

K I P D A

Kentuckiana Regional Planning
& Development Agency

Amendment 9
to
Connecting Kentuckiana 2050 Metropolitan
Transportation Plan (MTP)

Project Updates
for the
Fiscal Year 2025- 2028 Transportation
Improvement Program (TIP)

TPC Approval
May 22, 2025





Area Agency on Aging and Independent Living
Area Development District
Metropolitan Planning Organization



A Resolution of the
Kentuckiana Regional Planning and Development Agency
Amendment 9 to *Connecting Kentuckiana 2050*, the Metropolitan
Transportation Plan (MTP)

Whereas, the Kentuckiana Regional Planning and Development Agency (KIPDA) Transportation Policy Committee is designated by the governors of the State of Indiana and the Commonwealth of Kentucky under state and federal laws as the Metropolitan Planning Organization (MPO) for the Louisville/Jefferson County KY-IN Planning Area encompassing Clark and Floyd counties Indiana, and Bullitt, Jefferson, and Oldham counties and a portion of Shelby County in Kentucky; and,

Whereas, consistent with federal and state mandates, states' environmental requirements, and with the KIPDA Transportation Policy Committee's Memorandum of Agreement, *Participation Plan*, and other operating procedures, the KIPDA Transportation Policy Committee has worked with local, state, and federal jurisdictions and agencies in a continuing, cooperative, and comprehensive planning process; and has incorporated the work of local governments, and the suggestions of citizens, businesses, and interests throughout the MPA in this document; and

Whereas, Amendment 9 to *Connecting Kentuckiana 2050*, the Metropolitan Transportation Plan (MTP) was made in conjunction with the development of the *FY 2025 - FY 2028 Transportation Improvement Program (TIP)*.

Whereas, the *FY 2025 - FY 2028 Transportation Improvement Program* for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is a subset of *Connecting Kentuckiana 2050*, the Louisville/Jefferson County KY-IN Metropolitan Transportation Plan, which has been determined to conform to the State Implementation Plans of Indiana and Kentucky; and,

Whereas, the *FY 2025 - FY 2028 Transportation Improvement Program* for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is fiscally constrained. The Kentucky and Indiana non-dedicated funded projects identified in this TIP have been requested by the Indiana Department of Transportation (INDOT) and the Kentucky Transportation Cabinet (KYTC). The required funds will become part of the Kentucky FY 2025 - 2028 Statewide Transportation Improvement Program (STIP), and the Indiana FY 2024 - 2028 STIP, respectively, and will become part of the end of fiscal year fiscal constraint recalculations; and,





Area Agency on Aging and Independent Living
Area Development District
Metropolitan Planning Organization



Now, therefore be it resolved, by the Transportation Policy Committee of KIPDA that this amendment of *Connecting Kentuckiana 2050*, the Metropolitan Transportation Plan for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is adopted by official action at the May 22, 2025, meeting. This action is contingent upon and effective when a planning conformity finding is made by the appropriate federal agencies; and,

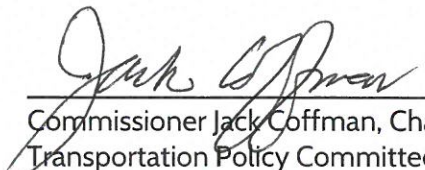
Whereas, the KIPDA Transportation Policy Committee is to certify that *Connecting Kentuckiana 2050* complies with all the applicable requirements of the Federal Transit Act, Clean Air Act, Americans with Disabilities Act, Civil Rights Act, Federal Transportation Act, and all other applicable state and federal laws; and,

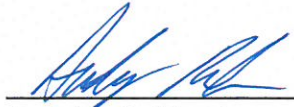
Whereas, *Connecting Kentuckiana 2050*, as amended, will serve as the KIPDA Metropolitan Transportation Plan under federal law contingent upon and effective when a conformity finding is made by the appropriate federal agencies; and,

Now, therefore let it be resolved, that the KIPDA Transportation Policy Committee adopts Amendment #9 of the *Connecting Kentuckiana 2050 Metropolitan Transportation Plan* to serve as the KIPDA MPO official Metropolitan Transportation Plan; and,

Let it be further resolved that KIPDA staff is authorized to transmit Amendment 9 of *Connecting Kentuckiana 2050* to the Governors of the State of Indiana and the Commonwealth of Kentucky, and to the Indiana Department of Transportation and the Kentucky Transportation Cabinet in compliance with federal and state requirements.'

Adopted by the KIPDA Transportation Policy Committee on the 22nd day of May 2025.


Commissioner Jack Coffman, Chair
Transportation Policy Committee


Andy Rush, Director
KIPDA Transportation Division



AMENDMENT 9 SCHEDULE

Connecting Kentuckiana 2050 Metropolitan Transportation Plan (MTP)
Fiscal Year (FY) 2025 - 2028 Transportation Improvement Program (TIP)

WHY ARE THERE AMENDMENTS TO THE MTP & TIP?

New projects that are not regionally significant and qualify as Group Projects, as well as many minor changes to existing projects, can be added through an administrative modification. Administrative modifications can be processed within 30 days.

New projects and project changes that do not fit the criteria above must be added to the MTP and/or TIP through an amendment. There are many reasons why a project must be amended. Adding a regionally significant project that does not fit KIPDA's Group Projects policy or changing the scope of a roadway project to add a travel lane are both examples of projects that must be amended. While every effort is made to expedite amendments, the process can take up to 6 months.

KEY STEPS & TIMING

Project applications (new or modified) are due from sponsors

December 6, 2024

KIPDA staff completes project review

December 23, 2024

Air quality conformity activities

December 30, 2024-
March 14, 2025

Interagency Consultation Group (IAC) Coordination

March 20, 2025

Public comment period

April 8, 2025-
May 7, 2025

Comments sent to the Transportation Policy Committee (TPC)

May 8, 2025

Transportation Technical Coordinating Committee (TTCC) Recommendation

May, 14 2025

TPC Action

May 22, 2025

Amendment 9 to the MTP is composed of the new projects updates for the FY25 to FY28 TIP which is simultaneously under review.

All new projects and changes to existing projects must be submitted through the Project Application form found on KIPDA's Transportation Planning Portal.

The Portal can be accessed at the following address:

<https://kipdatransportation.org/forms/>

ADDITIONAL INFORMATION



MTP Action:	None				
TIP Action:	Update TIP funding				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	Floyd County Board of Commissioners	KIPDA ID:	3367	State ID:	2401834
County:	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	Baylor Wissman Hilltop	Funding Source:	Group III & HSIP-MPO	Open to Public Date:	2031
Total Estimated Project Cost:	\$3,336,344		Total Cost Programmed in TIP to date:	\$201,852 \$3,336,344	
Description:	Project will replace existing roadway to widen lanes to 11 feet in each direction, add 2 foot shoulders with 1 foot aggregate. Additional safety measures including edge striping and curve notices will be included.				
Justification:	Crash data and a recent Thoroughfare Study indicated run off road crashes on this roadway. The development of a large subdivision in the Town of Georgetown that will utilize this roadway will increase traffic volume and likelihood of additional incidents.				
FY 25-28 TIP Funding:	FY 2025 Preliminary Engineering (PE) with Group III Funds: \$161,481 (Federal) + \$40,371 (Other) = \$201,852 (Total) FY 2028 Right of Way (ROW) phase with HSIP-MPO Funds: \$256,460 (Federal) + \$409,174 (Other) = \$665,634 (Total) *FY 2030 Construction Engineering (CE) phase with HSIP-MPO Funds: \$257,620 (Federal) + \$64,405 (Other) = \$322,025 (Total) *FY 2030 Construction (CN) phase with HSIP-MPO Funds: \$833,320 (Federal) + \$1,313,514 (Other) = \$2,146,834 (Total)				
*Funds programmed in fiscal years outside of the current 2025-2028 TIP years					

MTP Action:	None				
TIP Action:	Update TIP funding				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	Floyd County Board of Commissioners	KIPDA ID:	3366	State ID:	2401835
County:	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	Bridge 38 (Baylor Wissman Replacement)	Funding Source:	Group III & Surface Transportation Block Grant - MPO (STBG-MPO)	Open to Public Date:	2031
Total Estimated Project Cost:	\$3,151,000		Total Cost Programmed in TIP to date:	\$3,151,000	
Description:	Project will replace existing bridge due to poor geometry and the superstructure and substructure deterioration. It will expand bridge from one to two travel lanes with 2 foot shoulders. Approach will be re-aligned to improve site distance.				
Justification:	Existing bridge was constructed in 1950 as one lane crossing and is deteriorating. Bridge provides access to road connecting major subdivisions and provides cross I-64 access to County. Approach has horizontal curve decreasing sight distance and making more unsafe.				
FY 25-28 TIP Funding:	FY 2025 Preliminary (PE) phase with Group III Funds: \$360,000 (Federal) + \$90,000 (Other) = \$450,000 (Total) FY 2027 Right of Way (ROW) phase with STBG-MPO Funds: \$32,000 (Federal) + \$8,000 (Other) = \$40,000 *FY 2029 Construction Engineering (CE) phase with STBG-MPO Funds: \$276,000 (Federal) + \$69,000 (Other) = \$345,000 (Total) *FY 2029 Construction (CN) phase with STBG-MPO Funds: \$1,852,800 (Federal) + \$463,200 (Other) = \$2,316,000 (Total)				
*Funds programmed in fiscal years outside of the current 2025-2028 TIP years					

MTP Action:	None				
TIP Action:	Remove TIP funding				
Exempt/Non Exempt:	Non-exempt		Model Impact:	Remove from 2030 scenario	
Project Sponsor:	New Albany	KIPDA ID:	3102	State ID:	2301317
County:	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	Graybrook Lane Extension	Funding Source:	Surface Transportation Block Grant - MPO (STBG-MPO)	Open to Public (OTP) Date:	2030 2031
Total Estimated Project Cost:	\$3,708,432		Total Cost Programmed in TIP to date:	\$3,708,432	
Description:	Extension of collector class roadway (Graybrook Lane) from the intersection with Bono Road/Pearl Street to the intersection of State Street. This roadway extension would further establish connections to the vital State Street corridor.				
Justification:	Graybrook Lane currently deadends into Pearl Street/Bono Road intersection. By extending Graybrook Lane, the collector class roadway would be extended to an important arterial roadway of State Street which would allow citizens an easier route to connect to shopping, vital services, and transit. Furthermore, this project serves an economically depressed area of the city and would allow better connections for the citizens adjacent to this project.				
FY 25-28 TIP Funding:	FY 2025 Preliminary Engineering (PE) phase with STBG-MPO funds: \$357,109 (Federal) + \$108,636 (Other) = \$465,745 (Total) FY 2028 Right of Way (ROW) phase with STBG-MPO funds: \$439,200 (Federal) + \$109,800 (Other) = \$549,000 (Total) *FY 2029 Utilities (U) phase with STBG-MPO funds: \$80,000 (Federal) + \$20,000 (Other) = \$100,000 (Total) *FY 2030 Construction (CN) phase with STBG-MPO funds: \$2,074,949 (Federal) + \$518,738 (Other) = \$2,593,687 (Total)				
*Funds programmed in fiscal years outside of the current 2025-2028 TIP years					

MTP Action:	None				
TIP Action:	Update TIP funding				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	Floyd County Board of Commissioners	KIPDA ID:	3368	State ID:	2401836
County:	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	Highway 150 Break - Highlander Point	Funding Source:	Group III & Surface Transportation Block Grant - MPO (STBG-MPO)	Open to Public Date:	2030
Total Estimated Project Cost:	\$3,743,989		Total Cost Programmed in TIP to date:	\$393,750 \$3,743,989	
Description:	Establishment of lighted intersection between Old Vincennes Road and West Luther Road on Highway 150 providing additional access to Highlander Point Gateway district.				
Justification:	Additional access needed from Highway 150 to alleviate congestion and reduce accidents at Old Vincennes Road intersection. Additionally, will provide access to developing areas on either side of highway.				
FY 25-28 TIP Funding:	FY 2025 Preliminary Engineering (PE) phase with Group III funds: \$315,000 (Federal) + \$78,750 (Other) = \$393,750 (Total) FY 2028 Construction Engineering (CE) phase with STBG-MPO Funds: \$402,029 (Federal) + \$100,507 (Other) = \$502,536 (Total) FY 2028 Construction (CN) phase with STBG-MPO Funds: \$2,680,191 (Federal) + \$670,048 (Other) = \$3,350,239 (Total)				
MTP Action:	Add new project				
TIP Action:	Add new project				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	NEW	State ID:	2500084
County:	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	I-64 Hot Mix Asphalt (HMA) Overlay	Funding Source:	National Highway Performance Plan (NHPP)	Open to Public (OTP) Date:	2030
Total Estimated Project Cost:	\$22,972,577		Total Cost Programmed in TIP to date:	\$22,972,577	
Description:	Hot mix asphalt (HMA) overlay minor structural on I-64 from .50 miles west of SR 135 to 1.01 miles west of SR 64. This DES # covers the small culverts on this portion of the contract.				
Justification:	To improve the conditions of the pavement and extend its service life.				
FY 25-28 TIP Funding:	*FY 2030 Construction (C) phase with NHPP funds: \$20,675,319 (Federal) + \$2,297,258 (Other) = \$22,972,577 (Total)				
*Funds programmed in fiscal years outside of the current 2025-2028 TIP years					

MTP Action:	None				
TIP Action:	Update TIP funding				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	3363	State ID:	2201202
County:	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	Merry Way near Georgetown Elementary	Funding Source:	Highway Safety Improvement Program (HSIP)- State	Open to Public (OTP) Date:	2027
Total Estimated Project Cost:	\$1,028,250		Total Cost Programmed in TIP to date:	\$1,028,250	
Description:	The purpose of this project is to remove physical barriers that inhibit access to and away from schools and public parking in Georgetown. Upon completion of the project all pedestrian facilities at the SR 64 intersection of Merry Way and at SR 64 should meet the minimum requirements for ADA compliance. INDOT is required to address substandard curb ramps and pedestrian facilities to remain in keeping with FHWA requirements and the law, therefore the no build alternative is dismissed.				
Justification:	INDOT is required to address substandard curb ramps and pedestrian facilities to remain in keeping with FHWA requirements and the law, therefore the no build alternative is dismissed.				
FY 25-28 TIP Funding:	FY 2026 Right of Way (ROW) phase with HSIP-ST funds: \$45,000 (Federal) + \$5,000 (Other) = \$50,000 (Total) FY 2027 Construction phase with HSIP-ST funds: \$749,700 (Federal) + \$83,300 (Other) = \$833,000 (Total)				

MTP Action:	N/A				
TIP Action:	Update TIP funding				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	2973	State ID:	2100800
County:	Clark	Parent ID:	N/A	Group ID:	N/A
Project Name:	SR 60 Small Structure Replacement, 1.58 Miles West of I-65	Funding Source:	National Highway Performance Plan (NHPP)	Open to Public Date:	2026
Total Estimated Project Cost:	\$975,137 \$617,221		Total Cost Programmed in TIP to date:	\$975,137 \$617,221	
Description:	Small structure replacement over unnamed ditch 1.58 miles west of I-65.				
Justification:	The purpose of this project is to correct the deficiencies in the structure in order to extend or reset the service life of the asset. The project need is based on the current condition of the structure elements. The pipe is either collapsed or full of sediment and cannot fail any further. The roadway is not affected, but the pipe is causing drainage issue for the nearby residents. This pipe was recently added into the inventory.				
FY 25-28 TIP Funding:	*FY 2023 Preliminary Engineering (PE) phase with NHPP funds: \$214,323 (Federal) + \$23,814 (Other) = \$238,137 (Total) *FY 2023 Preliminary Engineering (PE) phase with NHPP funds: \$190,510 (Federal) + \$47,627 (Other) = \$238,137 (Total) *FY 2024 Right of Way (ROW) phase with NHPP funds: \$9,000 (Federal) + \$1,000 (Other) = \$10,000 (Total) *FY 2024 Right of Way (ROW) phase with NHPP funds: \$8,000 (Federal) + \$2,000 (Other) = \$10,000 (Total) FY 2026 Utilities (U) phase with NHPP funds: \$90,000 (Federal) + \$10,000 (Other) = \$100,000 (Total) FY 2026 Utilities (U) phase with NHPP funds: \$80,000 (Federal) + \$20,000 (Other) = \$100,000 (Total) FY 2026 Construction (CN) phase with NHPP funds: \$564,300 (Federal) + \$62,700 (Other) = \$627,000 (Total) FY 2027 Construction (CN) phase with NHPP funds: \$215,267 (Federal) + \$53,817 (Other) = \$269,084 (Total)				
*Funds programmed in fiscal years outside of the current 2025-2028 TIP years					

MTP Action:	Add new project				
TIP Action:	Add new project				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	NEW	State ID:	2001561
County:	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	Statewide signing and installation of conflict warning signs	Funding Source:	Highway Safety Improvement Program (HSIP)- State	Open to Public Date:	2026
Total Estimated Project Cost:	\$1,537,734		Total Cost Programmed in TIP to date:	\$1,537,734	
Description:	This is a statewide signing installation and repair of conflict warning signs in various locations throughout the state.				
Justification:	Installation of conflict warning signs are a safety initiative to help prevent injuries and accidents.				
FY 25-28 TIP Funding:	FY 2026 Construction (CN) phase with HSIP-ST funds: \$1,230,187 (Federal) + \$307,547 (Other) = \$1,537,374 (Total)				

MTP Action:	Update Total Estimated Project Cost				
TIP Action:	Update TIP funding				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	New Albany	KIPDA ID:	3369	State ID:	2401854
County:	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	Slate Run Road Phase II	Funding Source:	Group III & TA-MPO & CRP-MPO	Open to Public Date:	2031
Total Estimated Project Cost:	\$5,100,000 \$7,970,000		Total Cost Programmed in TIP to date:	\$250,000 \$7,970,000	
Description:	The project consists of the widening of Slate Run Road from Lockwood Drive to Ekin Avenue in New Albany, Indiana. The road is being widened to create new separate bicycle lanes. Curb and gutter will be added to both sides of the roadway, and new sidewalks will be constructed outside of the curb lines.				
Justification:	This is phase 2 of an overall project for which phase 1 construction was completed in 2021. Slate Run Road has been a safety issue for the City of New Albany due to speeding motorists and the lack of bicycle and pedestrian facilities. The roadway is highly trafficked by bicycles and pedestrians due to the existence of the Slate Run Elementary School. This project is needed to assist in traffic calming to reduce speeding motorists, as well as provide safe bicycle paths and pedestrian walkways separate and outside of the roadway to reduce the risk of fatalities and injuries along this corridor.				
FY 25-28 TIP Funding:	FY 2025 Preliminary Engineering (PE) phase with Group III Funds: \$200,000 (Federal) + \$50,000 (Other) = \$250,000 (Total) FY 2027 Right of Way (ROW) phase with TA-MPO Funds: \$402,940 (Federal) + \$100,735 (Other) = \$503,675 (Total) FY 2028 Right of Way (ROW) phase with TA-MPO Funds: \$1,293,060 (Federal) + \$323,265 (Other) = \$1,616,325 (Total) *FY 2030 Construction Engineering (CE) phase with TA-MPO Funds: \$400,000 (Federal) + \$100,000 (Other) = \$500,000 (Total) *FY 2030 Construction (CN) phase with CRP-MPO Funds: \$4,080,000 (Federal) + \$1,020,000 (Other) = \$5,100,000 (Total)				
*Funds programmed in fiscal years outside of the current 2025-2028 TIP years					

MTP Action:	Add new project				
TIP Action:	Add new project				
Exempt/Non Exempt:	Non-exempt		Model Impact:	Add to 2035, 2040, & 2050 scenarios	
Project Sponsor:	Bullitt County	KIPDA ID:	New	State ID:	
County:	Bullitt	Parent ID:	N/A	Group ID:	N/A
Project Name:	US 31E to KY 2706	Funding Source:	Surface Transportation Block Grant - MPO (STBG- MPO)	Open to Public (OTP) Date:	2033
Total Estimated Project Cost:	\$18,000,000		Total Cost Programmed in TIP to date:	\$250,000	
Description:	Widening KY 2706 (Greenbrier Rd.) from HWY 44 to 31Ex and eventually extending to 31E. KY 2706 would include Wales Run and Landis Lane, intersecting with 31EX.				
Justification:	High growth area in Mt Washington, with possible economic and residential impact. Also parks and recreation benefits				
FY 25-28 TIP Funding:	FY 2026 Planning (P) phase with STBG-MPO funds: \$200,000 (Federal) + \$50,000 (Other) = \$250,000 (Total)				

MTP Action:	Update Total Estimated Project Cost				
TIP Action:	Update TIP funding				
Exempt/Non Exempt:	Non-exempt		Model Impact:	No change to the model	
Project Sponsor:	Jeffersontown	KIPDA ID:	3111	State ID:	
County:	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	Billtown-Eastview Collector Extension	Funding Source:	Surface Transportation Block Grant - MPO (STBG-MPO)	Open to Public (OTP) Date:	2026 2030
Total Estimated Project Cost:	\$1,265,000 \$2,352,000		Total Cost Programmed in TIP to date:	\$1,265,000 \$2,352,000	
Description:	Improve safety, improve multi-modal connectivity, and reduce congestion along Billtown Road (CS-1720H) from Ruckreigel Parkway (MP 0.000) to Watterson Trail (MP 0.165). Improve access and multi-modal connectivity from Billtown Road to Eastview Avenue. The project includes the 3-lane widening of existing Billtown Road between Ruckreigel Parkway and Watterson Trail, and the addition of curb and gutter and sidewalks along both sides of the road. The project also includes the extension of existing Eastview Avenue between Billtown and Taylorsville Road, where some segments of narrow roadway and right of way already exist. The Eastview extension will be a 2-lane curb and gutter roadway with sidewalks and will help to establish improved access and connectivity for the new Jeffersontown Police Station to be completed in 2023.				
Justification:	The project helps to complete Jeffersontown's downtown transportation plan and establish additional points of system access and connectivity, by linking Taylorsville Road and Billtown Road, as well as a linkage to the existing dead-end portion of College Avenue in between. The extension is most critical to provide enhanced access to the new police station at the corner of Neal and Taylorsville Road and will open up access to the south. The project supports the City's goal to provide complete streets, through the inclusion of sidewalks along each side of both Billtown and Eastview. Presently, there is a narrow sidewalk, in poor condition, and with no vertical curb separation from the road, along one side of the Billtown corridor. The Eastview extension crosses a 2+ acre vacant parcel owned by the City. Thus, the right of way acquisition costs will be limited, and the project will help to create economic development opportunities to support the future land use plan for the vacant property.				

KIPDA ID 3111 cont. FY 25-28 TIP Funding:	FY 2026 Design (D) Phase with STBG-MPO Funds: \$310,000 (Federal) + \$70,400 (State/Local) = \$380,400 (Total) FY 2026 Construction (CN) Phase with STBG-MPO Funds: \$660,000 (Federal) + \$165,000 (State/Local) = \$825,000 (Total) FY 2027 Right of Way (ROW) Phase with STBG-MPO Funds: \$176,000 (Federal) + \$40,000 (State/Local) = \$216,000 (Total) FY 2028 Utilities (U) Phase with STBG-MPO Funds: \$528,000 (Federal) + \$120,000 (State/Local) = \$648,000 (Total) *FY 2029 Construction (CN) Phase with STBG-MPO Funds: \$1,056,000 (Federal) + \$240,000 (State/Local) = \$1,296,000 (Total)
*Funds programmed in fiscal years outside of the current 2025-2028 TIP years	

MTP Action:	N/A				
TIP Action:	Update to model. Project is going from 2 to 4 lanes.				
Exempt/Non Exempt:	Non-Exempt		Model Impact:	Add to 2035, 2040 & 2050 scenarios	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	3371	State ID:	5-8954.10
County:	Jefferson	Parent ID:	2919	Group ID:	N/A
Project Name:	KY 155	Funding Source:	Surface Transportation Block Grant Flex Funding (STPF)	Open to Public (OTP) Date:	2031
Total Estimated Project Cost:	\$35,149,000		Total Cost Programmed in TIP to date:	\$35,149,000	
Description:	Improve safety and traffic operations on KY 155 from MP 2.000 in Spencer County to Floyds Fork in Jefferson County (total length 6.247 miles) (Portion of 5-8954.00) CHAF ID IP20230128				
Justification:	Project is intended to improve safety and traffic operations on KY 155 from south of Plum Creek in Spencer County to Floyds Fork in Jefferson County. The current 2-lane roadway has limited capacity, and ADT is projected to increase at a rate significantly higher than average. Project also seeks to reduce the number of crashes along the corridor by providing safer access and additional passing opportunities.				
FY 25-28 TIP Funding:	FY 2025 Design (D) phase with STPF funds: \$1,600,000 (Federal) + \$400,000 (Other) = \$2,000,000 (Total) FY 2027 Design (D) phase with STPF funds: \$2,571,200 (Federal) + \$642,800 (Other) = \$3,214,000 (Total) FY 2028 Utilities (U) phase with STPF funds: \$6,780,000 (Federal) + \$1,695,000 (Other) = \$8,475,000 (Total) FY 2028 Construction (C) phase with STPF funds: \$17,168,000 (Federal) + \$4,292,000 (Other) = \$21,460,000 (Total)				

MTP Action:	Add new project				
TIP Action:	Add new project				
Exempt/Non Exempt:	Non-exempt		Model Impact:	Update 2025, 2030, 2035, 2040 & 2050 scenarios	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	NEW	State ID:	5-9073.00
County:	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	US 31E	Funding Source:	Highway Safety Improvement Program (HSIP)- State	Open to Public (OTP) Date:	2025
Total Estimated Project Cost:	\$380,000		Total Cost Programmed in TIP to date:	\$380,000	
Description:	Roadway Reconfiguration along Bardstown Road (US 31E) from Taylorsville Road to Bonnycastle Avenue. BMP 13.118 , EMP 14.390 Includes striping updates along Taylorsville Road (KY 155) from Talbott Avenue to Bardstown Road. BMP 16.317 , EMP 16.541				
Justification:	To increase the level of safety on these two road segments				
FY 25-28 TIP Funding:	FY 2025 Construction (C) phase with HSIP-ST funds: \$380,000 (Federal) + \$0 (Other) = \$380,000 (Total)				

MTP Action:	Update Model and add additional state ID				
TIP Action:	Update Model and add additional state ID				
Exempt/Non Exempt:	Non-exempt		Model Impact:	Update 2030, 2035, 2040 & 2050 scenarios	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	3375	State ID:	5-80259.00 5-80253.00
County:	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	US-31E	Funding Source:	State Construction Funds (SPP)	Open to Public (OTP) Date:	2027
Total Estimated Project Cost:	\$1,500,000		Total Cost Programmed in TIP to date:	\$1,500,000	
Description:	Right sizing and pedestrian access improvements on US 31E from milepoint 14.625 to milepoint 13.125 (2022CCN)				
Justification:	Improve safety for all users of the corridor with particular emphasis being given to the safety of the corridor's most vulnerable users: pedestrians.				
FY 25-28 TIP Funding:	FY 2025 Design (D) phase with SPP funds: \$0 (Federal) + \$50,000 (Other) = \$50,000 (Total) FY 2026 Construction (C) phase with SPP funds: \$0 (Federal) + \$1,450,000 (Other) = \$1,450,000 (Total)				

MTP Action:	Remove redundant project, combine State ID with 5-80259 listing				
TIP Action:	Remove redundant project, combine State ID with 5-80259 listing				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	3374	State ID:	5-80253.00
County:	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	US-31E	Funding Source:	State Construction Funds (SPP)	Open to Public (OTP) Date:	2028
Total Estimated Project Cost:	\$1,500,000		Total Cost Programmed in TIP to date:	\$0	
Description:	Resurfacing, safety improvements, and pedestrian access improvements US 31E From milepoint 14.625 (Eastern Parkway) to milepoint 13.125 (Taylorsville Road). (2022CCN) IP20230130				
Justification:	Improve safety for all users of the corridor with particular emphasis being given to the safety of the corridor's most vulnerable users: pedestrians.				
FY 25-28 TIP Funding:	FY 2025 Design (D) phase with SPP funds: \$0 (Federal) + \$50,000 (Other) = \$50,000 (Total) FY 2026 Construction (C) phase with SPP funds: \$0 (Federal) + \$450,000 (Other) = \$450,000 (Total) FY 2027 Construction (C) phase with SPP funds: \$0 (Federal) + \$1,000,000 (Other) = \$1,000,000 (Total)				

MTP Action:	Remove redundant project, KIPDA ID 2953 covered this work and was completed in 2024				
TIP Action:	None				
Exempt/Non Exempt:	Non-exempt		Model Impact:	No impact due to completed project	
Project Sponsor:	Louisville Metro	KIPDA ID:	2767	State ID:	
County:	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	Bardstown Road Safety Study Implementation - Northern Phase	Funding Source:		Open to Public (OTP) Date:	2030
Total Estimated Project Cost:	\$4,100,000		Total Cost Programmed in TIP to date:	\$0	
Description:	The Bardstown Road Safety Study was created in 2018 and provides recommendations to improve safety (prioritizing non-motorized users) along the corridor from Broadway to I-264. Recommendations include improved pedestrian-scale lighting, a road diet that would reduce the roadway from 4 lanes to 2 with permanent parking on both sides of the street and dedicated turn lanes at signalized intersections from Broadway to Woodford Place.				
Justification:	Crashes along the corridor are noticeably high for both pedestrians and autos. The critical crash rate for most of the corridor is well above 1. Over the last 5 years there has been an average of 40 collisions per month and 9 pedestrians collisions per year (both of which occur more frequently at night.) The multiple improvements proposed in the plan would help mitigate these unsafe conditions along one of Louisville's most vibrant urban corridors.				
FY 25-28 TIP Funding:	N/A				

MTP Action:	Update project description and project limits				
TIP Action:	N/A				
Exempt/Non Exempt:	Non-exempt		Model Impact:	Update 2035, 2040 and 2050 scenarios	
Project Sponsor:	Louisville Metro	KIPDA ID:	2740	State ID:	
County:	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	Bardstown Road Safety Study Implementation - Southern Phase	Funding Source:		Open to Public Date:	2035
Total Estimated Project Cost:	\$3,300,000		Total Cost Programmed in TIP to date:	\$0	
Description:	The Bardstown Road Safety Study was created in 2018 and provides recommendations to improve safety (prioritizing non-motorized users) along the corridor from Broadway to I-264. Bump-outs at specific locations to improve ped crossings, removal of the existing alternating lane lights, expanding the travel lanes from 4 to 5 (adding TWLTL) from Douglass Boulevard to Taylorsville Road and from Tyler Lane to Brighton Drive, improved crosswalks at several locations, a 10' shared use path from Eastview Avenue to Tyler Lane, dedicated turn lanes onto Tyler Lane, and improved traffic coordination for arrival and dismissal at Assumption High School, St. Raphael and Hawthorne Elementary.				
Justification:	Crashes along the corridor are noticeably high for both peds and autos. The critical crash rate for most of the corridor is well above 1. Over the last 5 years there has been an average of 40 collisions per month and 9 pedestrians collisions per year (both of which occur more frequently at night.) The multiple improvements proposed in the plan would help mitigate these unsafe conditions along one of Louisville's most vibrant urban corridors.				
FY 25-28 TIP Funding:	N/A				

MTP Action:	Update total estimated project cost				
TIP Action:	Update TIP funding and OTP				
Exempt/Non Exempt:	Non-exempt		Model Impact:	Remove from 2025 scenario	
Project Sponsor:	Louisville Metro	KIPDA ID:	223	State ID:	5-404.01
County:	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	Cooper Chapel Road Phase 3	Funding Source:	Surface Transportation Block Grant - MPO (STBG- MPO)	Open to Public (OTP) Date:	2025 2028
Total Estimated Project Cost:	\$30,699,792 \$33,050,703		Total Cost Programmed in TIP to date:	\$29,610,703 \$33,050,703	
Description:	Phase 3: Extend and construct 2 lane roadway with a continuous center-turn lane from KY 864 (Beulah Church Road) to US 31E (Bardstown Road) at Bardstown Falls Road. Project will include consideration of bicycle and pedestrian facilities.				
Justification:	The area south of I-265 (Gene Snyder Fwy.) between KY 61 (Preston Highway) and US 31E (Bardstown Road) is experiencing rapid growth with the development of many new residential subdivisions. Cooper Chapel Road is a heavily traveled collector road serving this area. The Location and Feasibility Study will establish and preserve a corridor for the future extension of Cooper Chapel Road so that it can be established as a through route between KY 61 and US 31E. The roadway construction will provide access to an area that recently received sanitary sewers and city water service.				
FY 25-28 TIP Funding:	FY 2025 Utilities (U) phase with STBG-MPO funds: \$1,500,000 (Federal) + \$375,000 (Other) = \$1,875,000 (Total) FY 2025 Utilities (U) phase with STBG-MPO funds: \$2,098,400 (Federal) + \$524,600 (Other) = \$2,623,000 (Total) FY 2025 Construction (C) phase with STBG-MPO funds: \$16,000,000 (Federal) + \$4,000,000 (Other) = \$20,000,000 (Total) FY 2027 Construction (C) phase with STBG-MPO funds: \$18,153,600 (Federal) + \$4,538,400 (Other) = \$22,692,000 (Total)				

MTP Action:	N/A				
TIP Action:	Update TIP funding				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	Louisville Metro	KIPDA ID:	2539	State ID:	5-3034.00
County:	Jefferson	Parent ID:	1857	Group ID:	N/A
Project Name:	Louisville Loop Shared Use Path - McNeely Lake Segment	Funding Source:	Transportation Alternatives - MPO (TA-MPO)	Open to Public (OTP) Date:	2028
Total Estimated Project Cost:	\$3,674,679 \$7,442,040		Total Cost Programmed in TIP to date:	\$3,338,679 \$7,442,040	
Description:	Construct approximately two miles of new 10-12 foot wide asphalt/concrete shared use path through McNeely Lake Park. The first phase of the new shared use path will connect the recently constructed Loop path at Cedar Creek Road on the southeast side of the park to the existing park path at the west side of the McNeely Lake dam on the north side of the park. This segment of the Louisville Loop in McNeely Lake Park will include a new bridge over the lake at the dam spillway area and a trail head near the east end of the new path. The second phase of the new shared use path will connect the dam spillway area with Copper Chapel Road along the lake. This segment will include a new bridge over the lake near McNeely Lake Park Road.				
Justification:	McNeely Lake Park is a major urban park located in the southern part of Louisville which is experiencing a rapid transition from primarily agricultural to low and medium density residential land uses. As Louisville continues to grow in this area, there is a need for better connectivity and accessibility from both existing and approved new neighborhoods to the recreational amenities in the 746-acre park which includes athletic fields, tennis and basketball courts, a playground, and extensive path and trail system used by pedestrians, cross-country teams and others. The 100-mile Louisville Loop is a shared use path planned to traverse McNeely Lake Park as it moves across the southern part of Louisville from the Jefferson Memorial Forest to the Parklands of Floyds Fork connecting neighborhoods, schools, work places and other community facilities.				
FY 25-28 TIP Funding:	FY 2025 Design (D) phase with TA-MPO funds: \$242,689 (Federal) + \$60,672 (Other) = \$303,361 (Total) FY 2027 Construction (C) phase with TA-MPO funds: \$2,000,000 (Federal) + \$500,000 (Other) = \$2,500,000 (Total) FY 2027 Construction (C) phase with TA-MPO funds: \$5,040,000 (Federal) + \$1,260,000 (Other) = \$6,300,000 (Total)				

MTP Action:	N/A				
TIP Action:	Update TIP funding				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	Louisville Metro	KIPDA ID:	2980	State ID:	5-584.00
County:	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	Ohio River Valley NE Bike/Ped Improvements Phase II (Louisville Loop)	Funding Source:	Carbin Reduction Program - MPO (CRP-MPO)	Open to Public (OTP) Date:	2028 2029
Total Estimated Project Cost:	\$1,812,500 \$4,187,500		Total Cost Programmed in TIP to date:	\$1,437,500 \$4,187,500	
Description:	Design and construct an accessible shared-use path system, including amenities; and make improvements to portions of an existing shared-use path that connects the Big Four Bridge to Caperton Swamp. This corridor is approximately 3.5 miles of the 100+ mile Louisville Loop.				
Justification:	The Ohio River Valley Northeast corridor of the Loop will provide an accessible shared-use path system to allow pedestrians and bicyclists to safely connect from neighborhoods to parks, schools, workplaces, and other community facilities on mostly off-road facilities. It will provide safe alternative transportation routes for pedestrians and bicyclists such as younger children and families who prefer not to ride on the road. On-street bike facilities will also be incorporated where possible to accommodate more experienced riders who prefer to ride on roadways, because the Loop intends to serve all categories of bicyclists.				
FY 25-28 TIP Funding:	FY 2025 Design (D) phase with CRP-MPO funds: \$550,000 (Federal) + \$137,500 (Other) = \$687,500 (Total) FY 2026 Right of Way (ROW) Phase with CRP-MPO Funds: \$88,000 (Federal) + \$22,000 (Other) = \$110,000 (Total) FY 2026 Utilities (U) Phase with CRP-MPO Funds: \$28,000 (Federal) + \$7,000 (Other) = \$35,000 (Total) FY 2026 Construction (C) Phase with STBG-MPO Funds: \$1,150,000 (Federal) + \$287,500 (Other) = \$1,437,500 (Total) FY 2028 Construction (C) Phase with CRP-MPO Funds: \$2,696,000 (Federal) + \$659,000 (Other) = \$3,355,000 (Total)				

MTP Action:	Update Total Estimated Project Cost				
TIP Action:	Update TIP funding and OTP				
Exempt/Non Exempt:	Non-exempt		Model Impact:	Remove from 2025 scenario	
Project Sponsor:	Louisville Metro	KIPDA ID:	1809	State ID:	5-470.00
County:	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	One-Way Street Conversion to Two-Way Phase 1	Funding Source:	Surface Transportation Block Grant - MPO (STBG-MPO)	Open to Public (OTP) Date:	2024 2027
Total Estimated Project Cost:	\$7,216,175 \$18,871,175		Total Cost Programmed in TIP to date:	\$7,216,175 \$18,871,175	
Description:	Design and construction for the conversion of the following one-way streets in downtown Louisville to two-way traffic flow: Jefferson Street (Floyd to Baxter Avenue); Liberty Street (Jackson to Baxter); Muhammad Ali Boulevard (Jackson to Chestnut Connector); Chestnut Street (Jackson to Chestnut Connector); 8th Street (Kentucky to Main); 7th Street (Oak to Main); Shelby Street (Gray to Main Street); and Campbell Street (Chestnut to Main Street).				
Justification:	One-way streets make for efficient movers of traffic, but can often introduce safety concerns for motorists, bicyclists and pedestrians because they tend to provide for higher travel speeds than two-way streets and in some cases hinder opportunities for economic development as certain businesses have a formal policy against locating on one-way streets. The benefits of two-way streets are numerous. They tend to have slower travel speeds than one-way streets, they reduce confusion for motorists unfamiliar with the area, they provide better access to both businesses and residential areas, and in some circumstances they can reduce the traffic load on other one-way streets.				
FY 25-28 TIP Funding:	FY 2025 Design (D) phase with STBG-MPO funds: \$219,900 (Federal) + \$54,975 (Other) = \$274,875 (Total) FY 2026 Construction (C) phase with STBG-MPO funds: \$1,650,000 (Federal) + \$412,500 (Other) = \$2,062,500 (Total) FY 2026 Construction (C) phase with STBG-MPO funds: \$10,874,000 (Federal) + \$2,843,500 (Other) = \$13,717,500 (Total)				

MTP Action:	Add new project				
TIP Action:	Add new project				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	TARC	KIPDA ID:	New	State ID:	
County:	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	Louisville Downtown Transit Center	Funding Source:	Surface Transportation Block Grant - MPO (STBG-MPO)	Open to Public (OTP) Date:	2031
Total Estimated Project Cost:	\$16,000,000		Total Cost Programmed in TIP to date:	\$1,250,000	
Description:	The Louisville Downtown Transit Center project would include two phases: (1) Establish operational specifications for a downtown transit center, identify potential locations, design line-level routing through downtown, facilitate stakeholder engagement and community input around the project, provide high level cost assumptions for land acquisition, design, and construction, and fund preliminary design documents. (2) Funding for engineering and construction of a Downtown Transit Center.				
Justification:	Transit centers provide critical, centralized infrastructure to transit users at high activity locations. These can include purchasing passes, transferring between routes, providing convenient locations for operators to relieve other operators, and other opportunities to enhance the transit experience. Transit centers consolidate services to a single location, increasing regional access to jobs and social services and improve operations. Transit centers can integrate other community amenities such as commercial space, public wi-fi, and restrooms for operators.				
FY 25-28 TIP Funding:	FY 2027 Design (D) phase with STBG-MPO funds: \$1,000,000 (Federal) + \$250,000 (Other) = \$1,250,000 (Total)				

MTP Action:	Add new project				
TIP Action:	Add new project				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	TARC	KIPDA ID:	NEW	State ID:	
County:	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	Zero-emission Bus Purchase	Funding Source:	Bus & Bus Facilities Capital Discretionary (Section 5339b)	Open to Public (OTP) Date:	2027
Total Estimated Project Cost:	\$4,300,250		Total Cost Programmed in TIP to date:	\$4,300,250	
Description:	TARC will replace three diesel buses that have exceeded their useful lives with three zero-emission battery-electric buses				
Justification:	Maintaining the transit fleet state of good repair while reducing harmful emissions				
FY 25-28 TIP Funding:	*FY 2025 Transit Capital phase with 5339(b) funds: \$3,643,825 (Federal) + \$656,425 (Other) = \$4,300,250 (Total)				
*Apportioned in 2024, programmed in 2025					

MTP Action:	N/A				
TIP Action:	Add new project				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	TARC	KIPDA ID:	3409	State ID:	
County:	Jefferson	Parent ID:	N/A	Group ID:	2681
Project Name:	3rd Party Contractual Services	Funding Source:	Urbanized Area Capital Formula Funding (Section 5339)	Open to Public Date:	2027
Total Estimated Project Cost:	\$5,000		Total Cost Programmed in TIP to date:	\$5,000	
Description:	This project will provide inspection services during the manufacture of buses for TARC.				
Justification:	The Federal Transit Administration requires inspection on the manufacturing line of heavy-duty transit buses in most cases. Inspection provides assurance that expensive repairs will not be necessary due to mistakes in production.				
FY 25-28 TIP Funding:	*FY 2024 2025 Transit Capital phase with 5339 funds: \$4,000 (Federal) + \$1,000 (Other) = \$5,000 (Total)				
*Apportioned in 2024, programmed in 2025					
MTP Action:	N/A				
TIP Action:	Add new project				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	TARC	KIPDA ID:	3410	State ID:	
County:	Jefferson	Parent ID:	N/A	Group ID:	2681
Project Name:	Management Information System Hardware	Funding Source:	Urbanized Area Capital Formula Funding (Section 5339)	Open to Public Date:	2026
Total Estimated Project Cost:	\$40,000		Total Cost Programmed in TIP to date:	\$40,000	
Description:	Replacement of IT components that have exceeded their useful lives				
Justification:	Replacement of components (servers, switches, etc.) necessary to administer, operate and maintain transit vehicles.				
FY 25-28 TIP Funding:	*FY 2024 2025 Transit Capital phase with 5339 funds: \$32,000 (Federal) + \$8,000 (Other) = \$40,000 (Total)				
*Apportioned in 2024, programmed in 2025					

MTP Action:	N/A				
TIP Action:	Add new project				
Exempt/Non Exempt:	Exempt		Model Impact:	No change to the model	
Project Sponsor:	TARC	KIPDA ID:	3411	State ID:	
County:	Jefferson	Parent ID:	N/A	Group ID:	2681
Project Name:	Acquire Miscellaneous (Office) Equipment	Funding Source:	Urbanized Area Capital Formula Funding (Section 5339)	Open to Public Date:	2026
Total Estimated Project Cost:	\$43,535		Total Cost Programmed in TIP to date:	\$43,535	
Description:	This project replaces administrative equipment that has exceeded its useful life				
Justification:	This project will replace office equipment (copiers, furniture) that can no longer be repaired or have become costly to repair.				
FY 25-28 TIP Funding:	*FY 2024 2025 Transit Capital phase with 5339 funds: \$34,828 (Federal) + \$8,707 (Other) = \$43,535 (Total)				
*Apportioned in 2024, programmed in 2025					

AIR QUALITY CONFORMITY

At this time, the Louisville, KY-IN transportation planning study area consists of Clark and Floyd counties, and Bullitt, Jefferson, and Oldham counties and approximately 4 square miles of Shelby County in Kentucky. Much of the existing planning area coincides with the local ozone nonattainment area. In the past, a portion of the planning study area also coincided with a local fine particulate matter (PM 2.5) nonattainment area, but that standard was revoked in April, 2015. The Louisville, KY-IN maintenance area for the 1997 8-hour ozone standard consisted of Clark and Floyd counties, IN, and Bullitt, Jefferson, and Oldham counties, KY. It was designated as a basic non-attainment area in June, 2004 and redesignated as an attainment area with a maintenance status in July, 2007. The 1997 8-hour ozone standard was revoked for the local area in April, 2015, and at that time, it was not necessary for the local area to determine conformity. (However, the local area was still eligible to receive Congestion Mitigation/Air Quality funding).

In June 2018, the former Louisville, KY-IN 1997 ozone maintenance area was designated as a marginal nonattainment area for the 2015 8-hour ozone standard. Since that time, the monitoring data has indicated that the design value is sufficiently low that the local area can be redesignated as attainment of the 2015 8-hour ozone standard, and the air quality agencies with responsibility for the local area have undertaken steps to do so. The redesignation State Implementation Plan has been submitted to Regions 4 and 5 of US EPA, and the Motor Vehicle Emission Budgets (MVEBs) have been found adequate by Region 5. They are still under review by Region 4. Meanwhile, in January 2023, the Kentucky portion of the local ozone nonattainment area was “bumped up” to a moderate ozone nonattainment area. Subsequently, EPA has proposed redesignation of the area to attainment based on recent air quality data incorporated into the prior SIP submittal.

KIPDA is amending *Connecting Kentuckiana 2050*, the metropolitan transportation plan (MTP), and establishing the FY 2025 – FY 2028 Transportation Improvement Program as the new updated TIP. This conformity analysis will support conformity determinations by the metropolitan planning organization and the U. S. Department of Transportation agencies for both documents. This analysis is intended to support determinations of conformity under the 1997 and 2015 8-hour ozone standards.

CONFORMITY UNDER THE 1997 and 2015 8-HOUR OZONE STANDARDS

When an area such as the Louisville area becomes nonattainment, the area must undertake a process known as conformity. This process provides a linkage between transportation planning and air quality planning. One of the key activities of conformity is to quantify the level of emissions of the air pollutant(s) and/or precursor(s) for certain analysis years and compare those levels to the motor vehicle emission budgets (MVEBs)—if they exist. The MVEBs limit the amount of a pollutant or precursor that can be emitted. If MVEBs do not exist, the area must rely on interim tests, such as comparing the emissions to the level of emissions in a baseyear, to determine conformity. The baseyear would be set by US EPA when the standard is promulgated.

When the local area was designated as nonattainment of the 2015 8-hour ozone standard, the air quality agencies with responsibility for the local area were charged with the additional responsibility to develop a set of actions that could be taken to reduce pollutant/precursor emissions. These actions were to be included in air quality plans known as State Implementation Plans (SIPs). Since the Louisville nonattainment area is a bi-state area, these sets of actions to reduce precursor emissions were to be incorporated into both the Indiana and Kentucky SIPs. It was during this process that MVEBs were established. Subsequent to the local area being designated as a nonattainment area but before the SIPs were completed, the data from the air quality monitors in the area indicated that the 2015 8-hour ozone standard had been met. With this data in hand, the air quality agencies were each able to submit a SIP known as a redesignation request. The establishment of the MVEBs was one of the components of the redesignation request. Since the SIPs were redesignation requests for ozone, the MVEBs were established for the precursors of ozone -- volatile organic compounds and oxides of Nitrogen.

Because the redesignation requests by the air quality agencies in Indiana and Kentucky are in different states of approval, it is necessary to use different emission budgets to determine whether each set of counties has passed conformity. Since Region 5 of US EPA has approved Indiana's redesignation request, the allowed emissions for the 2019 base year and the 2035 emission budgets for the 2015 Ozone standard are used for the Indiana counties of Clark and Floyd. Since Region 4 of US EPA has not yet approved Kentucky's redesignation request, the 2020 emission budgets for the 1997 Ozone standard are used for the Kentucky counties of Bullitt, Jefferson, and Oldham.

CONSULTATION FOR *CONNECTING KENTUCKIANA 2050*

The first step in determining conformity of *Connecting Kentuckiana 2050* was to consult with the interagency consultation (IAC) group concerning matters not explicitly determined by the conformity rule. Conformity under the 1997 and 2015 8-hour ozone standards have been previously determined. Therefore, many of the issues normally arising in conformity had undergone consultation previously when the local area was a nonattainment or maintenance area under the 2015 8-hour ozone standard or during the previous conformity process for *Connecting Kentuckiana 2050*.

Consultation for this amendment occurred during a video conference held on March 20, 2025. A total of 25 participants, representing nine federal, state, regional, and local agencies participated in the IAC Conference Call for Amendment 9 of KIPDA's *Connecting Kentuckiana 2050* Metropolitan Transportation Plan (MTP) and the *FY2025-FY2028 Transportation Improvement Program* (TIP). The list of participants included:

Participants:

EPA – Simone Jarvis, Sunday Gotvald, Diana Myers, Emma Moreo, Tony Maietta

FHWA – Nick Vail, La’Keshia Stewart, Tonya Higdon

KYTC – Tom Hall, Larry Chaney, Dasha Korostina

INDOT – Roy Nunnally

TARC – Aida Copic

LMAPCD – Matt King

KYDAQ – Blake Borwig, Claire Oyler, Kevin Davis

IDEM – Shawn Seals

KIPDA – Spencer Williams, Brady Hill, Chris Nicolas, Eronmonsele Esekhaigbe, Randy Simon, Elijah Beliles, Andy Rush

Welcome/Roll Call:

Andy Rush started the meeting at 9:05am and took the roll.

Project Discussion:

Chris Nicolas provided a summary of background information regarding the new FY 2025 – FY 2028 TIP and Connecting Kentuckiana 2050 Metropolitan Transportation Plan. Nicolas noted that some of the projects on the list for the initial draft contain a disclaimer pending Amendment 8 federal approval. There were 22 project changes for review by the IAC. Nicolas also noted that some of the projects in this list would not typically need to be in an amendment but have been included based on the timeline of TIP updates. Rush noted that the “Graybrook Lane Extension” project should show “New Albany” as the project

sponsor—not “Floyd”. Nicolas committed to making that change after the meeting and proceeded to provide a summary of other projects on the list. Nick Vail asked for clarification regarding the asterisks on the funding years in fiscal year 2023 and 2024 as these are outside the FY25 – FY28 TIP years. Nicolas clarified that the phases with asterisks are informational only for KIPDA records. Randy Simon pointed out that there is no air quality modelling analysis scenario for 2045. Nicolas committed to remove any reference to a 2045 model scenario from the list of projects. Simon and Nicolas clarified that KIPDA ID 3371 will be going from 2 lanes to 4 lanes. This was updated in the KIPDA travel model.

Nicolas continued to summarize new KYTC projects on the list. It was noted that the model year for US 31E should simply be for model year 2025 since the project’s open to public date is 2025. Nicolas committed to making that change. Nicolas and Rush explained changes to State ID 5-80259/5-80253. Funding has been removed from one project because they added it twice to the Highway Plan. Having both projects in the TIP would be redundant. Rush explained that some road conversions as a part of KIPDA ID 1809 have already been completed, while some have not. When KIPDA staff updated the travel model to remove the project from the 2025 scenario, only the portions of the project which are not completed have been removed from the 2025 scenario. Nicolas continued to explain the projects on the list. Simone Jarvis pointed out that three of the TARC projects on the list should be considered “exempt”.

Rush reiterated that the TIP is a subset of the MTP. While this process is meant to review the air quality projects changes for the new TIP, the current MTP will be amended for the ninth time, and the air quality analysis will be performed on the MTP. There is not currently a new MTP being processed. Vail asked for further clarification on Amendment 9 to the MTP and the TIP update, because the draft document stated, “FY 2023 – FY 2026 TIP” instead of “FY 2025 – FY 2028”. This was determined to be a typo in the draft document that would be corrected in the future. Vail asked to make sure that there would be a 30-day comment period for public review. Diana Myers asked about the emissions budgets. Rush asked Myers if there were any major updates to the process of managing regional emission budgets. Myers stated that the process should be mostly the same since around January.

Matt King inquired whether KIPDA was using the MOVES 5 model for their current analysis and Simon clarified that KIPDA was still using the MOVES 4.01 model at this time. Simon and King discussed the meaning of the 2020 emissions budget as it relates to the 1997 emissions standard as well as new standards regarding gasoline in the air quality modelling. King, Rush, and Simon discussed where an appropriate future budget should be set relative to current emissions estimations. Simon asked if Sunday Gotvald had any comments regarding the information

Simon sent for Amendment 8. Gotvald stated that she had no comments on his submission. No other questions were asked by the group; so the meeting was adjourned at 9:50am.

ESTABLISHED PRACTICE

In addition to the issues discussed during consultation, there were several issues which were not explicitly discussed or received little discussion during the video conference consultation, but which had impacts on the analysis. Many of these issues had been discussed during previous consultations. These issues were handled in a manner consistent with the previous established practice. The more prominent issues are discussed below.

Relationship of MTP and TIP for Conformity Purposes

The Transportation Improvement Program (TIP) is maintained as a subset of the Metropolitan Transportation Plan (MTP). Therefore, the conformity determination for the MTP will serve as the conformity determination for the TIP.

Conclusion: The IAC members are informed of this from time to time in order to clarify the conformity determination for the MTP also serves as the conformity determination for the TIP.

Vehicle Registration (Fleet Mix) Data

At various times in the past, new vehicle registration data has been provided for use in developing pollutant emissions. This vehicle registration data has been reviewed and accepted by the IAC. The data being used for the Indiana counties has been updated to 2022, and the data being used for the Kentucky counties has been previously updated to 2023. These data represent the most recent information available for this issue.

Conclusion: Based on a consensus of the IAC members, vehicle registration data for 2022 for the Indiana counties and for 2023 for the Kentucky counties is now being used in developing emission estimates.

CONFORMITY OF *CONNECTING KENTUCKIANA 2050*

The MTP, *Connecting Kentuckiana 2050*, was examined to determine if it met the requirements of the conformity rule under the 1997 and 2015 8-hour ozone standards. In general, the process leading to a conformity determination has two major components:

- (1) a regional emissions (air quality) analysis to determine that air pollutant and/or precursor emissions do not exceed the budgets set in the SIPs, if applicable, or the emission levels for a given base year; and

- (2) a monitoring of the progress in implementation of the Transportation Control Measures (TCMs) contained in the SIPs.

In the past, consultation with the state and local air quality agencies and EPA had determined that there are no approved TCMs in the SIPs of Indiana and Kentucky. Therefore, it is possible to show conformity of *Connecting Kentuckiana 2050* simply by determining that the air pollutant and/or precursor emissions do not exceed the budgets in the SIPs or the base year emissions.

ANALYSIS PROCESS

The process of calculating the regional emissions for *Connecting Kentuckiana 2050* involved three main procedures. The first procedure was a review of the projects to determine which projects needed to be included in the regional emissions analysis. The second procedure was to perform the calculations necessary to quantify certain measures of travel behavior. The third procedure was to calculate the pollutant/precursor emissions. These activities are discussed below in greater detail.

Project Review

The first procedure was to review the projects to determine which projects were exempt or non-exempt and which projects were “regionally significant.” The combination of these two considerations was the basis for determining which projects were recommended for inclusion in the regional emissions analysis. During Amendment 9 of the MTP, *Connecting Kentuckiana 2050*, a group of projects had been proposed for the amendment of the plan. These projects were reviewed by KIPDA staff, who prepared a list of the projects with information about the projects and a staff recommendation concerning the project’s status relative to its being included in the regional emissions analysis. There is usually a straightforward explanation for why projects are included in or excluded from the analysis and why they are analyzed as they are. Most of the projects which were excluded were exempt projects as defined in the Code of Federal Regulations in 40 CFR 93.126 and 40 CFR 93.127.

During consultation, this list was reviewed and accepted by the IAC as described under the section entitled “CONSULTATION FOR *CONNECTING KENTUCKIANA 2050*.” (Please see above.) The projects in *Connecting Kentuckiana 2050* were analyzed as indicated on the list provided to IAC.

In the past, there were several projects which could not be analyzed using the travel model but were not explicitly exempt. Most of these projects had been evaluated using spreadsheet methods using emission factors (rates). Since the MOVES

emissions model was being used in the inventory mode, emission factors were not available for this analysis. However, experience had shown that the emission impacts for these projects were always small and positive (i.e., emission reducing). Therefore, it is reasonable to predict that the emission impacts of these projects—if they could be quantified—would decrease the emissions shown in the tables at the end of this document.

In the past, there was one particular project affecting Bullitt County that could not be included in the travel model but had the potential to increase emissions. Therefore, a special effort had previously been made to include its impacts in the analysis of travel behavior impacts and, consequently, in the regional emissions analysis. This project was the relocated (southern) section of US 31E. This project, which had been discussed during consultation in the past, involved the relocation of a small (approximately 0.2 mile) section of US 31E from Nelson County (outside of the nonattainment area) to Bullitt County (inside the ozone nonattainment area) during the reconstruction of that road. Estimates of the VMT for this project had been developed using a spreadsheet approach. The VMT estimates were calculated (off-model) as the product of the estimated traffic volumes for each of the analysis years and the length of the relocated section in Bullitt County and had been added to the other Bullitt County VMT estimates of the same functional class. This effort has not been necessary since Amendment 4. Additional roadway sections including the relocated section of US 31E have recently been added to the travel model. Therefore, the estimated VMT for that section is now calculated (along with the VMT from other projects) in the post-processing process of the travel model data and added to the Bullitt County VMT resulting from that process.

Calculation of Travel-Related Information

The analysis of the travel behavior impacts for the nonattainment area primarily involved using the KIPDA travel demand forecasting model to determine measures of travel such as vehicle-miles-traveled (VMT) and speed. The method for determining these measures was to input the appropriate roadway information into the model and to run the model using the appropriate socioeconomic information for a given analysis year. This analysis is explained below in further detail in the sections concerning the KIPDA travel demand forecasting model and adjustment factors for travel model output.

KIPDA Travel Demand Forecasting Model

The KIPDA travel demand forecasting model is a mathematical model which relates travel to the transportation system and basic socioeconomic information. The domain of the model is a study area which includes the Louisville (KY-IN) Metropolitan Planning Area. The Louisville (KY-IN) Metropolitan Planning Area

presently consists of Clark and Floyd counties in Indiana, and Bullitt, Jefferson, and Oldham counties and approximately 4 square miles in Shelby County in Kentucky. This area is divided into 984 smaller units called traffic analysis zones.

As previously mentioned, the KIPDA regional travel demand forecasting model was updated and calibrated in 2022. This update established 2019 as the new base year for the model. The model update utilized the information incorporated into the travel model during previous updates. In addition, a significant amount of data from Streetlight Data, Inc. was incorporated into the updated model, particularly for trips which crossed the external boundary of the model. During the update, the model parameters were adjusted such that the model output matched—within reason—two main calibration criteria based on measured data. These criteria were: (1) the total daily VMT for all highway facilities except local roads for the region; and (2) highway traffic volumes crossing the Ohio River screenline. The result of the update was a travel model which generally replicated travel in the Louisville area for 2019. The updated travel model was used in the regional emissions analysis.

The KIPDA travel demand forecasting model uses the standard four steps of modeling: trip generation, trip distribution, mode choice, and trip assignment. In addition, it considers travel by vehicles entering, leaving, and crossing the study area. These types of trips are known as external-internal, internal-external, and external-external, respectively. The internal ends of these trips are determined by the methods described below for internal-internal travel. The external ends are determined from the volume of traffic crossing the study area boundary at any of the 46 external stations.

Trip generation is the process of determining the number of unlinked trip ends--called productions and attractions--and their spatial distribution based on socioeconomic variables such as households and employment. The trip rates used to define these relationships were derived from the travel data collection efforts described above. This information was supplemented by the use of the *National Cooperative Highway Research Program Report #365* and the Institute of Transportation Engineers' *Trip Generation Report*. The KIPDA travel demand model uses three internal-internal trip purposes. Internal-internal trips are those which have both ends inside the modeling domain. The three purposes are home-based work, home-based other, and non-home-based. The set of trip rates is one of the calibration parameters of the model.

Trip distribution is the process of linking the trip ends thereby creating trips which traverse the area. The KIPDA travel model uses a gravity model to link all trips except the external-external ones. The gravity model is based on the principle that productions are linked to attractions as a direct function of the number of attractions of a zone and as an inverse function of the travel time between zones. This inverse

function of travel time is used to generate parameters called friction factors which, in turn, direct the gravity model. In addition, information from a study which investigated the behavior of travelers crossing the Ohio River and traffic count information from years near 2019 were utilized to develop additional parameters called K-factors. The K-factors are used by the model to ensure that it is predicting the correct volume of traffic crossing the Ohio River. Friction factors and K-factors are two of the calibration parameters of the model.

Mode choice is the process used to separate the trips which use transit from those which use automobiles. It is also used to separate the auto drive-alone trips from auto shared-ride trips. In some previous KIPDA travel demand models, mode choice was based primarily on information provided by the *TARC Travel Forecasting Study* from some time ago. In that model, the user's benefit or utility was calculated for each mode based on zonal socioeconomic characteristics and the cost and time of the trip using the various modes. A nested logit model was used to determine the probability of the trip being made by each of the modes. This probability was then multiplied by the number of trips between zones to determine the number of trips by each mode.

As previously stated, the conformity analysis for *Connecting Kentuckiana 2050* utilizes transit information from previous travel demand models. The results of the 2004 TARC on-board survey had been used to factor the data in the previous transit files. This was deemed acceptable for several reasons. The primary reason was that the transit network envisioned by *Connecting Kentuckiana 2050* is essentially the same as the existing one. In addition, the number of total trips from the two models was similar. Therefore, the use of the factored transit trip information from previous travel models did not significantly change the proportion of trips allocated to transit. Finally, the proportion of trips utilizing transit is less than 2% of the total trips. So small differences in the number of transit trips should have a negligible effect on overall travel.

Trip assignment is the process used to determine which links of the network a given trip will use. There are several assignment schemes which may be used. Two of the more common schemes are All-or-Nothing (AON)--in which all trips between two zones follow the shortest time path--and Stochastic--in which trips between two zones may be assigned to several paths based on their relative impedances or travel times. It is not uncommon for travel models to use several assignment schemes in sequence to converge to a better assignment. A sequence commonly used involves using several AONs with the traffic volumes reported at the end of each scheme being a weighted average of the volumes from the most recent scheme and the volumes from the previous schemes. A capacity restraint provision is used to adjust travel times between assignment schemes. This sequence is called an equilibrium assignment. The KIPDA travel model uses an equilibrium assignment which

converges when the change in system-wide travel time over successive iterations is estimated to be within 0.0001 or less.

Tolls are being used as a means of providing for a portion of the cost of the Louisville Southern Indiana Ohio River Bridges project. To reflect the effect of the tolls in the KIPDA travel model, time penalties have been used in the model on the bridges where tolls are being collected. As mentioned above, the toll structure was recently changed. To reflect this in the travel model update, the time penalties used in the KIPDA travel model were likewise changed to reflect the effect of the new toll structure. The time penalties also reflect some travel effects which could not otherwise be quantified.

The output from the KIPDA travel model is in the form of a series of links with each link having certain associated data such as number of lanes, capacity, facility type, area type, functional class, and volume. This data allows for the calculation of other link information such as vehicle-miles-traveled (VMT). The VMT can be calculated as the product of the volume of traffic using a link times the distance (length) of the link.

Adjustment Factors for Travel Model Output

The VMT and speeds from the travel demand model were adjusted before being used in the calculation of regional emissions. The purpose of these adjustments was to reconcile the model output with travel estimates from other sources, such as the Highway Performance Monitoring System (HPMS) estimates of VMT. To perform this adjustment, factors were developed for the baseyear of the model using HPMS or other estimates and applied to model output for other years.

The development of the VMT adjustment factors involved comparing the VMT outputs of the travel demand model to the HPMS VMT estimates for 2019. Factors were developed to adjust the model output to account for variation between the model and HPMS within each of the counties. To do this, the VMT from the 2019 model run was tabulated by county and functional classification. The VMT estimates derived from the model were then compared to the HPMS VMT estimates for 2019 to develop adjustment factors to be applied to the model output for subsequent years. The 8-hour ozone analysis is based on a level of traffic and the accompanying emissions expected on a typical summer weekday. For that analysis, the adjustment factors were increased by 2.9% to reflect the higher volume of traffic that can be expected on a typical summer weekday relative to the annual average daily traffic. The adjustment factors for VMT were developed on a functional classification basis for each county.

The development of the speed adjustment factors involved a similar process. The outputs of the travel demand model were compared to estimates of speed based on

the equations of the Highway Economic Reporting System (HERS). In general, the HERS equations were used to estimate speeds for five functional classifications of urban roadways and for five functional classifications of rural roadways. The speeds from these roadway sections were used to determine the average speed for each of five rural and urban functional classes. The speeds used in the travel model were also averaged for each of the five rural and urban functional classes for which HERS estimates had been developed. The speed adjustment factor for each of these functional classes was calculated as the ratio of the average speed using the HERS equations to the average speed using the travel model data. In some cases, the adjustment factors for some functional classes for some counties had to be based on the combined effects of the functional classes due to the sparseness of data for one or more of the functional classes.

The procedures described above produced speed adjustment factors for all functional classes except rural and urban local roads and ramps. (Ramps are not officially a separate functional class, but the speed behavior of traffic on ramps is not expected to be like that of any other functional class. Therefore, the ramps were treated as a separate “functional class”.) There was not sufficient data to estimate speeds for the roadways of these classes. For rural and urban local roads and ramps, the speeds in the travel model were used without adjustment (i.e., the speed adjustment factor for rural and urban local roads and for ramps = 1).

Calculation of Pollutant/Precursor Emissions

The calculation of the pollutant/precursor emissions for the nonattainment area involved using the adjusted output data from the KIPDA travel demand forecasting model as input to the MOVES model. KIPDA staff developed travel model output data in the form of vehicle-miles-traveled (VMT) in three formats: (1) VMT by speed bin by MOBILE 6 facility type (road type) for each county, (2) VMT fractions by speed bin by county by MOBILE 6 facility type (road type) for each county, and (3) VMT and average speed by functional class for each county. KIPDA staff utilized this data along with other necessary inputs to run the MOVES model and develop emission estimates for volatile organic compounds (VOCs) and oxides of Nitrogen (NOx).

MOVES Emissions Model

As previously mentioned, the Louisville region is a nonattainment/maintenance area for the pollutant ozone and must therefore control the precursors of ozone, VOCs and NOx. The emission estimates for VOCs and NOx were determined using the MOVES 4.01 emissions model. KIPDA staff produced the emissions for all of the counties in the nonattainment/ maintenance area. The methodology used in calculating these emission estimates is discussed below.

There are a number of factors affecting the emission estimates developed from the MOVES model. In the past, these factors included the presence of inspection/maintenance (I/M) programs in some of the counties. During that time period, the VMT generated in Clark, Floyd, and Jefferson (KY) counties came from some vehicles subject to an I/M program and from some vehicles not subject to an I/M program. The I/M program in Clark and Floyd counties was discontinued at the end of 2006. The I/M program in Jefferson County (KY) was discontinued in 2003. Therefore, these programs are no longer a factor in estimating emissions.

One of the other factors is the fuel used by the vehicles in the various counties. The fuels which are used in Clark, Floyd, and Jefferson counties include reduced Reid vapor pressure gasoline (RVP) and reformulated gasoline (RFG). While RFG is used in some portions of Bullitt and Oldham counties, unregulated gasoline is used in the other portions of those counties as well as the areas adjacent to the nonattainment area. Vehicles from these other areas can be expected to travel in the Clark, Floyd, and Jefferson (KY) counties also. In the past, the emission factors (from the MOBILE 6 model) for Clark, Floyd, and Jefferson (KY) counties used in the air quality analysis varied by county because they represent a VMT-weighted composite based on an estimate of travel in each county by vehicles from the various portions of the region. For this analysis, the MOVES model was used in what is known as the inventory mode. Using the inventory mode, it is possible to define the fuel characteristics and the presence of an I/M program for each county, but it is not possible to represent the effect of travel in a county by vehicles from other counties. Therefore, the use of composite emission factors was not possible. Other than that, the assumptions used in the analysis were consistent with those of the appropriate air quality agency for each of the counties. For Clark and Floyd counties, the assumptions of the Indiana Department of Environmental Management (IDEM) were used. Some assumptions of LMAPCD were also used for Clark and Floyd counties. For Jefferson County (KY), the assumptions of the LMAPCD were used. These assumptions had been previously reviewed and accepted by the IAC partners.

The assumptions used in developing the emissions for Clark, Floyd, and Jefferson (KY) counties were the same as those used in developing the ozone budgets update (for VOCs and NO_x) for the recent redesignation request in 2022. These assumptions included some changes which were incorporated in recent years prior to 2022. The changes which affected the VOC and NO_x emissions included:

- (1) improved consistency and completeness of gasoline data provided with the new MOVES model,
- (2) the incorporation of newer vehicle registration data (for 2022) for Clark and Floyd counties (provided by INDOT),
- (3) the incorporation of newer vehicle registration data (for 2023) for Jefferson County (provided by KYTC, and

- (4) improvements in internal model calculations to account for emission controls, driving profiles and engine characteristics.

The emissions for Bullitt and Oldham counties were also developed by KIPDA staff. As with the other counties, the assumptions for these counties were consistent with those used in the redesignation request developed in 2022. Most of the inputs to the MOVES model were defaults and/or data used that was consistent with previous SIPs or data updated for the redesignation request. As mentioned above, RFG is used in some portions (the “original” portions) of Bullitt and Oldham counties, and unregulated gasoline is used in the other portions (the “new” portions) of those counties as well as the areas adjacent to the nonattainment area. The “original” portions and “new” portions refer to whether a portion of these counties had originally designated as a nonattainment/maintenance status for the 1-hour ozone standard (used in the 1990’s) or had only been designated under the 1997 8-hour ozone standard. Neither portion of either county had an I/M program. So, it was not necessary to have I/M input information for MOVES. However, it was possible that the gasoline formulation in the different portions of these counties could be different.

It was determined—based on data provided by US EPA for the MOVES model—that the gasoline formulation for Bullitt and Oldham counties is essentially the same as that for Jefferson County with respect to the use of RFG. Since the use of the MOVES model in the inventory mode does not allow for the characteristics of different blends of gasoline within the same county, the gasoline formulations of Bullitt and Oldham counties were modeled the same as for Jefferson County.

The assumptions used for Bullitt and Oldham counties were consistent with those for the ozone budgets update for the recent redesignation request in 2022. The changes which affected the VOC and NO_x emissions included:

- (1) improved consistency and completeness of gasoline data provided with the new MOVES model,
- (2) the characterization of gasolines described in the previous paragraph,
- (3) the incorporation of newer vehicle registration data (for 2023) for Bullitt and Oldham counties (provided by KYTC, and
- (4) improvements in internal model calculations to account for emission controls, driving profiles and engine characteristics.

KIPDA staff developed emission estimates of VOCs and NO_x using the MOVES model. To review, the following steps were undertaken.

- (1) KIPDA staff received developed the adjusted travel model output in the forms of VMT and average speed, VMT by speed bin, and VMT fractions by speed bin, all by county and by MOBILE facility type by analysis year, as described above.
- (2) KIPDA reformatted the data to prepare it as input to the MOVES model.

- (3) The MOVES model was run in inventory mode to determine emission estimates of each precursor for each county for each analysis year.

RESULTS OF THE ANALYSIS

The metropolitan transportation plan, *Connecting Kentuckiana 2050*, has been examined to determine if it is in conformity with the SIPs of Indiana and Kentucky and fulfills the criteria in the federal conformity rule (found in 40 CFR 93). The examination has been based on an air quality analysis to determine that air pollutant and/or precursor emissions of the appropriate areas did not exceed the VOC and NOx motor vehicle emission budgets.

As previously mentioned, the other criterion for determining conformity would have been the progress in the implementation of the Transportation Control Measures (TCMs) contained in the SIPs. However, since previous consultation had determined that there were no approved TCMs, that criterion did not affect the determination of conformity. The results of the regional emissions analysis for ozone precursors are discussed below.

8-hour Ozone Analysis

The eight-hour ozone redesignation SIPs of Indiana and Kentucky contain emission budgets for the precursors of ozone, volatile organic compounds (VOCs) and oxides of Nitrogen (NOx). The regional emissions analysis was conducted to provide estimates of the levels of emissions of VOCs and NOx for the various analysis years. These emission levels were then compared to the budgets in the SIPs to determine if the conformity tests were passed.

The results of the regional emissions analysis are summarized in Tables 1, 2, and 3. Table 1 shows the summer weekday vehicle-miles-traveled from the analysis. Table 2 shows that for 2025 and 2030, the summer weekday VOC and NOx emission levels for the 2015 8-hour nonattainment area are less than the 2019 base year emissions in the 2015 8-hour ozone redesignation SIP. Table 2 also shows that for 2035, 2040, and 2050, the summer weekday VOC and NOx emission levels for the 2015 8-hour nonattainment area are less than the motor vehicle emission budgets established in the 2015 8-hour ozone redesignation SIP. Table 2 also shows that for 2035, 2040, and 2050, the summer weekday VOC and NOx emission levels for the 2015 8-hour nonattainment area are less than the motor vehicle emission budgets established in the 2015 8-hour ozone redesignation SIP. Table 3 shows that for 2025 and 2030, the summer weekday VOC and NOx emission levels for the 2015 8-hour nonattainment area are less than 2020 emission budgets in the 1997 8-hour ozone redesignation SIP.

Conclusions – 8-hour Ozone

The regional emissions analysis of *Connecting Kentuckiana 2050* indicates that the Metropolitan Transportation Plan is consistent with the goals and emission budgets established in the State Implementation Plans of Indiana and Kentucky. The cumulative effect of the results shown in Tables 2 and 3 indicates that *Connecting Kentuckiana 2050* has met the requirements of conformity under the 1997 and 2015 8-hour ozone standards. In summary, it can be concluded that *Connecting Kentuckiana 2050* conforms to the SIPs and meets the requirements of the federal conformity rule.

TABLE 1

SUMMER WEEKDAY VEHICLE-MILES-TRAVELED (VMT) ESTIMATED FOR THE 8-HOUR OZONE NONATTAINMENT AREA (in 1000's of vmt/day)			
YEAR	INDIANA	KENTUCKY	TOTAL
2025	8072	26517	34589
2030	8486	27944	36430
2035	8907	29276	38183
2040	9348	30486	39834
2050	10220	32870	43090

TABLE 2

SUMMER WEEKDAY EMISSIONS FOR THE 2015 8-HOUR NONATTAINMENT AREA (kg/day)				
EMISSION LEVELS FOR VARIOUS YEARS				
YEAR	Area	VOCs	NOx	PASS
2025	Regional	7958	15580	YES
2030		5735	9904	YES
2035		4616	6519	YES
2040		3889	5144	YES
2050		3135	4265	YES

NOTE: The criteria for conformity for the INDIANA counties are as follows:

2025 and 2030 Regional emission levels for VOCs must be below the 2015 Ozone standard redesignation SIP base year (2019) emissions of 13.65 tons/day or 12,383 kg/day.

2025 and 2030 Regional emission levels for NOx must be below the 2015 Ozone standard redesignation SIP base year (2019) emissions of 33.03 tons/day or 29,964 kg/day.

2035, 2040, and 2050 Regional emission levels for VOCs must be below the 2015 Ozone standard redesignation SIP emission budget (2035) of 5.51 tons/day or 4,999 kg/day.

2035, 2040, and 2050 Regional emission levels for NOx must be below the 2015 Ozone standard redesignation SIP emission budget (2035) of 17.18 tons/day or 15,585 kg/day.

TABLE 3

SUMMER WEEKDAY EMISSIONS FOR THE 1997 8-HOUR NONATTAINMENT AREA (kg/day)				
EMISSION LEVELS FOR VARIOUS YEARS				
YEAR	Area	VOCs	Nox	PASS
2025	Regional	7958	15580	YES
2030		5735	9904	YES
2035		4616	6519	YES
2040		3889	5144	YES
2050		3135	4265	YES

NOTE: The criteria for conformity for the KENTUCKY counties are as follows:

2025, 2030, 2035, 2040, and 2050 Regional emission levels for VOCs must be below the 1997 Ozone standard redesignation SIP emission budget (2020) of 22.92 tons/day or 20,793 kg/day.

2025, 2030, 2035, 2040, and 2050 Regional emission levels for NOx must be below the 1997 Ozone standard redesignation SIP emission budget (2020) of 29.46 tons/day or 26,726 kg/day.