBPP is accomplished by tracking performance measures, setting data-driven targets for each measure, and selecting projects to help meet the targets. The federal performance measures include:

- Safety
- Pavement & Bridge
- System Performance
- Transit

Each federal measure has target setting requirements, which provides the MPO guidance for how our region is doing to achieve the measures. The MPO developed a rolling schedule to update performance measure data based on data availability and when targets are to be reported to KDOT. The most up-to-date data and targets can be found at <https://lawrenceks.org/mpo/t2040/pm>. Through the TIP development process, project sponsors were asked a series of questions to determine if the project would assist the MPO in reaching the region's desired targets. For this discussion it is important to note, there are thirty (30) projects included in the fiscally constrained TIP.

Safety Targets

Safety targets are based on a five-year rolling average and annual targets are set. Table 11 displays the current safety targets for 2022. Safety data is obtained from KDOT each August and targets are determined for the next target year in October. Safety performance measures reflect data for all public roads including the number of fatalities, rate of fatalities per 100 million Vehicle Miles Traveled (VMT), number of serious injuries, rate of serious injuries per 100 million VMT, and number of non-motorized fatalities and serious injuries.

Table 11: L-DC MPO T2040 Safety Targets - 2022

Safety		2022
9)	Number of fatalities	14.9
10)	Rate of fatalities per 100 million VMT	1.1
11)	Number of serious injuries	24.1
12)	Rate of fatalities per 100 million VMT	2.4
13)	Number of non-motorized fatalities & serious injuries	3.3

TIP Projects Working Towards Safety Goals

All but one of the non-transit projects have some component to address safety concerns. They are categorized as intersection projects, railroad projects, standalone bicycle/pedestrian projects, roadway projects including bicycle and pedestrian elements, and roadway projects. Table 12 displays the projects per category and describes the safety impact of the improvement. Further, common improvements which improve safety and corresponding projects are listed below.

Common Improvements That Impact Safety

Separated or dedicated facilities for pedestrians and bicyclists

According to a report from the Office of the New York City Mayor, when protected bike lanes are installed, injury crashes for all road users (motorists, pedestrians, and bicyclists) typically drop by 40% and by more than 50% in some locations.¹ (Example: Project #512: Lawrence Loop Shared Use Path)

Dedicated vehicle turning movements lanes

By creating two way left turn lanes, vehicles are separated from through traffic improving traffic flow and reduce the potential risk of rear end crashes. (Example: Project #214: Wakarusa Dr. Reconstruction, Research Pkway to 23rd St)

Access management

¹ Howard Wolfson Memo on March 21, 2011 regarding Bike Lanes - http://www.nyc.gov/html/om/pdf/bike_lanes_memo.pdf

Access management improves safety by separating access points so turning and cross movements occur at fewer locations. (Example: Project #234: 23rd Street Reconstruction: Haskell Ave to East City Limits)

Roundabouts

According to AASHTO Highway Safety Manual, installing roundabouts reduce the types of crashes where people are seriously hurt or killed by 78-82% when compared to conventional stop-controlled and signalized intersections.¹ (Example: Project #230: Queens Road: 6th St to North City Limits)

Meeting design standards

The safety of the roadway can be improved by flattening roadside slopes and making geometric improvements to bring roadways up to design standards. (Example: Project #219: Route 458 Improvements, E 1500 to E 1600 & Route 1055, N940 to N1000)

Table 12: Projects addressing L-DC MPO Safety Targets

Roadway Projects that Improve Safety		
#	Project	Safety Improvement
106	Wakarusa Drive Extension	Remove arterial traffic from recreational areas, reduce fire and medical response time, and decrease vehicle use
117	Naismith Drive Reconstruction: 19th St. to 23rd St.	Add bike facilities
142	US-40/K-10 Interchange Improvement (Diverging Diamond Interchange)	Geometric improvements
143	US-56 Reconstruction: US-56/US-59 Junction east to 1600 Rd.	Widen shoulders and acceleration/deceleration lanes
146	11th St. - Indiana to Ohio; Louisiana - 11th to 12th Reconstruction	Reconstruction of pavement, sidewalks and bike improvements
147	K-33: Wellsville to U.S. 56 (N. 200th Road) junction	Widen shoulders will allow for increased safety for bicyclists
148	Bob Billings - Kasold to Wakarusa Dr.	Separated ped/bike facility
149	Wakarusa Dr. Reconstruction - Harvard Rd to 6th Street	Separated ped/bike facility
214	Wakarusa Dr. Reconstruction: Research Pkwy to 23rd St	Sidewalks, bike facilities, two way left turn lanes
219	Rte 458/1055 Improvements: E 1500 thru E 1600	Provide paved shoulders and flatten roadside slopes
230	Queens Road: 6th to North City Limits	Geometric improvements to meet collector street standards, sidewalks, and bike facilities
234	23rd Street Reconstruction: Haskell to East City Limits	New sidewalks, bike facilities, turn lanes, and access management
236	SLT/K-10 West Leg in Douglas County	Additional through lanes, a new grade separated interchange and reconstructed interchanges, and a reduction of traffic conflicts and decision making points
237	SLT/K-10 West Leg in Douglas County	Additional through lanes, a new grade separated interchange and reconstructed interchanges, and a reduction of traffic conflicts and decision making points
243	US-56 Improvements: Eisenhower St to 1st St	Geometric Improvements
605	DGCO: High Friction Surface Treatment	Applying high-friction road surface treatment helps maintain pavement friction reducing crashes.

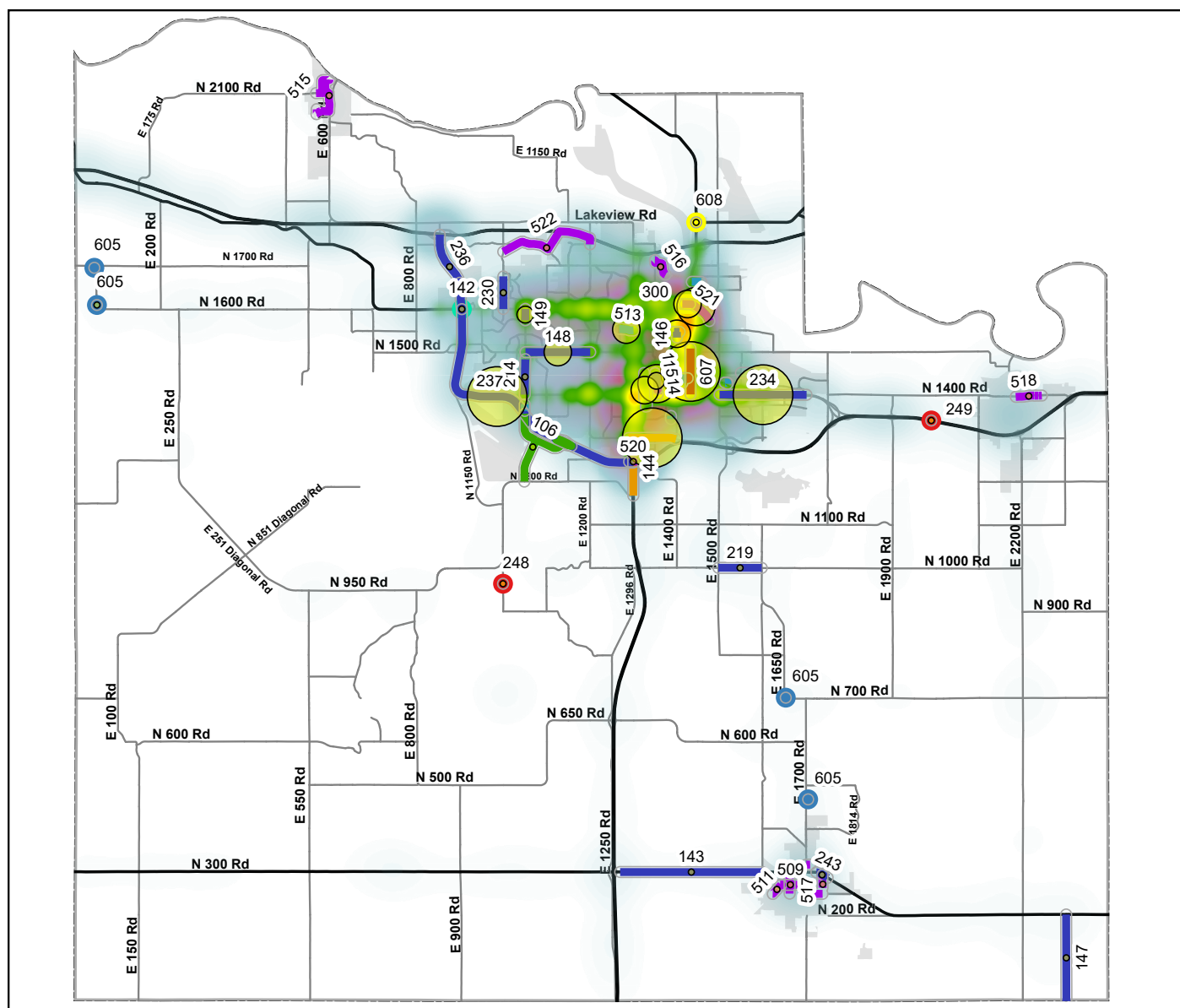
¹ FHWA's Office of Safety - <https://safety.fhwa.dot.gov/intersection/innovative/roundabouts>

Table 12: Projects addressing L-DC MPO Safety Targets (Continued)

Bridge Projects that Improve Safety		
#	Project	Safety Improvement
248	Bridge 0964-1000 replacement	Replace with wider bridge
249	Repair bridge #071 on K-10 in Douglas County	Bridge repair
ITS Projects that Improve Safety		
#	Project	Safety Improvement
300	6th and Massachusetts St Traffic Signal Improvement	Pedestrian activation buttons and vehicle detection
144	South Iowa St. Traffic Signal Improvement Project	Improve traffic flow
608	Signal Improvement at US24/US40/US59 near Lawrence	Improve visibility
Bicycle & Pedestrian Projects that Improve Safety		
#	Project	Safety Improvement
507	Various Lawrence Bike/Sidewalk/ADA Ramps Projects	Provide dedicated space for pedestrians and bicyclists
509	West Baldwin Pedestrian/Bike Connectivity Project	ADA compliant sidewalks and separated ped/bike facility
513	Lawrence Safe Routes to School Phase 2 (2021)	Sidewalk
514	Naismith Drive Mobility Enhancement	Separated ped/bike facility
515	Lecompton Sidewalk Loop Project: Historic Loop & Grand Loop Connectivity	Sidewalk
516	Lawrence Loop Shared Use Path: Michigan St. to Sandra Shaw Park	Separated ped/bike facility
517	Baldwin City Sidewalk Gap Project	Sidewalk
518	Eudora 10th St. Sidewalk Expansion	Sidewalk
520	Lawrence Loop - Iowa Crossing	Grade separated SUP crossing
521	Lawrence Loop Trail - Kaw River -7th street to Constant Park	Separated ped/bike facility
522	Lawrence Loop Trail from Queens Rd to Kasold	Separated ped/bike facility
607	Massachusetts Street - 14th to 23rd Street Multi-Modal Improvements	Ped/bike facility
Railroad Projects that Improve Safety		
#	Project	Safety Improvement
600	Various Railroad Safety Projects in the Region	This grouped project is for railroad safety projects that improve safety hazards at public railroad crossings. It targets known railroad safety issues throughout the region.

The MPO examined January 2012 to August 2022 crash data provided by KDOT to determine high crash locations. As shown in Figure 6, there were 18,613 crashes in this time frame within 1/8 mile of the TIP project locations, compared to a total of 28,576 total crashes in Douglas County.

Figure 6: TIP Projects at Crash Locations

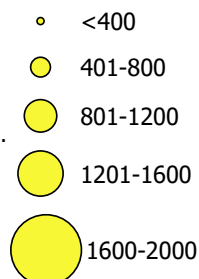


Overall Crash Heat Map



*The overall crash heat map includes pedestrian and bicycle crashes as well.

Vehicle Crashes within 1/8 Mile of TIP Project

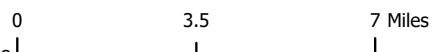


- Fiber
- Pedestrian/Bicycle
- Road
- Road, Bridge
- Safe Routes to School
- Safety

- Interchange
- Signal
- Surfacing
- Bridge
- City Limits
- County Limits

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Date Exported: 09/13/2022
Source: KDOT 2022
Produced: Lawrence-Douglas County MPO



Pavement & Bridge Targets

Pavement data categorizes pavement as Good and Poor. Good condition suggests no major investment is needed, while poor condition suggests major reconstruction investment is needed. Pavement condition is evaluated by measuring International Roughness Index (IRI), Present Serviceability Index (PSR), Cracking Percent, Rutting, and Faulting (uneven slabs of concrete). Bridge data is based on deck area. Condition is determined by the lowest rating of deck, superstructure, substructure, or culvert. National Highway System (NHS) bridge condition and Interstate and Non-Interstate NHS pavement condition data is provided by KDOT. The bridge targets are shown in Table 13, while the pavement targets are in Table 14.

Table 13: L-DC MPO T2040 NHS Bridges by Deck Area Targets - 2022

Bridge	2022
14) Percentage of NHS bridges by deck area classified as in GOOD condition	95.8%
14) Percentage of NHS bridges by deck area classified as in POOR condition	0.0%

Table 14: L-DC MPO T2040 Interstate and Non-Interstate NHS Pavement Condition Targets - 2022

Pavement	2022
18) Percentage of pavements of the Interstate System in GOOD condition	96%
18) Percentage of pavements of the Interstate System in POOR condition	0%
19) Percentage of pavements of the Non-Interstate NHS in GOOD condition	58%
19) Percentage of pavements of the Non-Interstate NHS in POOR condition	3%

TIP Projects Working Towards Pavement & Bridge Goals

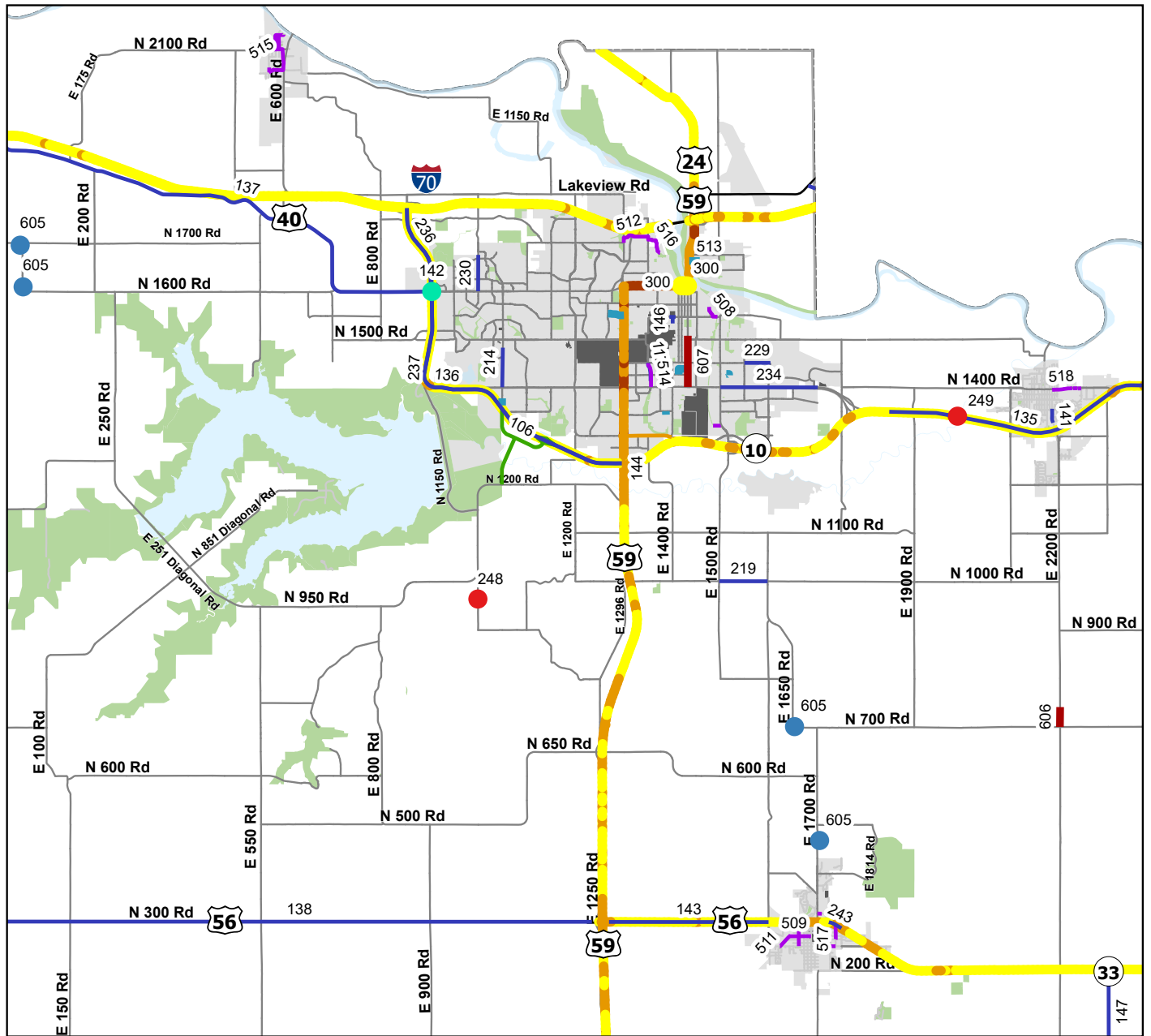
There are two bridge projects in the TIP. One is a NHS bridge - #249 the K-10 bridge over the Wakarusa River. Improving the overall quality of bridges in Douglas County will assist in achieving the local performance measures of improving non-NHS bridges. Table 15 displays the projects which improve pavement conditions.

Table 15: Projects Improving Pavement Conditions

#	Project	Year	Length	Cost
106	Wakarusa Drive Extension	2019-2025	2	\$ 12,750
117	Naismith Drive Reconstruction: 19th St. to 23rd St.	2023-2024	0.5	\$ 4,300
142	US-40/K-10 Interchange Improvement (Diverging Diamond Interchange)*	2021-2025	0	\$ 16,556
214	Wakarusa Dr. Reconstruction: Research Pkwy to 23rd St	2022-2023	1.47	\$ 7,300
219	Rte 458/1055 Improvements: E 1500 thru E 1600	2020-2021	1.6	\$ 3,609
230	Queens Road: 6th to North City Limits	2015-2022	0.75	\$ 3,800
234	23rd Street Reconstruction: Haskell to East City Limits	2020-2022	2.01	\$ 10,850
143	US-56 Reconstruction: US-56/US-59 Junction east to 1600 Rd.*	2021-2025	3.75	\$ 1,200
148	Bob Billings - Kasold to Wakarusa Dr.	2025-2026	1.5	\$ 13,100
146	11th St. - Indiana to Ohio; Louisiana - 11th to 12th Reconstruction	2022-2023	0.25	\$ 1,750
607	Massachusetts Street - 14th to 23rd Street Multi-Modal Improvements	2023-2024	1.1	\$ 1,600
147	K-33: Wellsville to U.S. 56 (N. 200th Road) junction	2022	2.01	\$ 2,000
149	Wakarusa Dr. Reconstruction - Harvard Rd to 6th Street	2024-2025	0.25	\$ 1,250
	* Project on NHS			

Figure 7 displays TIP projects and NHS pavement condition. It assists in determining if projects will assist in improving "poor" pavement and achieving our pavement condition targets. The other projects which are not on the NHS will help achieve the local performance measures of improving non-NHS major roads (collector and above) pavement condition.

Figure 7: Fiscally Constrained TIP Projects and Pavement Data



2021 Pavement Data

- | | | |
|-----------------|-------------------------|-------------------------|
| ● Signal | ● Parks | — Pedestrian/Bicycle |
| — Good Pavement | ● Surfacing | — Road |
| — Fair Pavement | — Pedestrian/Bicycle | — Road, Bridge |
| — Poor Pavement | — Road | — Safe Routes to School |
| ● Bridge | — Road/Bridge | — Safety |
| ● Interchange | — Safe Routes to School | — Fiber |
| | — University | |
| | — Water | |
| | — City Limits | |
| | — County Limits | |

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 Date Exported: 09/16/2022
 Source: KDOT 2021
 Produced: Lawrence-Douglas County MPO

System Performance Targets

Reliability performance measures relate to person-miles traveled on the Interstate and Non-Interstate NHS, as well as truck travel time reliability on the Interstate. This equates to consistency or dependability of travel times. This data all comes from National Performance Management Research Data Set (NPMRDS) RITIS. The Interstate (I70) is maintained by the Kansas Turnpike Authority (KTA). Table 16 displays the system performance reliability targets.

Table 16: L-DC MPO T2040 Reliability Targets - 2022

System Performance	2022
6) Percent of the Person-Miles Traveled on the Interstate That Are Reliable (LOTTR)	99%
6) Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable (LOTTR)	99%
8) Truck Travel Time Reliability (TTTR) Index on the Interstate system	1.07

TIP Projects Working Towards System Performance Goals

There are no TIP projects that are part of the interstate system. Thus there are no specific projects working to achieve the person-miles traveled and truck travel time reliability targets pertaining to the interstate (T2040 PM 6 and 8). Furthermore, the data is provided as a set number by from NPMRDS RITIS and there is no way to determine which portion of the roadway is assigned a specific score. There are five (5) projects on the Non-Interstate NHS, but none of them improve the person-miles traveled reliability (LOTTR) as none of the projects are adding auto capacity.

Transit Targets

Transit State of Good Repair measures include the Useful Life Benchmark (ULB) for revenue and non-revenue vehicles by auto type including full-sized buses, cutaway buses, vans, minivans, SUVs, and automobile. The percentage of assets with a condition rating below 3 on the FTA Transit Economic Requirements Model (TERM) scale is another federal performance measure, but there are no federally funded transit facilities in the MPO area. The MPO supports the State's target, but collected transit state of good repair information for local planning purposes only (Table 17).

Table 17: L-DC MPO T2040 Transit State of Good Repair Targets (Useful Life Benchmark – ULB)

Transit State of Good Repair	Vehicle Type	Target
16) Revenue Vehicles	Full-sized bus	25%
	Cutaway bus	25%
	Van	25%
	Minivan	25%
16) Non-Revenue Vehicles (Equipment)	Minivan	75%
	SUV	75%
	Automobile	75%
17) Percentage of assets with a condition rating below 3 on the FTA Transit Economic Requirements Model (TERM) scale	There are no federally funded facilities	

The Useful Life Benchmark (ULB) is the expected service years for a vehicle class. For example, a minivan is expected to last for at least 8 years. The MPO supports the State's targets. Targets set in the State TAM Plan are used for federal reporting. The L-DC MPO Target are for local planning purposes only.

Table 18 displays the Lawrence Transit 2020 Safety Targets. Lawrence Transit accepted the State's targets for all of the measures except system reliability. Safety events are comprised of collisions, fires, hazardous material spills, act of nature (Act of God), evacuation, or [other safety occurrence not otherwise classified] occurring on transit right-of-way, in a transit revenue facility, or in a transit revenue vehicle and meeting established NTD thresholds. These measures will be updated yearly.

Table 18: Lawrence Transit Safety Targets - 2020

Mode of Transit Service	Fatalities		Injuries		Safety Events (Total)	Safety Events		System Reliability (Vehicle Revenue Miles/Failures)
	Fatalities (Total)	(per 100 Thousand Vehicle Revenue Miles)	Injuries (Total)	(per 100 Thousand Vehicle Revenue Miles)		(per 100 Thousand Vehicle Revenue Miles)		
Fixed Route Bus Service	0	0	2	0.2	2	0.2		40,000
Demand Response Bus Service	0	0	2	0.2	2	0.2		40,000

Source: 2020-State Sponsored Agency Safety Plan Lawrence Transit and Kansas Department of Transportation. Lawrence City Commission 8/18/2020.

TIP Projects Working Towards Transit Goals

According to information provided by project sponsors, five (5) out of fourteen (14) transit projects will help address the transit useful life benchmark (shown in Table 19). The projects include purchasing new transit vehicles and preventative maintenance on vehicles. By purchasing these new vehicles the overall percentage of vehicles at or exceeding the Useful Life Benchmark (ULB) will be reduced (Table 19). Further, the Lawrence Transit Capital, Operating, and Electric Buses projects will work towards meeting the Lawrence Transit specific System Reliability Transit Safety target shown in Table 18. These projects are shown in Table 20.

Table 19: Projects addressing L-DC MPO Transit Useful Life Benchmark Targets

#	Project	How the Project Improves Transit ULB
401	Independence Inc., FTA 5311 Operating & Capital	Vehicle preventative maintenance/Purchase New Vehicle
403	Lawrence Transit Capital Assistance	Purchase paratransit vehicles
412	Lawrence Transit Operating Funds	Vehicle preventative maintenance
416	Lawrence Transit Electric Buses Phase 1	Replaces five diesel powered buses with electric buses
420	Lawrence Transit Electric Buses Phase II	Replaces two diesel powered buses with electric buses

Table 20: Projects addressing Lawrence Transit Safety Targets

Transit Projects that Improve Safety		
#	Project	Safety Improvement
419	American Rescue Plan (ARP) Operating Assistance	Transit safety

Progress towards Targets

In summary, based on information available, the MPO believes we are on track to meet the goals set in Transportation 2040.

Evaluating Performance over Time

Federal performance measures will be tracked annually in the performance measure report – T2040 Appendix F: System Performance Report, which will be updated on a rolling basis based on when data is available. View the most current data at the performance measure website:

<https://lawrenceks.org/mpo/t2040/pm>. Performance measures will be evaluated as part of the annual report process and may be altered as the MPO Policy Board deems necessary (based on the Public Participation Plan (PPP)). Evaluating performance measures will be updated when a full TIP update is completed or if regulations have changed requiring an update.

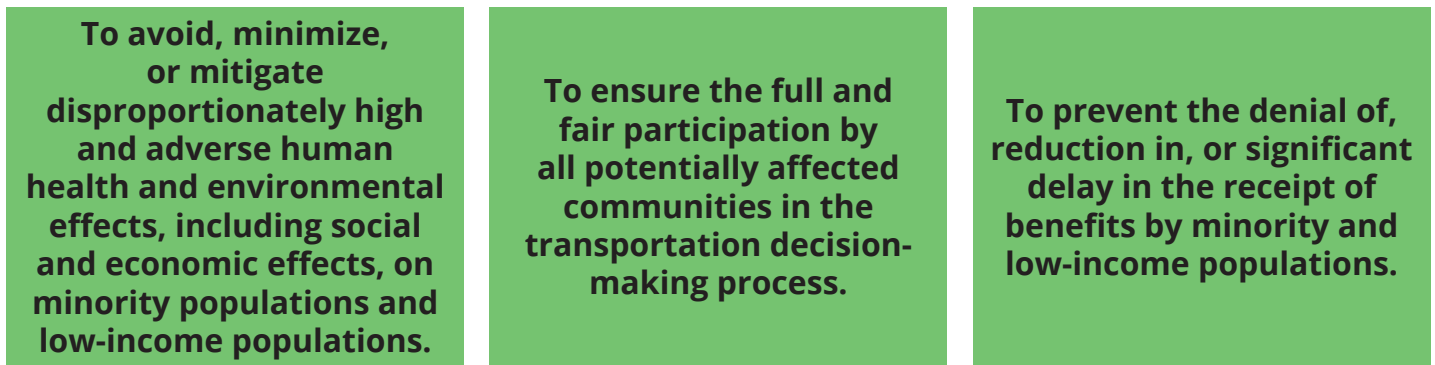
ENVIRONMENTAL JUSTICE

REVIEW & EQUITY

...HOW ARE WE ELEVATING EQUITY?

The Environmental Protection Agency (EPA) defines Environmental Justice as the “fair treatment for people of all races, cultures, and incomes, regarding the development of environmental laws, regulations, and policies.” 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 and that all people have equal access to the benefits afforded by federally funded projects as well as equal access to the decision-making process for the selection of those federal projects.¹ This concept is conveyed in the three Environmental Justice Principles shown in Figure 8.

Figure 8: U.S. DOT Environmental Justice Principles



Read about how the MPO is providing access to the transportation planning process at www.lawrenceks.org/mpo/public_participation.²

Methodology for Identifying EJ Populations

The MPO identifies minority and low income populations and evaluates their proximity to TIP projects at a regional scale. The MPO then examines the distribution of funds. However, ultimately project selection and scope are the responsibility of the project sponsor. Thus the MPO recommends project sponsors consider equity when selecting projects.

Define Target Populations and Thresholds

Low-income and minority populations were identified in the MPO area. This is done by utilizing Census block groups and 2011-2015 American Community Survey (ACS) 5-year estimate data. Block groups are determined to meet the EJ threshold if they meet either of the criteria listed below.

Low/Moderate Household Income Population, by 2010 Census Block Groups (and April 2019 income data)

The threshold for low/moderate household income was 51 percent or more of the population residing in households earning less than 80 percent of the area’s median income. The City of Lawrence Neighborhood Resources Division of the Planning and Development Services Department currently

¹ This policy is defined in Executive Order 12898 that was signed by President Clinton on February 11, 1994.

² Title VI Civil Rights and Environmental Justice Non-Discrimination issues can be found in the MPO’s Title VI Program Manual and the Public Participation Plan. More Environmental Justice information related to programs, including MPO operations which are funded by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), can be found at the following website: https://www.fhwa.dot.gov/environment/environmental_justice/

uses this information to identify areas within the community that have higher concentrations of low and moderate income residents. This data is updated every five years unless there is a change to the census tracts and block group boundaries. Various housing rehabilitation program funds and Community Development Block Grant (CDBG) funds are targeted toward these areas.

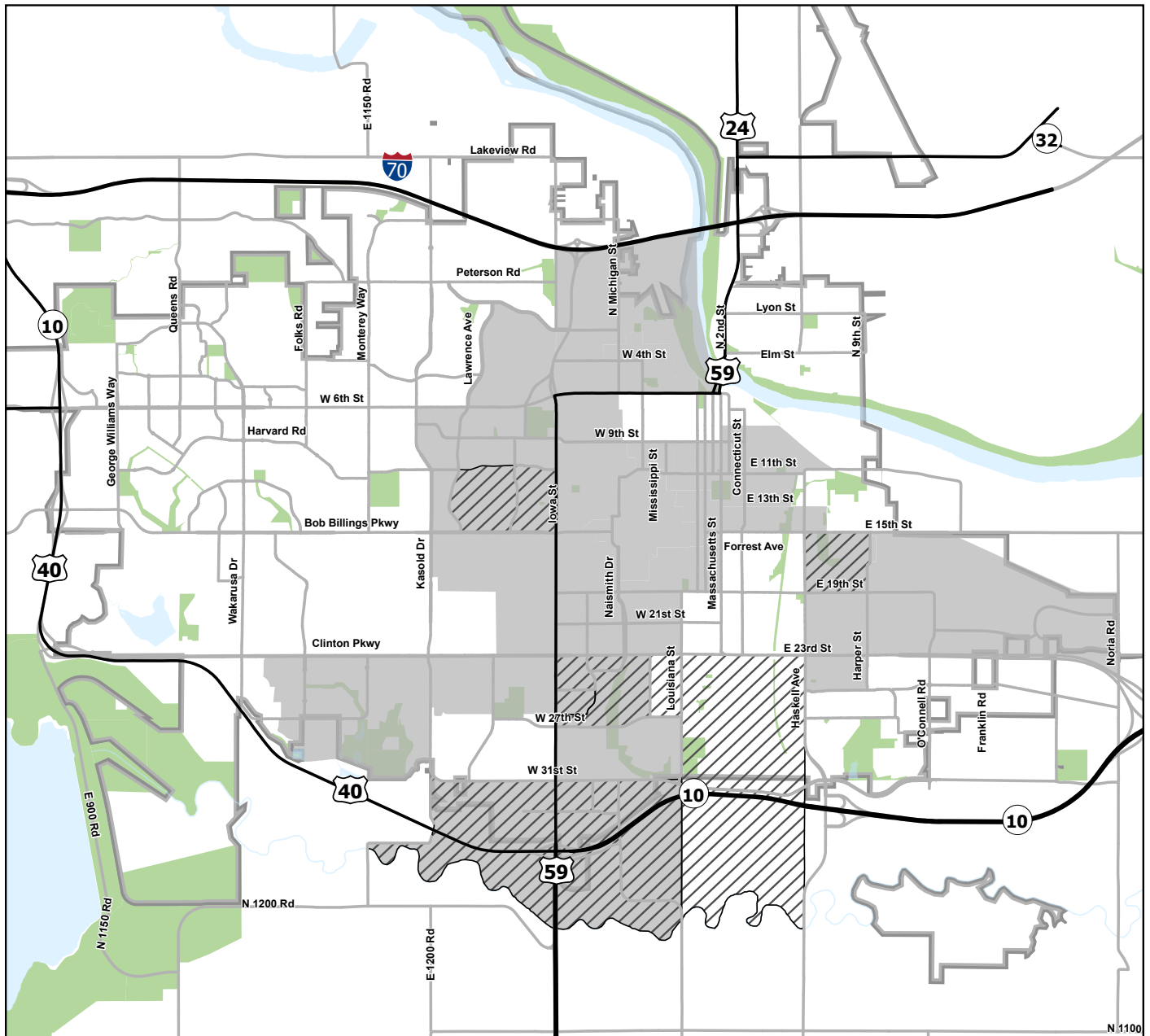
135% of Mean Minority Population, by 2020 Census Block Groups

The US Census Bureau collects demographic data for race and ethnicity. The majority race in this region is White/Caucasian and the other races, as well as those of Hispanic or Latino origin, collectively are considered as the minority group population for this EJ analysis. Census Block Group data indicates 22.6% of Douglas County belongs to a minority population. A threshold of 135% of the county average is used to assess Block Groups with high concentrations of minority populations. 135% of 22.6% is 30.5%, meaning Block Groups that exceed 30.5% minority population are classified as EJ zones. Figures 9 and 10 show these EJ zones.

Transportation Disadvantage

Similar to EJ review, evaluating transportation disadvantage provides a data driven approach to understanding distribution of transportation networks, services, and projects. Transportation disadvantage builds upon the approach of EJ but includes additional criteria. These criteria include: households with a person who has a disability, people who have less than a high school education, minorities, single parent households, zero vehicle households, population under 18 and over 65, and low-moderate income households. This TIP does not include analysis of transportation disadvantage but it is a tool that can be used for project selection. To view more information visit <https://lawrenceks.org/mpo/transportation-disadvantaged>.

Figure 9: EJ Zones

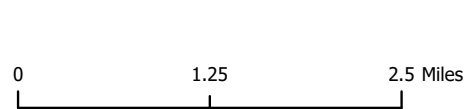


Environmental Justice (EJ) zones are comprised of low to moderate income households (shown in gray) and/or minority households (indicated with diagonal lines) populations. These zones are updated utilizing income information from the US Housing & Urban Development (HUD) Department and race data from the US Census Bureau American Community Survey.

- Low-Moderate Income Block Groups
- Parks
- City Limits
- Minority Block Groups
- Water

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Source: 2016-2020 ACS 5-yr Est. & CDBG
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Assess and Analyze Investments in the TIP

When assessing and analysing investments in the TIP and their effect on EJ populations and Transportation Disadvantaged Populations it is more than only the location of projects and how many are (or aren't) in EJ areas. Further, considerations for long and short term effects of projects must be considered. The term "Disproportionately High and Adverse Effects" is utilized in this analysis, which refers to interrelated social and economic effects which may include:

- Bodily impairment, infirmity, illness or death.
- Air, noise, water pollution and soil contamination.
- Destruction or disruption of man-made or natural resources.
- Destruction or diminution of aesthetic values.
- Destruction or disruption of community cohesion or a community's economic vitality.
- Destruction or disruption of the availability of public and private facilities and services.
- Vibration.
- Adverse employment effects.
- Displacement of persons, businesses, farms or nonprofit organizations.
- Increased traffic congestion, isolation, exclusion or separation of minority or low-income individuals within a given community or from the broader community.
- The denial of, reduction in or significant delay in the receipt of benefits of Federal Highway Administration (FHWA)/Department of Transportation (DOT) programs, policies or activities.

Disproportionately high and adverse effects refer to effects that:

1. Are predominately borne by a minority population and/or low-income population.
2. Will be suffered by the minority population and/or low-income population and are appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.

Analysis of Road/Bridge & Bicycle/Pedestrian TIP Projects

The following pages present information about the TIP projects and their impact on EJ zones and Transportation Disadvantaged Populations. Although the MPO does not select projects, it is the MPO's duty to present data and information related to equity to assist project sponsors in selecting projects which will not disproportionately have high and adverse effects on low income, minority, or other transportation disadvantaged populations.

The fiscally constrained TIP projects were mapped to see where the projects intersect with EJ zones. Not all TIP projects could be mapped for the EJ analysis. This analysis does not include transit allocations, planning studies, and projects that are not limited to a specific point on a map. Table 22 shows the total 2021-2024 TIP projects, the TIP projects that were able to be mapped, and the mapped TIP projects that are within the EJ zones.

Thirty-three (33) projects were mapped in this 2023-2026 TIP, for a combined total of \$154.4 million. Of the 33 mapped projects in the TIP, 13 are considered EJ projects for the purpose of this analysis for a total improvement cost of \$66.6 million (as shown in Table 21). Approximately 43% of the total funding for the 33 mapped projects will be invested in EJ zones. These projects are within or intersect a road that is in an EJ zone or along an EJ zone border and are shown in Figure 10.

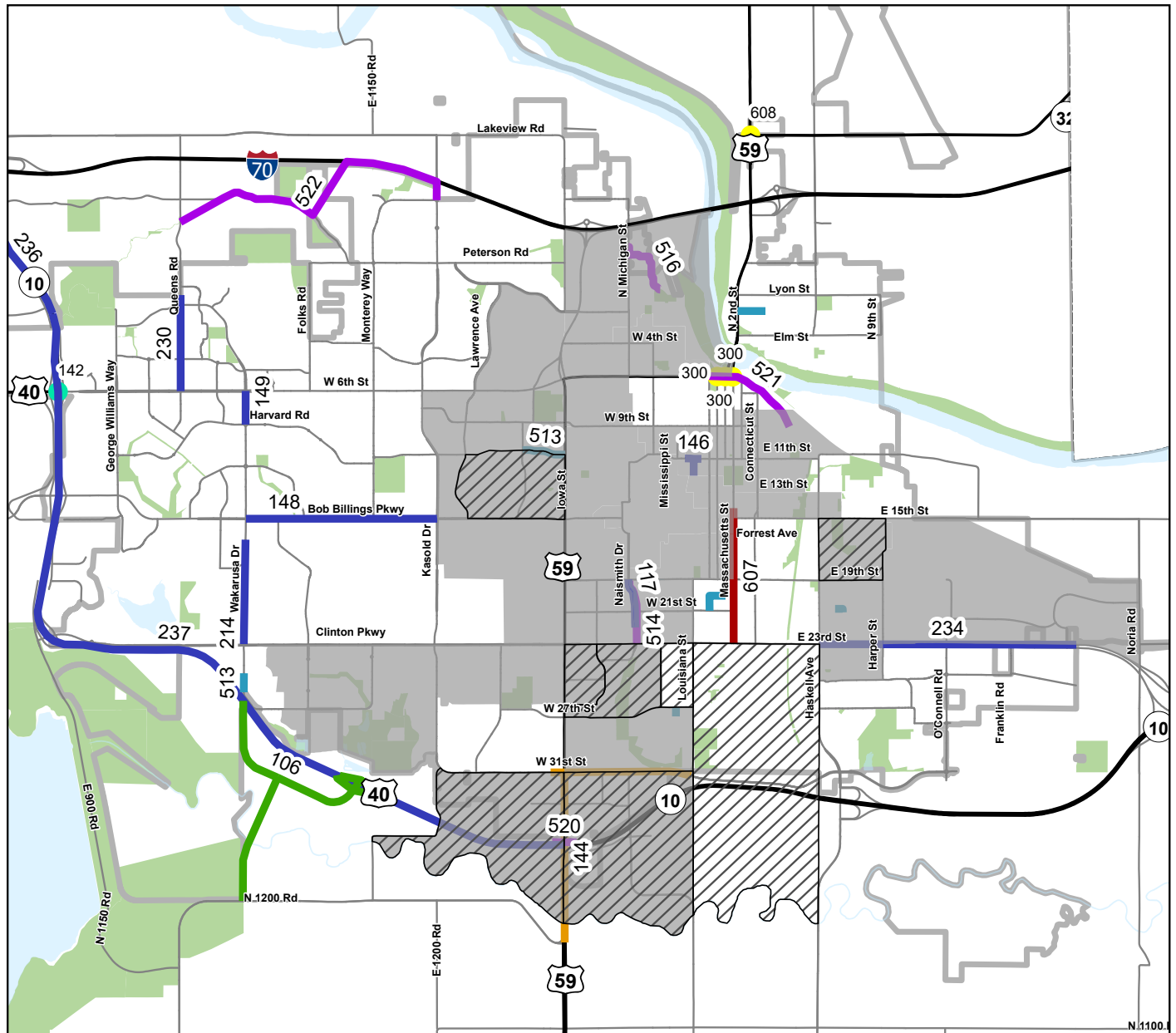
Table 21: Fiscally Constrained TIP Projects (shown in \$1,000s)

	Number of Projects	Total Project Costs*
TIP Projects (2023-2026)	48	\$ 221,025
TIP Projects Mapped (2023-2026)	33	\$ 154,433
TIP Projects Mapped In EJ Zones (2023-2026)	13	\$ 66,592
*Total project costs include project phases outside of the TIP years (2023-2026)		
Note: TIP Project 507 Various Lawrence Sidewalk/Bike/Ped/ADA Ramps Projects are not mapped but EJ prioritization is included in the process of project selection, thus this project was included in the projects mapped in EJ zones.		

Table 22: EJ Zone Projects (shown in \$1,000s)

#	Project Name	Project Type	Miles of New Bikeway	Miles of New Sidewalk	Total Project Cost
117	Naismith Drive Reconstruction: 19th St. to 23rd St.	Road	0.5	0	\$ 4,300
144	South Iowa St. Traffic Signal Improvement Project	ITS	0	0	\$ 863
146	11th St. - Indiana to Ohio; Louisiana - 11th to 12th Reconstruction	Road	0.25	0.05	\$ 1,750
234	23rd Street Reconstruction: Haskell to East City Limits	Road	TBD	TBD	\$ 10,850
237	SLT/K-10 West Leg in Douglas County	Road/Interchange	0	0	\$ 30,800
300	6th and Massachusetts St Traffic Signal Improvement Project	ITS	0	0	\$ 700
507	Various Lawrence Bike/Sidewalk/ADA Ramps Projects	Pedestrian/Bicycle	TBD	TBD	\$ 3,650
513	Lawrence Safe Routes to School Phase 2 (2021)	Transportation Alternatives	0	0.9	\$ 675
514	Naismith Drive Mobility Enhancement	Pedestrian/Bicycle	0.25	0.25	\$ 412
516	Lawrence Loop Shared Use Path: Michigan St. to Sandra Shaw Park	Transportation Alternatives	0.47	NA	\$ 1,451
520	Lawrence Loop - Iowa Crossing	Pedestrian/Bicycle	0.03	0	\$ 1,898
521	Lawrence Loop Trail - Kaw River - 7th street to Constant Park	Pedestrian/Bicycle	0.5	0	\$ 9,905
607	Massachusetts Street - 14th to 23rd Street Multi-Modal Improvements	Safety	1.1	0.25	\$ 1,600
		Totals	3.1	1.45	\$ 68,854

Figure 10: MPO Fiscally Constrained Programmed Projects in Relation to EJ Zones



Environmental Justice (EJ) zones are comprised of low to moderate income households (shown in gray) and/or minority households (indicated with diagonal lines) populations. These zones are updated utilizing income information from the US Housing & Urban Development (HUD) Department and race data from the US Census Bureau American Community Survey.

- | | | | |
|---|-------------|--------------------|-----------------------|
| Low-Moderate Income Block Groups | Parks | Fiber | Safe Routes to School |
| 99% Confidence Interval Minority Block Groups | University | Pedestrian/Bicycle | Safety |
| | Water | Road | Signal |
| | City Limits | Road, Bridge | |

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Date Exported: 9/20/2022
Source: 2016-2020 ACS 5-yr Est. & CDBG Income
Produced: Lawrence-Douglas County MPO



EJ analysis is more than just the location of the projects and how many are (or aren't) in EJ areas. Therefore additional data was gathered on the projects and the EJ zones. Projects were evaluated to determine their contribution to meeting the region's performance measure goals. Information was gathered about the EJ zone versus the rest of the County. As shown in Table 23, 13% of the miles of road centerline are located in the EJ zone, while the EJ comprises 4% of the total square miles for the County and 53% of the total population. The EJ zone has a per capita spending on TIP projects of \$1,065 compared to \$1,510 in the non EJ zone. The geographic distribution of projects in relation to defined EJ zones indicated EJ areas are not being denied the benefit of federal transportation spending.

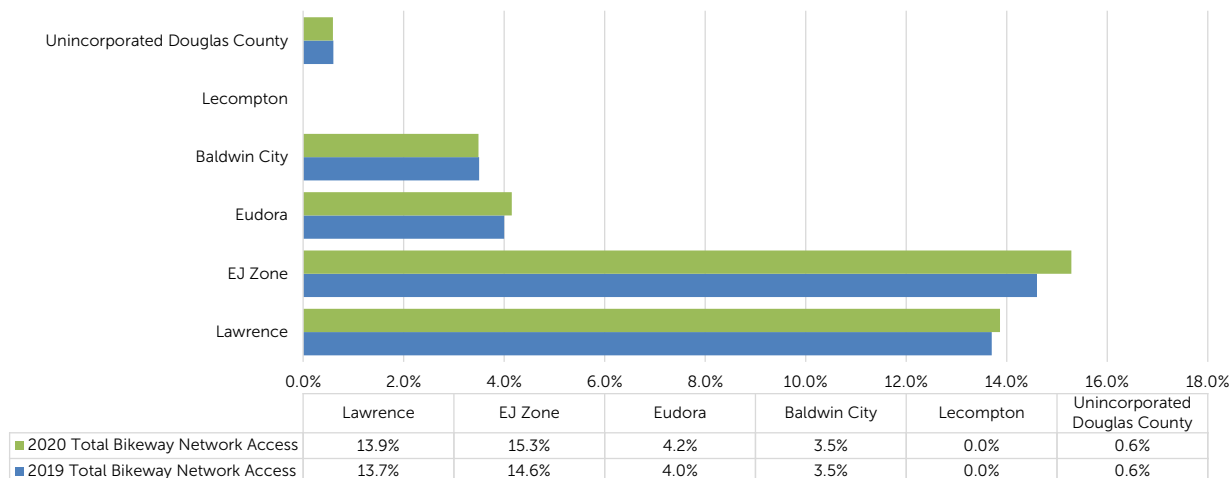
Table 23: EJ Zone Statistics v. Douglas County

	Total Douglas County	Non EJ Zone	EJ Zone	EJ Zone%
# of Road Centerline Miles	1451	1260	191	13%
Square Miles	475	456	19	4%
Population	121,304	56,679	64,625	53%

Transportation 2040 has twenty-six (26) performance measures, a mixture of federally required and locally developed measures. Several of them address access and transportation barriers.¹ The analysis below delves into the measures and the anticipated impacts of the projects programmed in this TIP.

Access to the bicycle and pedestrian networks is also important when considering equity. Access is directly tied to health equity. Health inequities can refer to people having difficulties obtaining medical services, high transportation costs, and long commute times. Transportation 2040 Performance Measure #1 is the percentage of households who have access within a ¼ mile to the bikeway network (bicycle boulevard, bike lane, protected bike lanes, shared use path). Overall access to the bicycle network is slightly higher in EJ areas than non EJ areas.

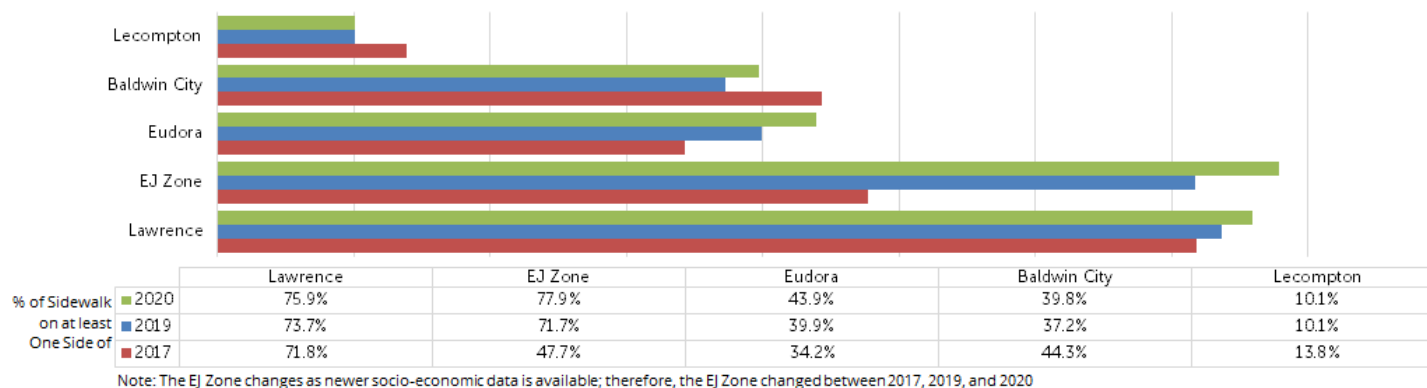
Figure 11: Percentage of Households who have Access within 1/4 mile to the Bikeway Network (T2040 PM1)



Note: The EJ Zone changes as newer socio-economic data is available; therefore, the EJ Zone changed between 2019 and 2020.

Another measure to measure access to bicycle and pedestrian facilities is Transportation 2040 Performance Measure #2 (Percentage of public streets with sidewalks on at least one side). Overall access to the pedestrian network is slightly higher in EJ areas than non EJ areas. Access provides mobility and opportunities to improve quality of life, thus projects should be prioritized in the EJ areas which provide transportation choices. There are thirteen (13) projects in the FFY2023 TIP which will add to the bicycle and pedestrian networks thereby increasing access. At least 2.5 miles of new sidewalks and 3.1 miles of new bikeways will be constructed in the EJ zone. These numbers do not take into account facilities on 23rd St. Reconstruction: Haskell Ave. to East City Limits (234) or the Various Lawrence Sidewalk/Bike/Ped/ADA Ramps (507) projects as the miles have not been determined. Project 514 – Naismith Mobility Enhancement – is installing sidewalk and transit connections and improvements in an EJ area. This project will pave the existing “goat path” where people have historically walked. Project 507 – Various Lawrence Sidewalk/Bike/Ped/ADA Ramps – is a grouped project for the dedicated funding for non-motorized projects and ADA Ramps in Lawrence. Approximately \$675,000 of local funding is available every year for dedicated bicycle and pedestrian projects and \$325,000 of local funding is programmed every year for improving ADA ramps. The dedicated bike/ped funding utilizes the Non-Motorized Projects Prioritization Policy to select projects. Consideration of equity in distribution of projects in EJ zones is part of the selection process. Also \$300,000 of Community Development Block Grant (CDBG) is budgeted to the City of Lawrence to address sidewalk and ADA ramp issues in the low/moderate income areas (a portion of the EJ zones). The City is allocated a percentage of CDBG funding each year so the \$300,000 is a place holder. All of the local and federal funding used to build new miles of bikeway and sidewalk will improve connectivity and mobility for all populations.

Figure 12: Percentage of Public Streets with at Least Sidewalk on One Side of Streets (T2040 PM2)



The Center for Neighborhood Technology’s Total Driving Costs tool measures the costs of car ownership and use for jurisdictions.¹ It utilizes a variety of data points to determine if transportation costs are unaffordable, which are any costs that are higher than 15% of an aver

¹ Access the Center for Neighborhood Technology’s Total Driving Costs tool at: <https://htaindex.cnt.org/total-driving-costs/>

Table 24: Average Cost of Transportation per Household (T2040 PM22)

	Total Annual Transportation Costs	Annual Transportation Costs % Over Affordable
Lawrence	\$ 12,900	141%
Eudora	\$ 15,059	165%
Baldwin City	\$ 15,232	166%
Lecompton	\$ 16,868	184%
Douglas County	\$ 13,725	150%

Note: Annual Household Income: \$61,020

15% of Income for Transportation = Affordable: \$9,153

Transportation costs are considered affordable if they are 15% or less of household income; This calculation used gas priced at \$3.80 and Regional Typical Household Characteristics. Data was gathered in 2017, an update will be completed when the CNT has grant funding potentially in 2021.

Source: Center for Neighborhood Technology's Total Driving Costs Tool

<https://htaindex.cnt.org/total-driving-costs>

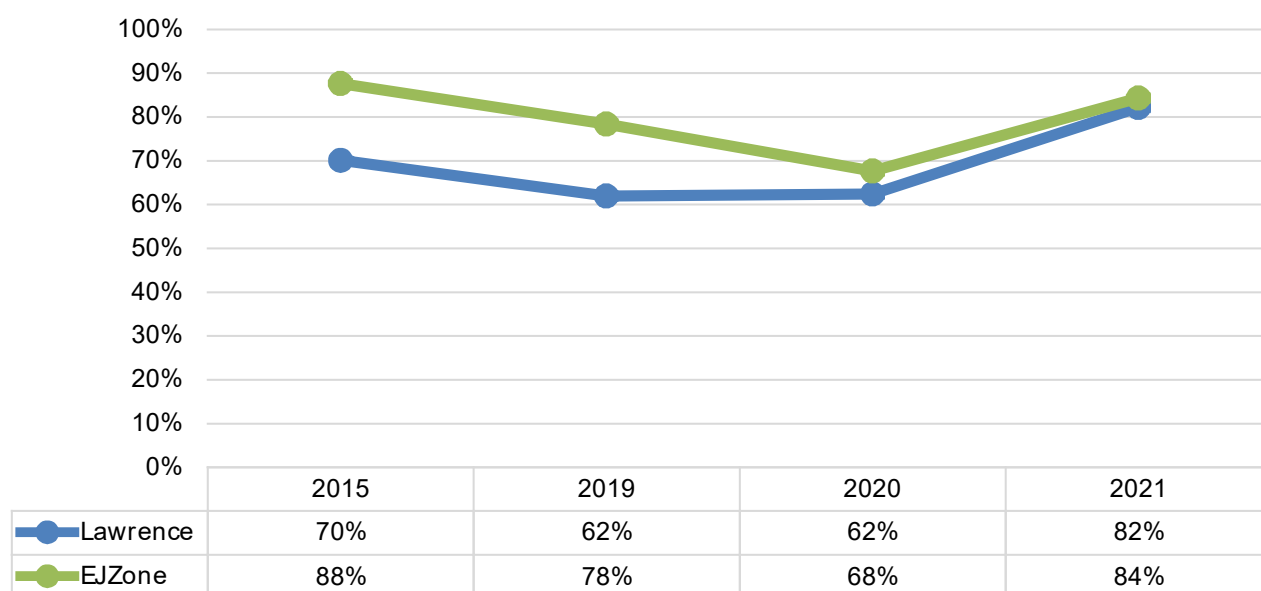
Another consideration is safety. Both vehicle and non-motorized (bicycle riders and pedestrian) crashes between 2017 and 2021 were mapped. A heat map showing the crashes and the number of crashes near TIP projects is found in Figure 6 (in the Performance Measure Chapter).

Analysis of Fixed Route Transit TIP Projects

Lawrence Transit & KU on Wheels 2022 fixed routes are shown on Figure 21. Sixteen (16) or 80% of the current routes have 30 minute or less service during peak times. As resources become available, Lawrence Transit & KU on Wheels are transitioning routes which warrant increased service to 30 minute or less service during peak times; however, KU on Wheels has seen recent service reductions due to budget constraints. Route information can be accessed at www.lawrencetransit.org/routes. None of the Lawrence Transit projects were mapped because transit service occurs throughout the community and is not located on one fixed point. Lawrence Transit projects include operating costs for fixed route and paratransit services, as well as the capital costs associated with vehicle acquisition.

Transportation 2040 Performance Measure #5 is the percentage of households with access within a 1/4 mile to a bus stop (Figure 13). Overall access to bus stops in EJ areas in comparison to Lawrence as a whole has increased since 2015. The Naismith Drive Mobility Enhancement (# 514) project will increase access by installing sidewalk leading to a bus stop. There are other unmapped bicycle and pedestrian projects (CDBG and Lawrence dedicated bicycle and pedestrian projects) which will likely improve access. Future analyses will evaluate the access added by these projects.

Figure 13: Percentage of Households with Access within a ¼ Mile to a Bus Stop (T2040 PM5)

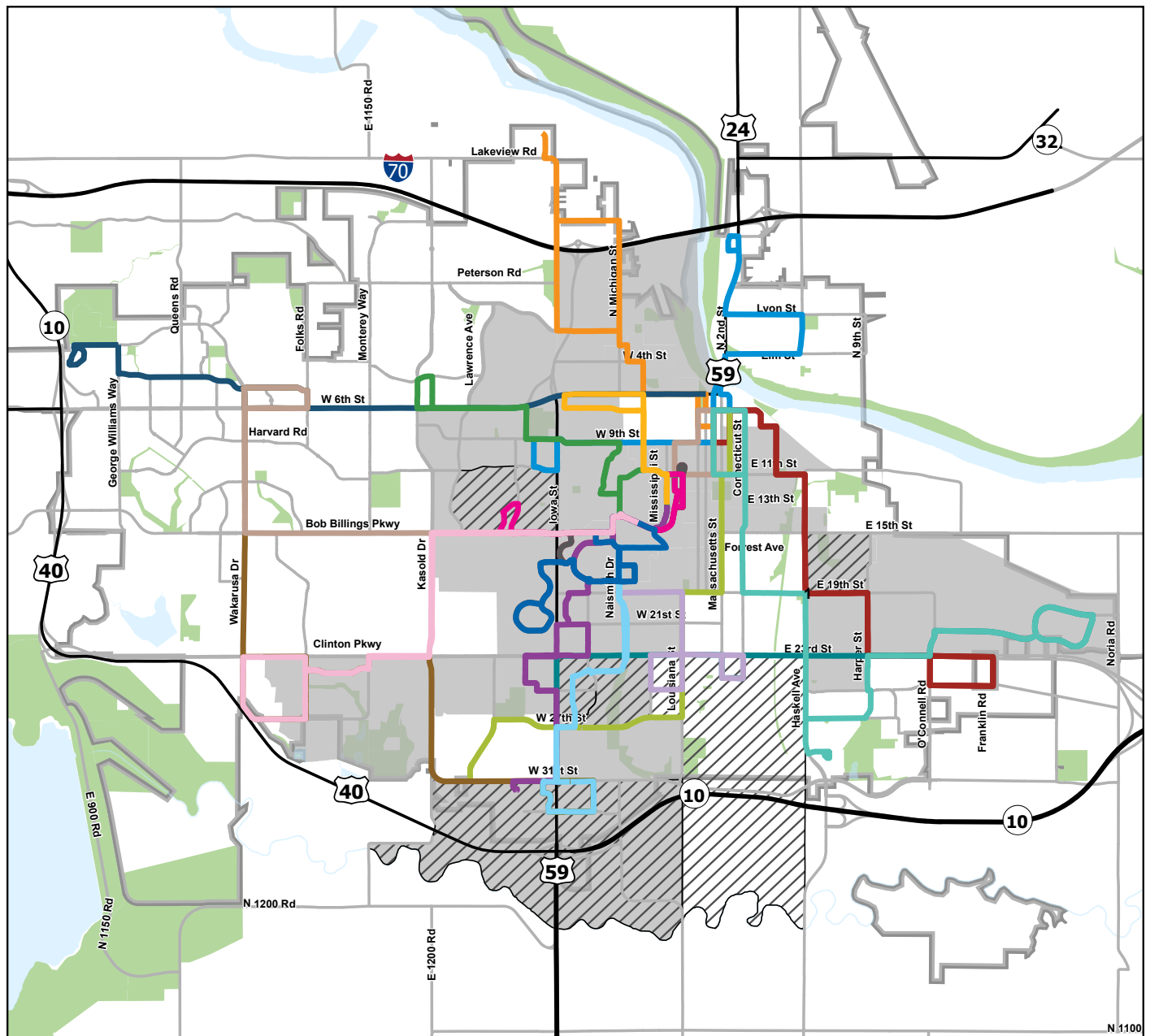


Note: Access was calculated for the EJ zone that existing in 2021 has not been calculated for the EJ area included in this TIP. The EJ Zone changes as newer socio-economic data is available, including in 2019 and 2020

For the case of federally supported transit services, both the fixed route system and paratransit service areas, cover parts of Douglas County with low-income and/or minority populations (Figure 14). Therefore, the TIP projects associated with these transit and paratransit services are all considered to serve EJ populations and to be located in EJ zones for the purpose of this analysis. If there is any difference with EJ zones it seems to be that some EJ zones receive greater choice and frequency of transit services because those areas coincide with the parts of the region with population densities high enough to support frequent fixed route transit (see the transit routes overlaid on population estimates in Figure 15).

Further, maps were created to determine the percentage of households within the EJ zones that are within a ¼ mile buffer of transit routes and the Transportation Disadvantaged Population overlaid with the fixed route transit routes. As shown in Figure 13, approximately 84% of households within the EJ zones are within ¼ mile of a transit route. A ¼ mile is generally the distance people are comfortable walking. Thus, 84% of households within EJ zones have easy to access transit service, thereby expanding their mobility.

Figure 14: Fixed Route Transit Routes 2022 in Relation to EJ Zones



Environmental Justice (EJ) zones are comprised of low to moderate income households (shown in gray) and/or minority households (indicated with diagonal lines) populations. These zones are updated utilizing income information from the US Housing & Urban Development (HUD) Department and race data from the US Census Bureau American Community Survey.

- Low-Moderate Income Block Groups
- Minority Block Groups
- 2022-2023 Transit Routes
- Parks
- Water
- City Limits

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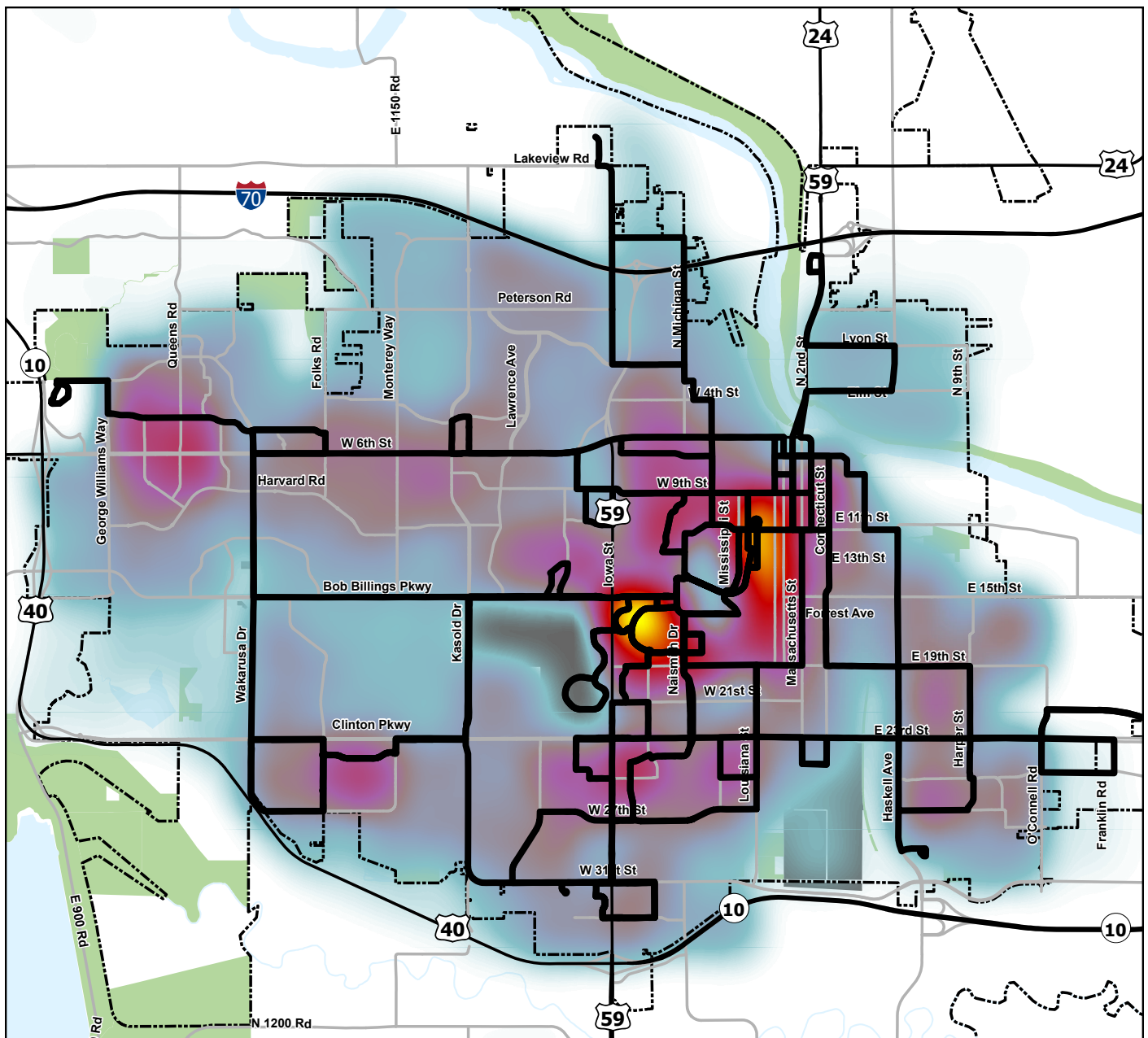
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N

0 1.25 2.5 Miles

Date Exported: 9/13/2022
Source: Lawrence Transit, 2016-2020 ACS 5-yr Est. & CDBG
Produced: Lawrence-Douglas County MPO Income

Figure 15: Lawrence Transit 2022 Routes and 2020 Population Estimate Densities



2020 Population Estimates

2022-2023 Transit Routes

University

City Limits

Least Dense

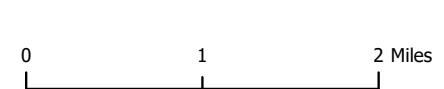
Parks

Water

Most Dense

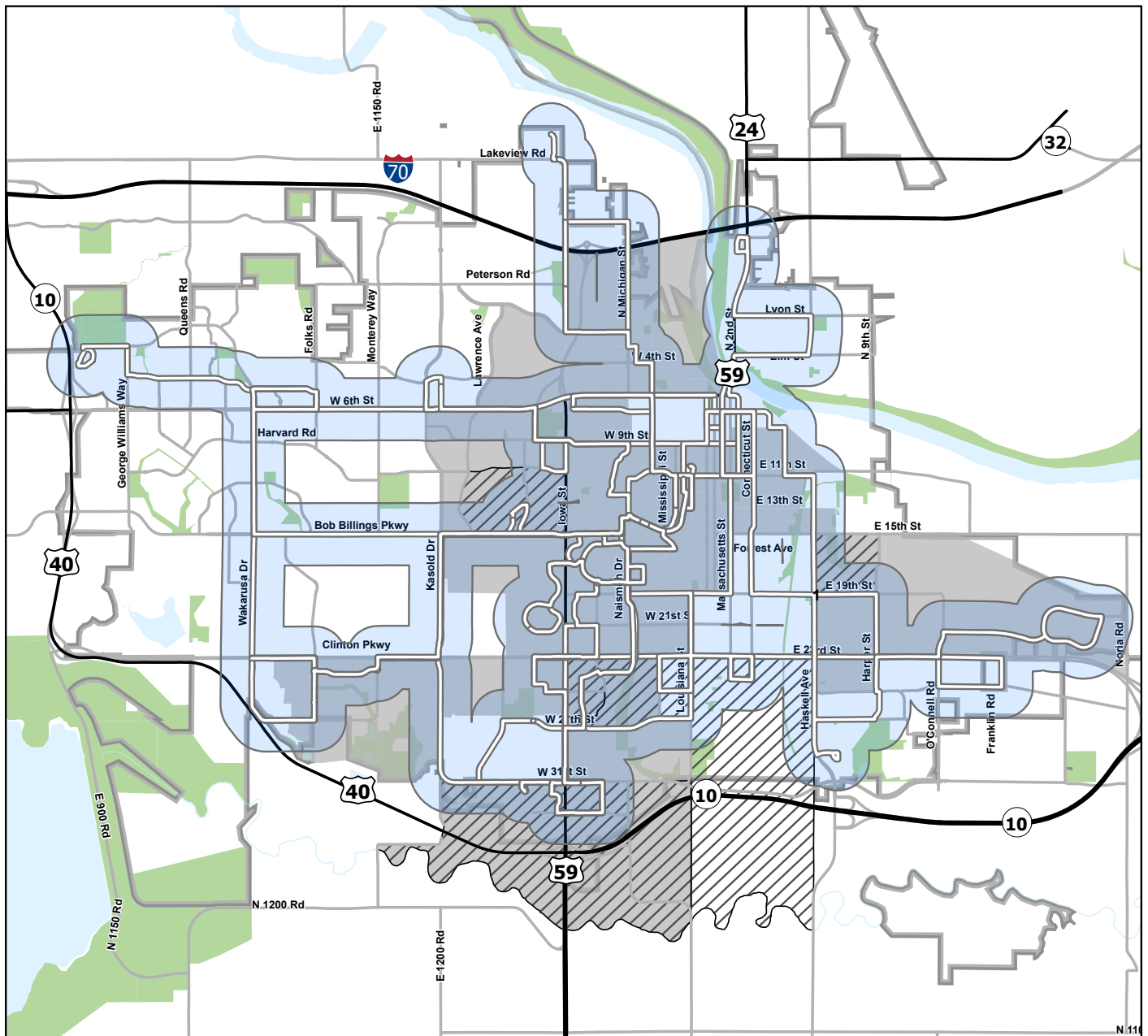
DISCLAIMER NOTICE

The map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The City of Lawrence makes no warranties, express or implied, as to the use of the map. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the map, including the fact that the map is dynamic and is in a constant state of maintenance, correction and update.



Date Exported: 9/21/2022
Source: Lawrence Transit & Plan 2040 Population Est.
Produced: Lawrence-Douglas County MPO

Figure 16: Fixed Route Transit Route Buffers 2022 in Relation to EJ Zones



Environmental Justice (EJ) zones are comprised of low to moderate income households (shown in gray) and/or minority households (indicated with diagonal lines) populations. These zones are updated utilizing income information from the US Housing & Urban Development (HUD) Department and race data from the US Census Bureau American Community Survey.

- Low-Moderate Income Block Groups
- Minority Block Groups
- Transit Routes 2022-2023
- 1/4 Mile Bus Route Buffer 2022-2023
- Water
- City Limits

DISCLAIMER NOTICE

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N

0 1.25 2.5 Miles

Date Exported: 9/13/2022
Source: Lawrence Transit, 2016-2020 ACS 5-yr Est. & CDBG
Produced: Lawrence-Douglas County MPO Income

Conclusion

Reviewing the assessment and analysis in this chapter the MPO believes there are no significant EJ issues with the selection of roadway, bridge, pedestrian/bicycle, or transit projects in Douglas County. This TIP includes projects inside and outside of EJ zones. Although not covered under Executive Order 12898, populations that may be transportation disadvantaged — people who have a disability, people who have less than a high school education, single parent households, zero vehicle households, and population under 18 and over 65 — were spatially analyzed and appear to be served by federal transportation investments.

The region's transportation projects are selected based on the merit of the project and the need for improvements to the transport system without any intended bias towards impacting EJ areas any more than any other area in the region. However, paying particular attention to EJ and Transportation Disadvantaged Areas when project selection occurs by the local entities will ensure equitable outcomes can be achieved. The MPO should continue to encourage best practices by project sponsors through project prioritization measures, such as scoring for EJ considerations and quality public participation.

Furthermore, future performance measure reports will include an analysis about the Transportation Disadvantaged Population access to the bikeways (PM1), sidewalk (PM2), and transit stops (PM5).

PLANNING & ENGINEERING FACTORS FOR LOCAL PROJECT CONSIDERATION

APPENDIX A

Planning Factors

- Is the project consistent with the goals and objectives found in the Metropolitan Transportation Plan (MTP)?
- Is the project listed as a recommended transportation system improvement in the MTP?
- Is the project regionally significant as defined by federal regulations and the latest Regionally Significant Policy approved by the MPO?
- Is the project consistent with the latest MPO/FHWA approved Functional Classification Map?
- Is the project consistent with the latest locally approved comprehensive plan (including the land use plan, area plans, Safe Routes to School, and other comprehensive plan elements/chapters) covering the project location?
- Does the project include provisions for transit, bicycle, and pedestrian movements (including students and ADA accessibility) as needed to provide a regional multimodal transportation system?
- Has the project sponsor considered Title VI, Environmental Justice (EJ), and Transportation Disadvantage Populations impacts in the planning for this project, and if the project is in a minority and/or low-income area has the project sponsor considered and addressed the Title VI and EJ issues related to the project?
 - Federally required EJ characteristics include: minority and low-income populations
 - Transportation disadvantages populations include: households with a person who has a disability, people who have less than a high school education, minorities, single parent households, zero vehicle households, population under 18 and over 65, and low income households.
- Has the project sponsor received public comments about this project and if received considered those public comments in the planning and design of the project?
- Is the project eligible for the type of federal and/or state funding being proposed for it, and is there adequate funding available for the project in the year it is proposed?

Engineering Factors

- Does the Project address a facility that has (existing or projected) a high volume to capacity ratio indicating it or will experience significant congestion and lower levels of service?
- Does the project location have a traffic accident history marked by a higher than expected accident rate which, along with other accident attributes, indicates that an engineering change could reduce the number and/or severity of crashes?
- Does the project location have pavement conditions noting a deteriorated state showing that the facility is in need of improvements to maintain its function and/or that those improvements can be made economically now before more costly reconstruction is needed?
- Does the project site include geometric design that is inadequate by current standards and does the project sponsor have documentation that this design is hampering the facility's ability to handle the traffic loads and/or vehicle sizes using the facility in a safe and efficient manner, and does the project sponsor plan to address those geometric deficiencies as part of this project?
- Does the project site or facility have structural deficiencies indicating that the facility is near the end of its projected lifespan and that it will need frequent maintenance to function adequately, and does the project sponsor plan to address these structural deficiencies as part of this project?
- Have safety concerns involving motorists, bicyclists, pedestrians and/or transit users and transit operations been identified at the project location and does the project sponsor plan to address those concerns as part of this project?
- Has the project location met minimum engineering standards set by the project sponsor that indicate the facility is in need of improvement, rehabilitation or replacement?

*This list is not exhaustive. It is used at the discretion of local governments and project sponsors and may be changed in the future.

B

DEFINITIONS OF MAJOR PROJECTS & SIGNIFICANT DELAY

APPENDIX B

Roadways (including intersections and bridges)

The major roadway projects include projects located on a roadway classified by the MPO as a Major Collector or higher, with construction costs of at least \$2.0 million and that have at least one of the following attributes:

- Designed to increase roadway capacity and/or decrease traffic congestion
- Designed to improve safety
- Designed to replace aging infrastructure and bring it up to current standards
- Results in significant delay and/or detours during construction

Major projects do not include the following types of projects that are considered to be routine maintenance projects: mill & overlay, micro-abrasion, micro-surfacing, crack sealing, concrete rehabilitation, curb repairs, sweeping, mowing, spot repairs, and interim measures on detour routes.

Transit Facilities and Services

The major transit projects include projects that need to be listed in the TIP because they use federal funding and/or are regionally significant, have a total cost of at least \$1.0 million, and meet at least one of the following criteria:

- Acquisition of three or more new transit vehicles
- Addition or expansion operations and/or maintenance buildings
- Initiation of new transit service or expansion of transit services into territory not previously served

Major transit projects do not include the following types of projects that are considered to be routine: preventive maintenance on transit vehicles; purchase of spare parts, shop supplies and fuel; annually received formula based operating assistance; purchase of bus stop signs, shelters and related items; scheduled purchases of one or two transit vehicles; staff training and recruitment; and other routine operational activities.

Bikeway and Pedestrian Facilities

The major bikeway and pedestrian projects includes projects that need to be listed in the TIP because of federal funding and/or regional significance, and meet at least one of the following criteria:

- Total project cost of at least \$ 500,000
- Construction of bikeway or pedestrian facility (or extension of existing facility) into a location where a bicycle/pedestrian facility did not exist before

Major bikeway/pedestrian projects do not include the following types of projects that are considered to be routine maintenance projects: patching, crack sealing, curb repairs, sweeping, mowing, spot repairs, landscaping maintenance, sign replacements, and other routine operational activities.

Significant Delay

The term significant delay will be defined as two years or more from the year first listed for the project in the previous TIP.

C

PROGRESS ON PREVIOUS TIP PROJECTS APPENDIX C

The following projects from the previous 2021-2024 TIP were implemented between the start of 2021 and the approval date for this new 2023-2026 TIP.

Table C-1: Completed Projects

#	Project Type	Project Name	Project Sponsor	Location	Description	Year
107	Road	Kasold Drive Reconstruction: Clinton Pkwy to HyVee	Lawrence	Kasold from 22nd St to Clinton Pkwy	Reconstruction of street including pavement, storm sewer, sidewalks, bicycle facilities, and median.	2017-2020
135	Road	K-10: West of E1900 East to DG/JO County Line Surfacing	KDOT	Beginning 0.48 miles West of E1900 thence east to the Douglas/Johnson County line	Surfacing	2019-2021
136	Road	K-10: West Leg Surfacing	KDOT	Beginning at Junction I-70/KTA/K-10 thence east to Junction K-10/US-40/US-59	Surfacing	2020-2021
137	Road	US-40 in Douglas County (1R Project)	KDOT	US-40: 0.15 miles East of the DG/SH county line east to Junction US-40/K-10	Surfacing	2020-2021
138	Road	US-56 in Douglas County (1R Project)	KDOT	US-56: OS/DG county line East to 0.22 miles west of Junction US-59/US-56	Surfacing	2020-2021
141	Road	Church Street Improvements: 15th St. to 14th St.	Eudora	Approximately 1,550 feet of improvements to Church St. beginning 600' south of the 15th St. intersection, north through the 14th St. intersection.	Expand & add drive/turn lanes, traffic signal at 15th St, curb & gutter, improved stormwater facilities & drainage, pedestrian infrastructure (crosswalks, ADA ramps, sidewalks, multi-modal transportation stops).	2021
145	Road	US-24 Surfacing: Junction US-24/K-32 to the Douglas/Leavenworth County Line	KDOT	Junction of US-24/K-32 to the DG/LV County Line	Ultrathin Bonded Asphalt Surfacing (UBAS) and Rumble Strips on Centerline	2022
208	Road	Route 1055 at North 700 Curve	Douglas County	Route 1055 from 725 North to 1670 East	Roadside safety improvements, replace two bridges and one culvert.	2020
220	Road	Route 1055 Improvements: N1000 to N1180	Douglas County	N1000 to N1180	Construct paved shoulders; replace narrow culvert; flatten roadside slope.	2019-2020
229	Road	19th Street Reconstruction: O'Connell Rd to Harper St	Lawrence	O'Connell Rd to Harper St	Reconstruct & tie into venture park and construct sidewalk & shared use path.	2016-2021

Table C-1: Completed Projects (Continued)

#	Project Type	Project Name	Project Sponsor	Location	Description	Year
506	Transportation Alternatives	Lawrence Safe Routes to School TA Phase 2	Lawrence	Various sidewalk along 6 streets in Lawrence	New sidewalk construction along designated Safe Routes to School. Driveway and sidewalk ramp construction will be included for ADA compliance.	2018-2019
508	Transportation Alternatives	Lawrence Loop Shared-Use Paths - 8th St to 11th St & 29th St	Lawrence	11th St to 9th St through Hobbs Park and along Delaware St & 29th St Haskell Rail Trail to Haskell Ave	Design and construction of 10' shared-use path	2019-2021
510	Transportation Alternatives	Bluejacket Trail: Phase II	Eudora	1201 Cedar St. to 1702 Cypress Ct. in Eudora	Design, engineer, and construct an ADA-compliant, approximately 7,050' long, 8' wide shared-use path.	2019-2020
512	Transportation Alternatives	Lawrence Loop Shared Use Path: Peterson Rd to Michigan St	Lawrence	Begins at the intersection of Peterson Rd and N Iowa St, ends at Michigan Rd 1/2 mile north of W 2nd St	Design and construction of 10' shared use path.	2020-2022
606	Safety	Rte 1061 / Rte 460 Intersection Safety Improvement	Douglas County	E 2200 RD from N 700 RD 0.3 miles north	Improvements to improve sight distance at the intersection of two county routes.	2022-2023
700	Other	South Lawrence Trafficway Widening Study	KDOT	K-10 West Leg in Douglas County US 59/K10/Iowa to I70/KTA/K10 Junction	Study K10 becoming a 4-lane freeway. This project will review project area issues, current transportation needs, impacts on current projects, interchange configurations and reevaluate the environmental documentation for the preferred improvements.	2015-2018
705	Other	K-10 (US-40) & 27th St/Waka. Intersection Improvements	KDOT	K-10 and 27th St/Wakarusa	Intersection improvement: add EB right turn lane on K-10, extend WB turn lane on K-10, add a NB right turn lane, revise pavement markings, mill & overlay north and south intersection legs & reconstruct sidewalk crossing. Permanent seeding & signage.	2019-2020
706	Intersection	Traffic Signal Coordination Study	Lawrence	Arterial streets	Provide a comprehensive update to the traffic signal system, optimize operations and development of a long-term city-wide traffic signal coordination and timing program.	2019

Major Projects from the 2019-2022 TIP That Were Significantly Delayed

Table C-2: Significantly Delayed Projects

#	Project Type	Project Name	Project Sponsor	Location	Description	Year
106	Road, Bridge	Wakarusa Drive Extension	Douglas County/Lawrence	Clinton Parkway to N 1200 Rd	New road construction to extend Wakarusa Drive from planned K-10 interchange to Route 458. Includes new bridge over Wakarusa River. *Alignment not finalized	2019-2025
214	Road	Wakarusa Dr. Reconstruction: Research Pkwy to 23rd St	Lawrence	Wakarusa: Research Pkwy to 23rd St	Reconstruction of street will include subgrade treatment, surfacing, storm sewer, geometric improvements, and multimodal facilities.	2022-2023
219	Road	Rte 458/1055 Improvements: E 1500 thru E 1600	Douglas County	E1500 to E1600 & N940 to N1000	Construct paved shoulders; replace narrow bridges and culvert; flatten roadside slope; and improve intersections.	2020-2021
230	Road	Queens Road: 6th to North City Limits	Lawrence	6th St to North City Limits	Construct Queens Road, roundabout at Overland Dr & Queens Rd, construct sidewalk & bike lanes.	2015-2022
234	Road	23rd Street Reconstruction: Haskell to East City Limits	Lawrence	Haskell Ave to East City Limits	Reconstruction of street including pavement, storm sewer, geometric improvements and multimodal facilities.	2020-2022
243	Road	US-56 Improvements: Eisenhower St to 1st St	KDOT	Eisenhower St to 1st St	Improvements to US-56 - Realign Eisenhower and construct 3 lane US-56 in Baldwin City.	2021

LATEST FEDERAL FISCAL YEAR - LIST OF OBLIGATED PROJECTS

APPENDIX D

The purpose of this listing is to illustrate the progress of federal aid transportation projects in the region as they move through the years in the TIP projects table and onto the recently obligated projects list. Projects are listed based on the year the federal funds were obligated, not necessarily the year the construction of the project began. The federal amount represents the federal funds spent on the project.

The table below describes projects listed in the TIP that were obligated in the previous Federal Fiscal Year (FFY). A listing of projects with federal aid obligated in the previous FFY are presented to the MPO each year for review either as part of a TIP approval or amendment or as a separate memo.

The listing will be is available on the MPO website and is sent to the Kansas Department of Transportation who will then distribute the listing to the FHWA and the FTA for informational purposes.

Table D-1: Obligated Projects From FFY2022

Lawrence-Douglas County MPO Area - List of Project for Which Federal Funds Were Obligated in FFY 2022										
Transit Projects										
MPO #	KDOT #	Project Name/Location	Project Description	Federal Funding Source	Federal Funds Requested in TIP	Cost in \$1,000's		Federal Funds Remaining/ Unliquidated Obligation	Bike &/or Ped Elements	Project Status
						Federal Funds Obligated in FFY 2022	Federal Funds Obligated To Date (Cumulative)			
412	FFY 2021 5307 FTA	Lawrence Transit - Operating Funds	Operating and Preventative Maintenance activities	5307	\$2,532	\$1,360	\$1,442	\$1,091	No	Active
412	FFY 2020 5307 FTA	Lawrence Transit - Operating Funds	Operating and Preventative Maintenance activities	5307	\$2,523	\$1,673	\$2,523	\$0	No	Active
417	FFY 2021 CARES Act	Lawrence Transit - Operating Funds	Operating and Preventative Maintenance activities	5307 CARES Act	Req \$1,921 ACTUAL \$2,429	\$2,429	\$5,440	\$1,686	No	Active
416	FFY2021 5339 FTA	Lawrence Transit Electric Buses	Procurement of five battery electric buses to replace five diesel powered buses, associated charging infrastructure, and project management.	5339	\$3,756	\$3,427	\$3,527	\$229	no	Active
Non-Transit Projects										
MPO #	KDOT #	Project Name/Location	Project Description	Federal Funding Source	Federal Funds Requested in TIP	Cost in \$1,000's		Federal Funds Remaining	Bike &/or Ped Elements	Project Status
						Federal Funds Obligated in FFY 2022	Federal Funds Obligated To Date			
605	C-5065-01	Douglas County: Horizontal Curves on RS-212 and RS-210	Apply high-friction surface treatment - child project of a STIP project	HSIP	\$1,011	\$1,011	\$1,011	\$0	No	Active
705	KA-3634-08	US-40/K-10 at 27th Street Intersection Imp DG Co	Intersection Improvement adding eastbound right turn lane on US-40/K-10, extend westbound turn lane on US-40/K-10 and add a northbound right turn lane, revise pavement markings, mill and overlay north/south intersection legs and reconstruct sidewalk crossing.	HSIP	\$768	\$36	\$768	\$0	No	Complete
509	TE-0472-02	West Baldwin Bike Ped Connectivity Phase 2	Construct 10' concrete shared-use path, add lighting, ADA improvements, fencing, benches, trash receptacles, etc.	TA	\$1,013	\$1,019	\$1,455	-\$442	Yes	Active
512	TE-0490-01	Lawrence Loop: N Iowa to Michigan	Construct a 10ft concrete shared-use path including a grade separated crossing of the KTA at McDonald Dr.	TA	\$1,070	\$1,070	\$1,070	\$0	Yes	Active
518	TE-0497-01	Eudora 10th Street Sidewalk Expansion	Construct 6' sidewalks and improve stormwater infrastructure	TA	\$1,781	\$1,450	\$1,450	\$331	Yes	Active
513	U-2372-01	Lawrence: Safe Routes to School Phase 2	Construct new sidewalks, ADA ramps and improved crosswalks	TA	\$500	\$146	\$500	\$0	Yes	Active
Legend			5317 - FTA Section 5317 - New Freedom	NHPP - National Highway Performance Program						
5307 - FTA Section 5307 - Operating Assistance, Preventive Maintenance, Program Administration, & Security and Capital			5339 - FTA Section 5339 - Bus and Bus Facilities	STP - Surface Transportation Program						
5309 - FTA Section 5309 - Capital Bus and Bus Facilities			BR - Bridge Replacement Funds	SRTS - Safe Routes to School						
5310 - FTA Section 5310 - Elderly and Disabled			HSIP - Highway Safety Improvement Program	TE/TA - Transportation Enhancement/Transportation Alternative						

TIP PUBLIC PARTICIPATION

APPENDIX E

Figure E-1: TIP Development Timeline

Task	Date
Call for Projects Due	8/31/2022
Develop new TIP	9/1/22 - 9/16/22
Send draft to KDOT, FHWA, and FTA for review	9/16/2022
30 day public comment period*	9/23/22 - 10/22/22
TAC consideration of TIP	10/4/2022
Incorporate public comments	10/23/2022
MPO Policy Board consideration of TIP and public comments	10/27/2022
Send approved TIP to KDOT, FHWA, and FTA	10/28/2022
Inclusion in Kansas STIP	11/3/2022

Figure E-2: Public Comment and Approval Summary

TIP Amendment Request Made to MPO Staff	Public Review Period	# of Public Comments	TAC Action	Policy Board Action
Original Approval	9/16/2022 to 10/15/2022	0	October 4, 2022	October 28, 2022
Amendment 1	3/9/2023 to 3/24/2023		April 4, 2023	April 20, 2023
Amendment 2	5/11/2023 to 5/26/2023		June 6, 2023	June 15, 2023
Amendment 3	7/6/2023 to 7/21/2023		August 1, 2023	August 17, 2023
Amendment 4	to			
Amendment 5	to			
Amendment 6	to			

TIP public comments and MPO staff responses can be viewed at www.lawrenceks.org/mpo/tip/comments.

F SUMMARY OF TIP CHANGES

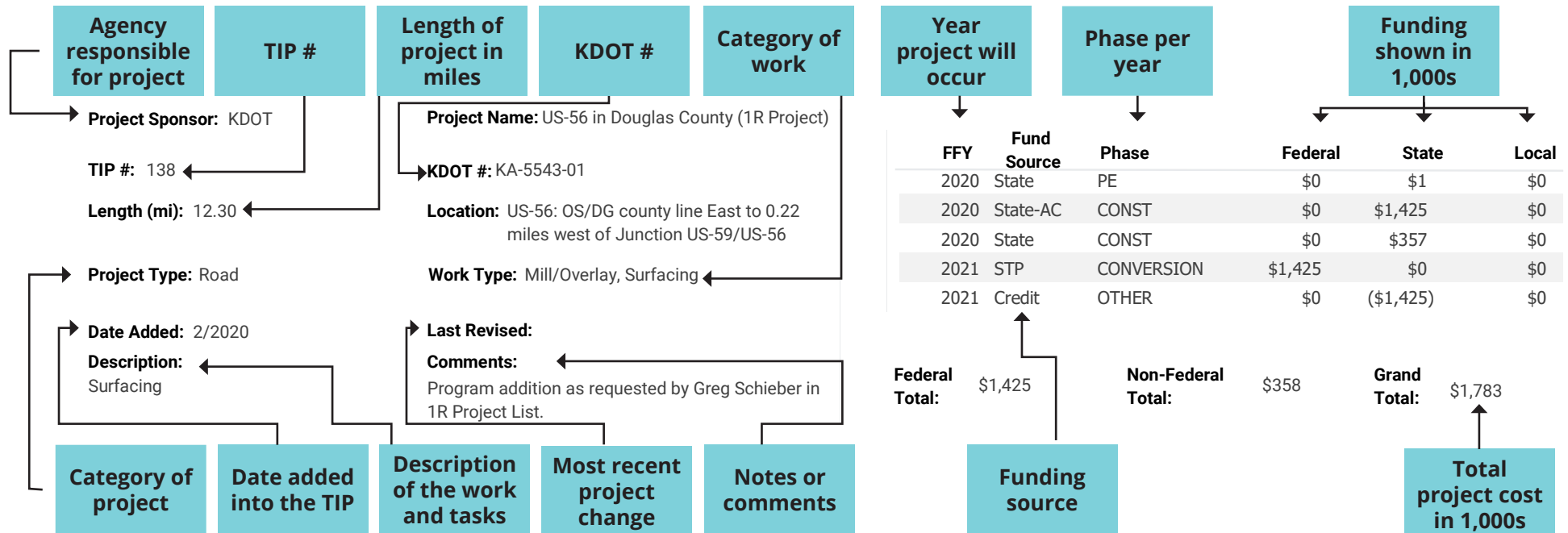
APPENDIX G

Note: Future TIP Amendments will be summarized here

TIP PROJECT LISTINGS

APPENDIX H

Example Listing



Decoding the TIP

TIP #: Assigned based on project type by MPO:

100 – Roadway/Intersection
200 – Bridges
300 – ITS
400 – Transit/Paratransit
500 – Enhancement (Bike/Ped)
600 – Safety
700 – Other – studies

Phase:

CAPITAL – Transit Capital
CONST – Construction - (includes Construction Engineering)
OPERATING – Transit Operating
PE – Preliminary Engineering
ROW – Right of Way
UTIL – Utilities

Project Type: Classified into categories:

- Bridge
- Enhancement
- Interchange
- Intersection
- ITS
- Road
- Safe Routes To Schools (SRTS)
- Safety
- Traffic Signal
- Transit/Paratransit

Federal Fiscal Year (FFY): October 1 - September 30

Work Type: Classified into categories:

- Access Management
- Bridge Rehabilitation
- Bridge Replacement
- Capital
- Geometric Improvement
- Grading
- Mill/Overlay
- Operating
- Other
- Pedestrian & Bicycle
- Planning
- Reconstruction
- Redeck Bridge
- Safety
- Seeding
- Signage
- Signal
- Special Work
- Surfacing
- Vehicle Replacement

Fund Source:

- Community Development Block Grant (CDBG)
- National Highway Performance Program (NHPP)
- Surface Transportation Program (STP)
- Highway Safety Improvement Program (HSIP)
- Railway-Highway Crossings (set-aside from HSIP)
- Transportation Alternatives (TA) – includes Safe Routes To School funding
- Urban Area Formula Grants (5307)
- Rural Area Formula Grants (5311)
- Enhanced Mobility of Seniors and Individuals with Disabilities (5310)
- Bus and Bus Facilities (5339) Program
- State of Kansas Funding (State)
- Local Government Funding (Local) - County and City funds from local property and sales taxes



Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Douglas County/Lawrence
TIP #: 106 **KDOT #**
Length (mi): 2.00
Project Type: Road, Bridge
Date Added: 10/2016 **Last Revised:** 10/2021
Description:
New road construction to extend Wakarusa Drive from planned K-10 interchange to Route 458. Includes new bridge over Wakarusa River. *Alignment not finalized

Project Name: Wakarusa Drive Extension
Location: Clinton Parkway to N 1200 Rd
Work Type: Grading, Bridge, Surfacing
Revision History:
Comments:
Construction contingent on KDOT construction of K-10 interchange at Wakarusa Drive. Changed TIP # from 100 to 106 in 2/2017.
Douglas County to pay 60% of design and construction costs & Lawrence to pay 40%.

FFY	Fund Source	Phase	Federal	State	Local
2022	Local	PE	\$0	\$0	\$500
2022	Local - LAW	PE	\$0	\$0	\$166
2022	Local - LAW	ROW	\$0	\$0	\$167
2022	Local - LAW	UTIL	\$0	\$0	\$167
2023	Local	PE	\$0	\$0	\$250
2023	Local	ROW	\$0	\$0	\$150
2023	Local	UTIL	\$0	\$0	\$100
2024	Local	CONST	\$0	\$0	\$750
2024	Local - LAW	CONST	\$0	\$0	\$6,500
2025	Local	CONST	\$0	\$0	\$4,000

Federal Total:	\$0	Non-Federal Total:	\$12,750	Grand Total:	\$12,750
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Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 117 **KDOT #**

Length (mi): 0.50

Project Type: Road

Date Added: **Last Revised:**
6/2023

Description:
Reconstruction of Naismith from 19th to 23rd st including new pavement, curb and gutter, storm sewer, sidewalks and bike facilities.

Project Name: Naismith Drive Reconstruction: 19th St. to 23rd St.

Location: 19th & Naismith to 23rd & Naismith

Work Type: Reconstruction, Pedestrian/Bicycle

Revision History: FFY23A2

Comments:
The street is in failing condition and needs to be reconstruction (PCI <50). Naismith is on the bike plan for future improvements.

FFY	Fund Source	Phase	Federal	State	Local
2025	Local	PE	\$0	\$0	\$400
2026	Local	CONST	\$0	\$0	\$5,000

Federal Total:	\$0	Non-Federal Total:	\$5,400	Grand Total:	\$5,400
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Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: KDOT

TIP #: 142 **KDOT #** KA-2841-02

Length (mi): 0.00

Project Type: Interchange

Date Added: 2/2021 **Last Revised:** 4/2023

Description:
Construct a Diverging Diamond Interchange (DDI) includes bridge #088- for the addition of sidewalk with barriers for pedestrian protection down center of bridge.

Project Name: US-40/K-10 Interchange Improvement (Diverging Diamond Interchange)

Location: US-40/K-10 Interchange Improvement (DDI) in Lawrence

Work Type: Reconstruction

Revision History: FFY23 A1

Comments:
PE Phase will utilize AC of \$1,240 with conversion to NHPP in 2025. The UTIL Phase will utilize AC of \$93 with conversion to NHPP in 2025. The CONST Phase will utilize AC of \$12,127 with conversion to NHPP in 2025.

FFY	Fund Source	Phase	Federal	State	Local
2021	State	PE	\$0	\$310	\$0
2021	State-AC	PE	\$0	\$1,240	\$0
2022	State	ROW	\$0	\$467	\$0
2022	State	UTIL	\$0	\$93	\$0
2022	State-AC	UTIL	\$0	\$372	\$0
2023	State-AC	CONST	\$0	\$12,127	\$0
2023	State	CONST	\$0	\$3,030	\$0
2023	Local	CONST	\$0	\$0	\$1,500
2025	Credit	OTHER	\$0	(\$13,739)	\$0
2025	NHPP	CONVERSION	\$13,739	\$0	\$0

Federal Total:	\$13,739	Non-Federal Total:	\$5,400	Grand Total:	\$19,139
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Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: KDOT

TIP #: 143 **KDOT #** KA-6015-01

Length (mi): 3.75

Project Type: Road

Date Added: 2/2021
Last Revised: 4/2022

Description:
Roadway reconstruction based on 44 ft. roadway with 10 ft. shoulders. Add acceleration/deceleration lanes as warranted.

Project Name: US-56 Reconstruction: US-56/US-59 Junction east to 1600 Rd.

Location: US-56 in Douglas County: Beginning at East Junction US-56/US-59 Ramps thence East to 1600 Road

Work Type: Reconstruction

Revision History:

Comments:
Project is authorized for PE ONLY. The estimated total project cost is \$15,486 which shall be used for planning purposes only. The PE Phase will utilize AC in the amount of \$1,003 with conversion to NHPP in 2026.

FFY	Fund Source	Phase	Federal	State	Local
2021	State	PE	\$0	\$251	\$0
2021	State-AC	PE	\$0	\$1,003	\$0
2028	Credit	OTHER	\$0	(\$1,003)	\$0
2028	NHPP	CONVERSION	\$1,003	\$0	\$0

Federal Total:	\$1,003	Non-Federal Total:	\$251	Grand Total:	\$1,254
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence		Project Name: South Iowa St. Traffic Signal Improvement Project	FFY	Fund Source	Phase	Federal	State	Local
TIP #: 144	KDOT # KA-6350-01		2023	Local	CONST	\$0	\$0	\$437
Length (mi): 3.60			2023	State	CONST	\$0	\$420	\$0
Project Type: ITS								
Date Added: 4/2021	Last Revised: 4/2023							
Description: Fiber extension from 31st & Louisiana St. and 23rd & Iowa St. to existing traffic signals in the South Iowa Area. Will include a variety of traffic signals improvements for as many as 11 signals (ex. New CCTV cameras, signal heads, detection, & cabinets).		Location: 31st St. (Louisiana St. to Neider Road) and Iowa St./US59 (23rd St. to County Route 458)						
		Work Type: Signal						
		Revision History: FFY23 A1						
		Comments:						
			Federal Total:	\$0	Non-Federal Total:	\$857	Grand Total:	\$857



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 146 **KDOT #**

Length (mi): 0.25

Project Type: Road

Date Added: 10/2021 **Last Revised:** 6/2023

Description:
11th St (Indiana to Ohio) including concrete pavement, storm sewer, bike/ped improvements & sanitary sewer improvements at 11th/Ohio.

Louisiana St (11th to 12th St) including concrete pavement, storm sewer, bike/ped improvements.

Project Name: 11th St. - Indiana to Ohio; Louisiana - 11th to 12th Reconstruction

Location: 11th St. - Indiana St. to Ohio St. & Louisiana St. - 11th St. to 12th St.

Work Type: Reconstruction

Revision History: FFY23 A2

Comments:
Street is in failing condition (PCI = 27) and poor subgrade conditions require complete reconstruction. 11th Street is a collector street and on transit route.

FFY	Fund Source	Phase	Federal	State	Local
2022	Local	PE	\$0	\$0	\$150
2024	Local	CONST	\$0	\$0	\$2,000

Federal Total:	\$0	Non-Federal Total:	\$2,150	Grand Total:	\$2,150
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: KDOT		<div><div>Project Name: K-33: Wellsville to U.S. 56 (N. 200th Road) junction</div><div>Location: 50 feet north of 6th Street in Wellsville north to the K-33/U.S. 56 (N. 200th Road) junction.</div><div>Work Type: Reconstruction</div><div>Revision History:</div><div>Comments:</div></div>	FFY		Fund Source	Phase	Federal	State	Local
TIP #: 147	KDOT # KA-6550-01		2022	State	PE	\$0	\$400	\$0	
Length (mi): 2.01									
Project Type: Road									
Date Added: 4/2022	Last Revised: 6/2022								
Description: A portion of this project is in Douglas County. Discovery Phase to determine the appropriate rehabilitation/reconstruction improvements for the location. It includes resurfacing and widening shoulders.									
		Federal Total:		\$0	Non-Federal Total:		\$400	Grand Total:	\$400



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 148 **KDOT #**

Length (mi): 1.50

Project Type: Road

Date Added: 10/2022
Last Revised:

Description:
Reconstruction of Bob Billings from Kasold to Wakarusa including new pavement, storm sewer, waterline, sidewalks and bike facility.

Project Name: Bob Billings - Kasold to Wakarusa Dr.

Location: Bob Billings - Kasold to Wakarusa Dr.

Work Type: Reconstruction

Revision History:

Comments:

FFY	Fund Source	Phase	Federal	State	Local
2025	PE	LOCAL	\$0	\$0	\$500
2026	PE	LOCAL	\$0	\$0	\$500
2026	ROW	LOCAL	\$0	\$0	\$100

Federal Total: \$0

Non-Federal Total: \$1,100

Grand Total: \$1,100



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence		Project Name: Wakarusa Dr. Reconstruction - Harvard Rd to 6th Street	FFY		Fund Source	Phase	Federal	State	Local
TIP #: 149	KDOT #		2025	PE		LOCAL	\$0	\$0	\$300
Length (mi): 0.25			2026	State		CONST	\$0	\$3,000	\$0
Project Type: Road									
Date Added: 10/2022		Last Revised: 6/2023	Work Type: Reconstruction						
Description: Reconstruction of street will include subgrade treatment, surfacing, storm sewer, geometric improvements, and multimodal facilities.		Revision History: FFY23 A2							
		Comments: Project will complete the reconstruction of the Wakarusa corridor from Clinton Parkway to 6th Street.							
			Federal Total:	\$0		Non-Federal Total:	\$3,300	Grand Total:	\$3,300



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 214 **KDOT #**

Length (mi): 1.47

Project Type: Road

Date Added:
10/2016

Last Revised:
10/2021

Description:
Reconstruction of street will include subgrade treatment, surfacing, storm sewer, geometric improvements, and multimodal facilities.

Project Name: Wakarusa Dr. Reconstruction: Research Pkwy to 23rd St

Location:Wakarusa: Research Pkwy to 23rd St

Work Type: Reconstruction

Revision History:

Comments:
Extend project limits from 18th St to 23rd St.

FFY	Fund Source	Phase	Federal	State	Local
2021	Local	PE	\$0	\$0	\$400
2023	Local	CONST	\$0	\$0	\$7,600

Federal Total:	\$0	Non-Federal Total:	\$8,000	Grand Total:	\$8,000
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Douglas County

TIP #: 219 **KDOT #**

Length (mi): 1.60

Project Type: Road

Date Added: 8/2015 **Last Revised:** 8/2021

Description:
Construct paved shoulders; replace narrow bridges and culvert; flatten roadside slope; and improve intersections.

Project Name: Rte 458/1055 Improvements: E 1500 thru E 1600

Location: E1500 to E1600 & N940 to N1000

Work Type: Grading, Surfacing

Revision History:

Comments:

FFY	Fund Source	Phase	Federal	State	Local
2020	Local	PE	\$0	\$0	\$2
2021	Local	PE	\$0	\$0	\$32
2021	Local	ROW	\$0	\$0	\$125
2021	Local	UTIL	\$0	\$0	\$250
2022	Local	CONST	\$0	\$0	\$3,200

Federal Total:	\$0	Non-Federal Total:	\$3,609	Grand Total:	\$3,609
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Lawrence-Douglas County MPO

FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 230 **KDOT #**

Length (mi): 0.75

Project Type: Road

Date Added: 8/2015 **Last Revised:** 10/2021

Description:
Construct Queens Road, roundabout at Overland Dr & Queens Rd, construct sidewalk & bike lanes.

Project Name: Queens Road: 6th to North City Limits

Location: 6th St to North City Limits

Work Type: Reconstruction

Revision History:

Comments:
PE/ROW are each estimated at 10% of Construction Costs.

Updated project description to include roundabout at Overland/Queens.

FFY	Fund Source	Phase	Federal	State	Local
2015	Local	ROW	\$0	\$0	\$600
2016	Local	PE	\$0	\$0	\$200
2022	Local	CONST	\$0	\$0	\$6,900
2023	Local	CONST	\$0	\$0	\$4,900

Federal Total:	\$0	Non-Federal Total:	\$12,600	Grand Total:	\$12,600
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 234 **KDOT #** KA-4473-01

Length (mi): 2.01

Project Type: Road

Date Added: 8/2015 **Last Revised:** 4/2022

Description:
Reconstruction of street including pavement, storm sewer, geometric improvements and multimodal facilities.

Project Name: 23rd Street Reconstruction: Haskell to East City Limits

Location: Haskell Ave to East City Limits

Work Type: Reconstruction

Revision History:

Comments:
PE/ROW are each estimated at 10% of Construction Costs. Project is part of the 23rd St KDOT/City turn back agreement. This agreement, including final project(s) cost share, has not been finalized to date.

FFY	Fund Source	Phase	Federal	State	Local
2020	Local	PE	\$0	\$0	\$500
2022	Local	CONST	\$0	\$0	\$2,250
2022	State	CONST	\$0	\$4,900	\$0
2023	Local	CONST	\$0	\$0	\$4,100

Federal Total:	\$0	Non-Federal Total:	\$11,750	Grand Total:	\$11,750
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Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: KDOT

TIP #: 236 **KDOT #** KA-3634-02

Length (mi): 1.20

Project Type: Road/Interchange

Date Added: 1/2016
Last Revised: 8/2023

Description:

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). Includes Bridges #200 (New), #201 (New), #202 (New), #203 (Replace Br #095), #204 (New), #205 (New), #086 (Repair).

Project Name: SLT/K-10 West Leg in Douglas County

Location: I-70/K10 Junction South to 3500 ft N of K-10/US-40 Junction

Work Type: Interchange/Reconstruction

Revision History: FFY23 A3

Comments:

PE uses \$3,360K of AC & UTIL uses \$1,600 of AC with conversion to NHPP in 2029. The total project cost, including all work phases, is estimated at \$106,179. This estimate should be used for planning purposes only. Authorized for PE, ROW, UTIL only.

FFY	Fund Source	Phase	Federal	State	Local
2021	State	PE	\$0	\$840	\$0
2021	State-AC	PE	\$0	\$3,360	\$0
2022	State	ROW	\$0	\$2,000	\$0
2024	State	UTIL	\$0	\$400	\$0
2024	State-AC	UTIL	\$0	\$1,600	\$0
2029	NHPP	CONVERSION	\$4,960	\$0	\$0
2029	Credit	OTHER	\$0	(\$4,960)	\$0

Federal Total: \$4,960

Non-Federal Total: \$3,240

Grand Total: \$8,200



Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: KDOT

TIP #: 237 **KDOT #** KA-3634-03

Length (mi): 7.00

Project Type: Road/Interchange

Date Added: 1/2016
Last Revised: 8/2023

Description:
Add 2-lanes to existing 2-lanes for a 4-Lane Freeway section. Existing interchanges at US-40 (6th St.), Bob Billings Pkwy, Clinton Pkwy, US-59 (Iowa St.) A new interchange for the Wakarusa/27th intersection, including replacing/repairing bridges.

Project Name: SLT/K-10 West Leg in Douglas County

Location: 3500 ft N of K-10/US-40 Junction, to K-10 US-59/Iowa St Junction

Work Type: Interchange/Reconstruction

Revision History: FFY23 A3

Comments:
Total est. cost of \$206,304. Revised cost estimate to reflect the March bi-annual estimates. Post-Field Check ROW activities adjusted to reflect requested dates from ROW. Letting date of 6/19/2024 remains the same.

FFY	Fund Source	Phase	Federal	State	Local
2021	State	PE	\$0	\$2,600	\$0
2021	State-AC	PE	\$0	\$10,400	\$0
2023	State	ROW	\$0	\$4,000	\$0
2024	State	UTIL	\$0	\$3,200	\$0
2024	State-AC	UTIL	\$0	\$12,800	\$0
2024	State	CONST	\$0	\$34,661	\$0
2024	State-AC	CONST	\$0	\$138,643	\$0
2028	Credit	OTHER	\$0	(\$161,843)	\$0
2028	NHPP	CONVERSION	\$161,843	\$0	\$0

Federal Total:	\$161,843	Non-Federal Total:	\$44,461	Grand Total:	\$206,304
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: KDOT

TIP #: 243

Length (mi): 0.30

Project Type: Road

Date Added: 7/2016

Description:
Improvements to US-56 - Realign Eisenhower and construct 3 lane US-56 in Baldwin City.

KDOT # KA-4365-01

Location: Eisenhower St to 1st St

Work Type: Other/Reconstruction

Revision History:

Comments:

Project Name: US-56 Improvements: Eisenhower St to 1st St

Project US-56 Improvements: Eisenhower St to 1st St

FFY	Fund Source	Phase	Federal	State	Local
2021	Local	CONST	\$0	\$0	\$89
2021	State	CONST	\$0	\$1,675	\$0
Federal Total:			\$0	Non-Federal Total:	\$1,764
				Grand Total:	\$1,764



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Douglas County

TIP #: 248 **KDOT #**

Length (mi): 0.15

Project Type: Bridge

Date Added: 10/2018 **Last Revised:** 8/2021

Description:
Replace load posted, fracture critical bridge

Project Name: Bridge 0964-1000 replacement

Location: E 1000 Road 0.4 mi. South of Route 458

Work Type: Bridge Replacement, Grading

Revision History:

Comments:
Funding amounts assume all Local funding.

FFY	Fund Source	Phase	Federal	State	Local
2021	Local	PE	\$0	\$0	\$110
2021	Local	ROW	\$0	\$0	\$15
2022	Local	UTIL	\$0	\$0	\$75
2022	Local	CONST	\$0	\$0	\$1,600

Federal Total:	\$0	Non-Federal Total:	\$1,800	Grand Total:	\$1,800
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Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: KDOT

TIP #: 249 **KDOT #** KA-5683-01

Length (mi): 0.00

Project Type: Bridge

Date Added: 8/2020 **Last Revised:** 8/2021

Description:
Machine preparation, replace joints, patch deck, polymer overlay, pier repair and bridge painting

Project Name: Repair bridge #071 on K-10 in Douglas County

Location: K-10; Bridge #071 over the Wakarusa River located 7.05 miles east of the K-10/U.S. 59 junction in Douglas County

Work Type: Bridge Rehabilitation

Revision History:

Comments:
The PE Phase will utilize AC in the amount of \$183 K with conversion to NHPP in 2022. The CONST Phase will utilize AC in the amount of \$1,363 K with conversion to NHPP in 2022.

FFY	Fund Source	Phase	Federal	State	Local
2020	State	PE	\$0	\$46	\$0
2020	State-AC	PE	\$0	\$183	\$0
2021	State	CONST	\$0	\$311	\$0
2021	State-AC	CONST	\$0	\$1,244	\$0
2022	NHPP	CONVERSION	\$1,427	\$0	\$0
2022	Credit	OTHER	\$0	(\$1,427)	\$0

Federal Total:	\$1,427	Non-Federal Total:	\$357	Grand Total:	\$1,784
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 300

Length (mi): 0.12

Project Type: ITS

Date Added: 8/2021

Description:
Project will replace the 3 signals on 6th (Massachusetts St, Vermont St, Kentucky St). Upgrades will include Accessible Pedestrian Signals and Detectors.

KDOT #

Location: 3 signals along 6th: Massachusetts St, Vermont St, and Kentucky St

Work Type: Signal

Revision History:

Comments:

FFY	Fund Source	Phase	Federal	State	Local
2022	Local	CONST	\$0	\$0	\$100
2023	Local	CONST	\$0	\$0	\$600



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Independence Inc.

TIP #: 401 **KDOT #**

Length (mi): 0.00

Project Type: Transit/Paratransit

Date Added: 10/2014 **Last Revised:** 6/2020

Description:
Operating and Capital

Project Name: Independence Inc., FTA 5311 Operating & Capital

Location: Lawrence

Work Type: Operating/Capital

Revision History:

Comments:

2019 – 5311 Admin- \$32, Local Admin- \$8; 2020 – 5311 Admin- \$31, Local Admin- \$8; 2021 – 5311 Admin- \$41, Local Admin- \$10.

Purchase Ramp Van in FY2020 & Ramp Minivan in FY2021.

FFY	Fund Source	Phase	Federal	State	Local
2021	Local	OPERATING	\$0	\$0	\$50
2021	State	OPERATING	\$0	\$33	\$0
2021	5311	OPERATING	\$83	\$0	\$0
2021	Local	CAPITAL	\$0	\$0	\$8
2021	5311	CAPITAL	\$33	\$0	\$0

Federal Total:	\$116	Non-Federal Total:	\$91	Grand Total:	\$207
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Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit

TIP #: 403 **KDOT #** PT-0701

Length (mi): 0.00

Project Type: Transit/Paratransit

Date Added: 10/2014
Last Revised: 6/2022

Description:
Comprehensive Transportation Program.
Purchase of replacement cutaway
vehicles.

Project Name: Lawrence Transit Capital and Operating Assistance

Location: Lawrence

Work Type: Special Work

Revision History:

Comments:
State CTP/IKE Legacy

FFY	Fund Source	Phase	Federal	State	Local
2019	State-PT	CAPITAL	\$0	\$500	\$0
2019	State-PT	OPERATING	\$0	\$759	\$0
2020	State-PT	CAPITAL	\$0	\$1,000	\$0
2020	State-PT	OPERATING	\$0	\$297	\$0
2021	State-PT	CAPITAL	\$0	\$600	\$0
2021	State-PT	OPERATING	\$0	\$721	\$0
2022	State-PT	CAPITAL	\$0	\$500	\$0
2022	State-PT	OPERATING	\$0	\$788	\$0
2023	State-PT	CAPITAL	\$0	\$0	\$0
2023	State-PT	OPERATING	\$0	\$1,155	\$0
2024	State-PT	CAPITAL	\$0	\$500	\$0
2024	State-PT	OPERATING	\$0	\$655	\$0
2025	State-PT	CAPITAL	\$0	\$500	\$0
2025	State-PT	OPERATING	\$0	\$655	\$0
2026	State-PT	CAPITAL	\$0	\$500	\$0
2026	State-PT	OPERATING	\$0	\$655	\$0

Federal Total: \$0

Non-Federal Total: \$9,785

Grand Total: \$9,785





Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit

TIP #: 412 **KDOT #** 5307 FTA

Length (mi): 0.00

Project Type: Transit/Paratransit

Date Added: 10/2014 **Last Revised:** 5/5/2022

Description:
Operating, Preventative Maintenance,
and Program Administration activities.

Project Name: Lawrence Transit Operating Funds

Location: Lawrence

Work Type: Operating

Revision History:

Comments:
Federal Transit 5307 Funds. 2021-2022 amounts
are projected.

FFY	Fund Source	Phase	Federal	State	Local
2019	Local	OPERATING	\$0	\$0	\$1,860
2019	5307	OPERATING	\$2,447	\$0	\$0
2021	Local	OPERATING	\$0	\$0	\$2,533
2021	5307	OPERATING	\$2,533	\$0	\$0
2022	Local	OPERATING	\$0	\$0	\$3,808
2022	5307	OPERATING	\$3,808	\$0	\$0
2023	Local	OPERATING	\$0	\$0	\$4,188
2023	5307	OPERATING	\$4,188	\$0	\$0
2024	Local	OPERATING		\$0	\$4,606
2024	5307	OPERATING	\$4,606	\$0	\$0
2025	Local	OPERATING	\$0	\$0	\$5,067
2025	5307	OPERATING	\$5,067	\$0	\$0
2026	Local	OPERATING	\$0	\$0	\$5,574
2026	5307	OPERATING	\$5,574	\$0	\$0

Federal Total: \$28,223

Non-Federal Total: \$27,636

Grand Total: \$55,859



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit

TIP #: 416 **KDOT #**

Length (mi): 0.00

Project Type: Transit/Paratransit

Date Added: 8/2020 **Last Revised:** 6/2022

Description:
Procurement of five battery electric buses to replace five diesel powered buses, associated charging infrastructure, and project management.

Project Name: Lawrence Transit Electric Buses Phase 1

Location: Lawrence

Work Type: Vehicle Replacement

Revision History:

Comments:
FTA Low-No grant for \$3.75 million awarded in June 2020.

FFY	Fund Source	Phase	Federal	State	Local
2021	5339	PE	\$367	\$0	\$0
2022	5339	CAPITAL	\$3,389	\$0	\$0
2022	Local	CAPITAL	\$0	\$0	\$2,234
Federal Total:			\$3,756	Non-Federal Total:	\$2,234
				Grand Total:	\$5,990



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit

TIP #: 417 **KDOT #**

Length (mi): 0.00

Project Type: Transit/Paratransit

Date Added: 10/2020 **Last Revised:** 6/2021

Description:
CARES Act funds were apportioned to Lawrence Transit, eligible for similar uses as 5307 funds in response to lost revenue and challenges due to COVID-19. In Lawrence, funding will be used for operating costs.

Project Name: CARES Act Operating Funds

Location: Lawrence

Work Type: Operating

Revision History:

Comments:
Linked with CARES Act Capital Assistance project (#418). Project requires no local match.

FFY	Fund Source	Phase	Federal	State	Local
2021	5307	OPERATING	\$1,921	\$0	\$0
2022	5307	OPERATING	\$3,737	\$0	\$0

Federal Total:	\$5,658	Non-Federal Total:	\$0	Grand Total:	\$5,658
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit

TIP #: 419 **KDOT #**

Length (mi): 0.00

Project Type: Transit/Paratransit

Date Added: 8/2021
Last Revised:

Description:
American Rescue Plan Act of 2021 (ARP) funds were apportioned to Lawrence Transit, eligible for similar uses as 5307 funds in response to lost revenues and challenges due to the COVID-19.

Project Name: American Rescue Plan (ARP) Operating Assistance

Location: City of Lawrence

Work Type: Operating

Revision History:

Comments:
In Lawrence, these funds will be used for salaries and operating costs as eligible under the 5307 program.

No local match required.

FFY	Fund Source	Phase	Federal	State	Local
2022	5307	OPERATING	\$1,524	\$0	\$0
2023	5307	OPERATING	\$2,988	\$0	\$0

Federal Total:	\$4,512	Non-Federal Total:	\$0	Grand Total:	\$4,512
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit		Project Name: Lawrence Transit Electric Buses Phase II						
TIP #: 420	KDOT #							
Length (mi): 0.00			Location: City of Lawrence					
Project Type: Transit/Paratransit			Work Type: Vehicle Replacement					
Date Added: 8/2021	Last Revised:		Revision History:					
Description: Procurement of two battery electric buses to replace two diesel powered buses, associated charging infrastructure, and project management.		Comments: FTA Low-No grant for \$1.8 million awarded in June 2021.						



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit		Project Name: Zero-Emissions Transition Plan						
TIP #: 421	KDOT #		FFY	Fund Source	Phase	Federal	State	Local
Length (mi): 0.00			2022	Local	PE	\$0	\$0	\$30
			2022	Federal	PE	\$120	\$0	\$0
Project Type: Transit/Paratransit		Location: Lawrence						
		Work Type: Planning						
Date Added: 6/2022	Last Revised: 6/2022	Revision History:						
Description: This project will allow Lawrence Transit to plan for larger scale deployments of charging equipment and buses towards the goal of a fully electric fleet.		Comments:						



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit
TIP #: 422 **KDOT #**
Length (mi): 0.00

Project Name: Equitable and Accessible Bus Stop Amenities
Location: Lawrence

Project Type: Transit/Paratransit
Date Added: 6/2022
Last Revised:
Work Type: Capital
Revision History:

Description:
This project will improve 25 bus stops in Environmental Justice zones. 16 sites will be improved with accessible boarding pads and solar lighting for visibility and safety, and 9 additional sites will gain shelters, benches, bike racks, and trash cans.

Comments:

FFY	Fund Source	Phase	Federal	State	Local
2023	Local	CONST	\$0	\$0	\$31
2023	Federal	CONST	\$122	\$0	\$0

Federal Total:	\$122	Non-Federal Total:	\$31	Grand Total:	\$153
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit

TIP #: 423 **KDOT #**

Length (mi): 0.00

Project Type: Transit/Paratransit

Date Added: 6/2022
Last Revised:

Description:
This project includes bicycle parking infrastructure and real-time bus arrival signage at both the Bob Billings and Downtown sites, as well as Downtown elements such as concrete, canopies, seating, shelters, and a restroom facility.

Project AIC - Multimodal Transfer Facility Elements Name:

Location: Lawrence

Work Type: Capital

Revision History:

Comments:
Access, Innovation, and Collaboration (AIC) Program

FFY	Fund Source	Phase	Federal	State	Local
2023	Local	CAP	\$0	\$0	\$406
2023	State	CONST	\$0	\$1,624	\$0

Federal Total:	\$0	Non-Federal Total:	\$2,030	Grand Total:	\$2,030
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit
TIP #: 424 **KDOT #**
Length (mi): 0.00

Project AIC - Bus Technology, Accessibility, and Name: Branding Enhancements
Location: Lawrence

Project Type: Transit/Paratransit **Work Type:** Other

Date Added: 6/2022 **Last Revised:** **Revision History:**

Description: Project includes real-time bus arrival information, automated vehicle annunciators, exterior rear destination signs on buses, interior digital signs on buses, flip-seat retrofits, and bus decals & wraps

Comments: Access, Innovation, and Collaboration (AIC) Program

FFY	Fund Source	Phase	Federal	State	Local
2023	Local	CAP	\$0	\$0	\$169
2023	Federal	CAP	\$677	\$0	\$0

Federal Total:	\$677	Non-Federal Total:	\$169	Grand Total:	\$846
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Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit

TIP #: 425 **KDOT #**

Length (mi): 0.00

Project Type: Transit/Paratransit

Date Added: 6/2022 **Last Revised:**

Description:
Procurement of four battery electric buses to replace two diesel powered buses, two gasoline powered buses, associated charging infrastructure, and project management.

Project Name: Electric Buses Phase III

Location: Lawrence

Work Type: Vehicle Replacement

Revision History:

Comments:
FTA Low-No grant for \$3.3 million awarded in August 2022

FFY	Fund Source	Phase	Federal	State	Local
2022	Local	PE	\$0	\$0	\$8
2022	Federal	PE	\$31	\$0	\$0
2023	Local	CONST	\$0	\$0	\$220
2023	Local	PE	\$0	\$0	\$40
2023	Federal	PE	\$161	\$0	\$0
2024	Local	CAP	\$0	\$0	\$501
2024	Local	PE	\$0	\$0	\$40
2024	Federal	PE	\$160	\$0	\$0
2024	Local	CONST	\$0	\$0	\$330
2024	Federal	CAP	\$2,824	\$0	\$0
2025	Local	PE	\$0	\$0	\$26

Federal Total: \$3,176

Non-Federal Total: \$1,165

Grand Total: \$4,341



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence Transit		Project Name: Microtransit Pilot				
TIP #: 426	KDOT #					
Length (mi): 0.00		Location: Lawrence				
Project Type: Transit/Paratransit		Work Type: Capital/ Operating				
Date Added: 10/2022	Last Revised:	Revision History:				
Description: This project includes hardware, backend platform, and customer-facing app to support planned microtransit service that will go into effect in January 2023.		Comments:				
				</		



Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 507 **KDOT #**

Length (mi): 0.00

Project Type: Pedestrian & Bicycle

Date Added: 10/2018
Last Revised: 10/2020

Description:
Pedestrian, Bicycle, & ADA ramp projects throughout Lawrence including in EJ areas. Community Development Block Grant (CDBG) is a HUD program administered by the Lawrence Development Services Dept. The City is allocated a % of CDBG funding each year.

Project Name: Various Lawrence Bike/Sidewalk/ADA Ramps Projects

Location: Lawrence

Work Type: Pedestrian & Bicycle Work

Revision History:

Comments:
The CDBG is an estimate of anticipated funding. CONST funding may be used for additional work tasks. Local funding for ADA ramps at \$325k/yr & Bike/Ped Program at \$675k/yr. Local funding matching TA project specific funding will be listed separately.

FFY	Fund Source	Phase	Federal	State	Local
2023	CDBG	CONST	\$300	\$0	\$0
2023	Local	CONST	\$0	\$0	\$675
2023	Local	CONST	\$0	\$0	\$325
2024	CDBG	CONST	\$300	\$0	\$0
2024	Local	CONST	\$0	\$0	\$675
2024	Local	CONST	\$0	\$0	\$325
2025	CDGB	Const	\$300	\$0	\$0
2025	Local	CONST	\$0	\$0	\$675
2025	Local	CONST	\$0	\$0	\$325
2026	CDGB	Const	\$300	\$0	\$0
2026	Local	CONST	\$0	\$0	\$675
2026	Local	CONST	\$0	\$0	\$325

Federal Total: \$1,200

Non-Federal Total: \$4,000

Grand Total: \$5,200



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Baldwin City

TIP #: 509

Length (mi): 0.78

Project Type: Transportation Alternative

Date Added: 4/2019

Description:
Construct sidewalk along the south side of Elm St from 8th St across existing Midland Railway Crossing connecting to existing sidewalk on USD 348 property with bulb out at 8th St. Construct shared use path along Elm St from Santa Fe Depot south of High St

Project Name: West Baldwin Pedestrian/Bike Connectivity Project

Location: Intersection of 8th Street/Elm St proceeding westerly to USD 348 property (+/- one-half mile) and East side of

Work Type: Pedestrian & Bicycle Work

Revision History:

Comments:
ADA accessible sidewalks and shared use path to provide connectivity for community at-large, and more specifically, to provide elementary students with a safe route. KDOT TA Project; FY20; \$1,012,960 (max.)

KDOT # TE-0472-02

FFY	Fund Source	Phase	Federal	State	Local
2021	Local	PE	\$0	\$0	\$149
2021	Local	UTIL	\$0	\$0	\$10
2022	Local	CONST	\$0	\$0	\$253
2022	TA	CONST	\$1,013	\$0	\$0

Federal Total:	\$1,013	Non-Federal Total:	\$412	Grand Total:	\$1,425
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Baldwin City		Project Name: Maple Leaf Trail - Phase 2	FFY		Fund Source	Phase	Federal	State	Local
TIP #: 510 KDOT # TE-0472-03			2024	TA		CONST	\$732	\$0	\$0
Length (mi): 0.60									
Location: Santa Fe Depot on High Street to Southwest City Limits of Baldwin City									
Project Type: Transportation Alternative									
Work Type: Pedestrian & Bicycle Work									
Date Added: 4/2023		Last Revised: 4/2023		Revision History: FFY23 A1					
Description: Construction of a 10' trail in southwest Baldwin City, extending southwest from the historic Santa Fe Depot		Comments: KDOT TA funded and is the 2nd phase of creation of the Maple Leaf Trail. The ultimate goal is to extend the trail all the way to Ottawa to interconnect with the Prairie Spirit Rail Trail and the Flint Hills Nature Trail.							
			Federal Total:		\$732	Non-Federal Total:		\$0	Grand Total: \$732



Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 513 **KDOT #** U-2372-01

Length (mi): 0.90

Project Type: Transportation Alternative

Date Added:

6/2020

Last Revised:

11/2021

Description:

New sidewalk construction along designated Safe Routes to School. Driveway and sidewalk ramp construction will be included for ADA compliance.

Project Name: Lawrence Safe Routes to School Phase 2 (2021)

Location: Various sidewalk along 6 streets & 1 crossing improvement

Work Type: Pedestrian & Bicycle Work, Safety

Revision History:

Comments:

This project will give a space for children to walk and/or bike to school along designated safe routes. The SRTS funding is an 80/20 (KDOT/City) cost share with KDOT contributing a max of \$500,000.

FFY	Fund Source	Phase	Federal	State	Local
2020	Local	PE	\$0	\$0	\$50
2021	TA	CONST	\$500	\$0	\$0
2022	Local	CONST	\$0	\$0	\$125

Federal Total: \$500

Non-Federal Total: \$175

Grand Total: \$675



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence		Project Name: Naismith Drive Mobility Enhancement						
TIP #: 514 KDOT # TBD								
Length (mi): 0.50			Location: Naismith Drive from 23rd St. to 19th St. (east side)					
Project Type: Pedestrian/Bicycle			Work Type: Pedestrian & Bicycle Work, Other					
Date Added: 10/2020 Last Revised:			Revision History:					
Description: Construct sidewalk on east side of Naismith Dr. with focus on Transit connection and improvements.		Comments: 2020 Access, Innovation, and Collaboration Grant Award						



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lecompton

TIP #: 515 **KDOT #** TE-0500-01

Length (mi): 1.75

Project Type: Transportation Alternative

Date Added: 4/2021

Last Revised: 8/2023

Description:
Construct 5' wide concrete sidewalk and install sharrows.

Project Name: Lecompton Sidewalk Loop Project: Historic Loop & Grand Loop Connectivity

Location: Connecting 2nd, 3rd, Elmore, Halderman, 7th, and Boone Streets

Work Type: Pedestrian & Bicycle Work

Revision History: FFY23 A3

Comments:
KDOT TA Project; FY23; \$727,200

FFY	Fund Source	Phase	Federal	State	Local
2023	Local	PE	\$0	\$0	\$114
2023	Local	CONST	\$0	\$0	\$300
2023	TA	CONST	\$727	\$0	\$0
2023	CRP	CONST	\$468	\$0	\$0
Federal Total:			\$1,195	Non-Federal Total: \$414	Grand Total: \$1,609



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 516

Length (mi): 0.47

Project Type: Transportation Alternative

Date Added: 4/2021

Description: Design and construction of 10' shared use path.

KDOT # TE-0499-01

Location: Begins at Michigan St., 1/2 mile north of W 2nd St., ends at Sandra Shaw Park

Work Type: Pedestrian & Bicycle Work

Last Revised: 8/2022

Comments: KDOT TA project, FY23:80% construction match

Project Name: Lawrence Loop Shared Use Path: Michigan St. to Sandra Shaw Park

Revision History:

FFY	Fund Source	Phase	Federal	State	Local
2021	Local	PE	\$0	\$0	\$150
2022	Local	ROW	\$0	\$0	\$525
2023	Local	CONST	\$0	\$0	\$193
2023	TA	CONST	\$773	\$0	\$0
Federal Total:			\$773	Non-Federal Total: \$868	Grand Total: \$1,641



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Baldwin City

TIP #: 517 **KDOT #** TE-0496-01

Length (mi): 1.10

Project Type: Transportation Alternative

Date Added: 4/2021 **Last Revised:** 8/2021

Description:
Construct 5' wide sidewalks in four sidewalk segments to fill in missing sidewalk gaps identified on the Safe Routes to School network.

Project Name: Baldwin City Sidewalk Gap Project

Location: 11th St., Hwy 56 to High St.; High St., 4th St. to 2nd St; 2nd St., Hwy 56 to Fremont St; & Quayle St., Middle School to 6th St.

Work Type: Pedestrian & Bicycle Work

Revision History:

Comments:
KDOT TA Project; FY22; \$620,000 (max)

FFY	Fund Source	Phase	Federal	State	Local
2022	Local	PE	\$0	\$0	\$106
2022	Local	CONST	\$0	\$0	\$155
2022	TA	CONST	\$620	\$0	\$0
Federal Total:			\$620	Non-Federal Total:	\$261
				Grand Total:	\$881



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Eudora

TIP #: 518 **KDOT #** TE-0497-01

Length (mi): 0.61

Project Type: Transportation Alternative

Date Added: 4/2021
Last Revised: 8/2022

Description:
Construct 6' wide sidewalks to replace existing deteriorated sidewalk or install new sidewalk. Also will expand the reinforced concrete box culvert under 10th st. to improve stormwater/flood management. This sidewalk is in the Safe Routes to School Plan.

Project Name: Eudora 10th St. Sidewalk Expansion

Location: Corner of 10th & Church St. to corner of Peach St. & 10th St.

Work Type: Pedestrian & Bicycle Work

Revision History:

Comments:
KDOT TA Project; FY22; \$1,111,074 (max)

FFY	Fund Source	Phase	Federal	State	Local
2022	Local	PE	\$0	\$0	\$135
2022	Local	UTIL	\$0	\$0	\$250
2022	Local	CONST	\$0	\$0	\$356
2022	TA	CONST	\$1,781	\$0	\$0

Federal Total:	\$1,781	Non-Federal Total:	\$741	Grand Total:	\$2,522
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: City of Lawrence
TIP #: 519 **KDOT #** TE-0523-01

Length (mi): 0.00

Project Type: Pedestrian/Bicycle

Date Added: 4/2023 **Last Revised:** 4/2023

Description:
Construct approx 5500 linear feet of sidewalk and sidewalk ramps along identified Safe Routes on Ousdahl Rd from 26th St to 19th St and on W 25th St from Cedarwood Ave to Ousdahl Rd; install ped-activated crossing improvements at 22nd St if warranted

Project Name: 2024 Safe Routes to School
Location: Ousdahl Road from 26th to 19th & 25th from Cedarwood to Ousdahl

Work Type: Transportation Alternatives

Revision History: FFY23 A1

Comments:

FFY	Fund Source	Phase	Federal	State	Local
2023	Local	PE	\$0	\$0	\$100
2023	Local	ROW	\$0	\$0	\$15
2024	TA	CONST	\$955	\$0	\$0
2024	Local	CONST	\$0	\$0	\$423

Federal Total:	\$955	Non-Federal Total:	\$538	Grand Total:	\$1,493
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 520 **KDOT #**

Length (mi): 0.03

Project Type: Pedestrian/Bicycle

Date Added: 10/2022

Description:
Construct a grade-separated crossing for the Lawrence Loop Trail at Iowa Street. Currently, non-motorized users of the Lawrence Loop cross five lanes of vehicular traffic on Iowa Street (US Highway 59) to continue on the trail.

Project Name: Lawrence Loop - Iowa Crossing

Location: Iowa Street at K10

Work Type: Pedestrian & Bicycle Work

Revision History:

Comments:
This project is the third highest scoring bike project in the Non-motorized Projects Prioritization Policy and would significantly improve safety at this highly utilized trail crossing.

FFY	Fund Source	Phase	Federal	State	Local
2023	Local	PE	\$0	\$0	\$248
2024	Local	CONST	\$0	\$0	\$330
2024	State	CONST	\$0	\$1,320	\$0
Federal Total:			\$0	Non-Federal Total: \$1,898	Grand Total: \$1,898



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 521 **KDOT #**

Length (mi): 0.50

Project Type: Pedestrian/Bicycle

Date Added:
10/2022

Description:
Complete the downtown section of the Lawrence Loop Trail from the Santa Fe Depot on 7th Street to Constant Park.

Project Name: Lawrence Loop Trail - Kaw River -7th street to Constant Park

Location: Lawrence Loop Trail - Kaw River -7th street to Constant Park

Work Type: Pedestrian & Bicycle Work

Revision History:

Comments:
Project would move us closer to completing a loop trail around Lawrence. Through public input and administrative review, this project was identified as a priority project in the recently completed Parks & Recreation Master Plan (2017).

FFY	Fund Source	Phase	Federal	State	Local
2023	Local	OTHER	\$0	\$0	\$275
2024	Local	PE	\$0	\$0	\$530
2025	Local	CONST	\$0	\$0	\$600
2026	Local	CONST	\$0	\$0	\$800

Federal Total:	\$0	Non-Federal Total:	\$2,205	Grand Total:	\$2,205
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence

TIP #: 522 **KDOT #**

Length (mi): 1.75

Project Type: Pedestrian/Bicycle

Date Added: 10/2022
Last Revised:

Description:
Construct a 10ft a concrete shared use path that connects the Baldwin Creek Trail at Queens Road, to E 1130 Road to help complete the Lawrence Loop Trail.

Project Name: Lawrence Loop Trail from Queens Rd to Kasold

Location: Lawrence Loop Trail from Queens Rd to Kasold

Work Type: Pedestrian & Bicycle Work

Revision History:

Comments:
Project would move us closer to completing a loop trail around Lawrence. Through public input and administrative review, this project was identified as a priority project in the recently completed Parks & Recreation Master Plan (2017)

FFY	Fund Source	Phase	Federal	State	Local
2025	Local	ROW	\$0	\$0	\$2,000
2026	Local	PE	\$0	\$0	\$100

Federal Total:	\$0	Non-Federal Total:	\$2,100	Grand Total:	\$2,100
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: City of Eudora

TIP #: 523 **KDOT #**

Length (mi): 0.49

Project Type: Pedestrian/Bicycle

Date Added: 6/2023 **Last Revised:** 6/2023

Description:
The construction of an 8-foot wide concrete Shared Use Path (SUP) along Church Street from 20th to 15th Street, including RRFBs at the crossings and a concrete protection barrier on the bridge over K-10 Hwy.

Project Name: Church Street Shared Use Path

Location: Church Street from 20th to 15th Street

Work Type: Pedestrian & Bicycle Work

Revision History: FFY23 A2

Comments:
This SUP will connect the City's sidewalk network north of K-10 Hwy with an existing SUP that extends from 20th to 27th Street.

FFY	Fund Source	Phase	Federal	State	Local
2024	Local	CONST	\$0	\$0	\$218
2024	TA	CONST	\$871	\$0	\$0

Federal Total:	\$871	Non-Federal Total:	\$218	Grand Total:	\$1,089
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Lawrence-Douglas County MPO FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: KDOT

TIP #: 600 **KDOT #**

Length (mi):

Project Type: Safety

Date Added: 10/2014
Last Revised: 10/2020

Description:
Safety improvements along railroads in region as identified by KDOT. These funds may be used to benefit the region by working to correct or improve identified safety hazards at public railway-highway crossing in a proactive manner.

Project Name: Various Railroad Safety Projects in the Region

Location:

Work Type:

Revision History:

Comments:
This is a master project that would include any safety projects selected in region. State funds (SF) Conversions: 2020 SF to 2021 HSIP, 2021 SF to 2022 HSIP, 2022 SF to 2023 HSIP, 2023 SF to 2024 HSIP.

FFY	Fund Source	Phase	Federal	State	Local
2020	State-AC	CONST	\$0	\$500	\$0
2021	Credit	OTHER	\$0	(\$500)	\$0
2021	State-AC	CONST	\$0	\$500	\$0
2022	Credit	OTHER	\$0	(\$500)	\$0
2022	State-AC	CONST	\$0	\$500	\$0
2023	HSIP	CONVERSION	\$500	\$0	\$0
2023	HSIP	CONVERSION	\$500	\$0	\$0
2023	HSIP	CONVERSION	\$500	\$0	\$0
2023	Credit	OTHER	\$0	(\$500)	\$0
2023	State-AC	CONST	\$0	\$500	\$0
2024	HSIP	CONVERSION	\$500	\$0	\$0
2024	Credit	OTHER	\$0	(\$500)	\$0

Federal Total: \$2,000

Non-Federal Total: \$0

Grand Total: \$2,000



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Douglas County

TIP #: 605 **KDOT #** C-5065-01

Length (mi): 1.46

Project Type: Road

Date Added: 10/2020 **Last Revised:** 10/2021

Description:
Apply high-friction surface treatment to Horizontal Curves on RS-212 and RS-210

Project Name: DGCO: High Friction Surface Treatment

Location: Routes 442 and 1055

Work Type: Surfacing

Revision History:

Comments:
Safety Improvements in Douglas County

FFY	Fund Source	Phase	Federal	State	Local
2022	Local	CONST	\$0	\$0	\$112
2022	HSIP	CONST	\$1,011	\$0	\$0

Federal Total:	\$1,011	Non-Federal Total:	\$112	Grand Total:	\$1,123
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Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: Lawrence		Project Name: Massachusetts Street - 14th to 23rd Street Multi-Modal Improvements		FFY	Fund Source	Phase	Federal	State	Local
TIP #: 607		KDOT #		2023	Local	PE	\$0	\$0	\$150
Length (mi): 1.10		Location: Massachusetts St. - 14th St. to 23rd St.		2024	Local	CONST	\$0	\$0	\$1,650
Project Type: Safety		Work Type: Pedestrian & Bicycle Work, Mill/Overlay, Safety							
Date Added: 10/2021		Last Revised: 8/2022		Revision History:					
Description: 2014 AARP report recommended bike/ped facilities on Mass. St. and intersection improvements at 19th/Mass. Construction of project anticipated in 2024 with street maintenance project. Project pending state grant funds (HSIP or TA).		Comments: Mass. St. (11th-14th) reconfigured using 2018 KDOT safety funds. Mass. St. (14th-21st) is a gap in future primary network in T2040 & Lawrence Bikes. Connect to 21st St. Bike Blvd providing access to Iowa St. Complete a gap & provide multimodal downtown.							
				Federal Total:	\$0	Non-Federal Total:	\$1,800	Grand Total:	\$1,800



Lawrence-Douglas County MPO
FFY 2023 - 2026 Transportation Improvement Program Projects (Costs in 1,000s)

(Includes the Program of Projects for the Lawrence Transit System)

Project Sponsor: KDOT

TIP #: 608

Length (mi): 0.00

Project Type: ITS

Date Added: 10/2022

Description: Upgrade traffic signals to LED with battery backup, adding flashing yellow arrow to permissive lefts and install retro-reflective backplates

KDOT # KA-6282-01

Location: US24/US40/US59 intersection 394.324 - 394.325

Work Type: Signal

Revision History:

Comments: Revised letting date from October 2022 to May 2023. U.S. 24/ U.S. 40/U.S. 59 intersection located north of Lawrence

FFY	Fund Source	Phase	Federal	State	Local
2021	State	PE	\$13	\$0	\$0
2023	State	CONST	\$173	\$0	\$0

Federal Total:	\$186	Non-Federal Total:	\$0	Grand Total:	\$186
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