KIPDA
Kentuckiana Regional Planning & Development Agency

DRAFT

Amendment 4
to the
Fiscal Year 2025 - 2028
Transportation Improvement Program (TIP)

Amendment 13
to
Connecting Kentuckiana 2050
Metropolitan Transportation Plan (MTP)

Anticipated TPC Approval for May 29, 2026

Please note - Amendment 4 and 13 are a single list of updates with two different reference numbers. The TIP numbering scheme restarted with the FY25-FY28 TIP adoption and the MTP numbering scheme will not restart until a new MTP is adopted.

KIPDA

AMENDMENT SCHEDULE

Amendment 4 to the *Fiscal Year (FY) 2025 - 2028 Transportation Improvement Program* (TIP) Amendment 13 to *Connecting Kentuckiana 2050 Metropolitan Transportation Plan* (MTP)

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	March 20, 2026
KIPDA staff completes project review	March 31, 2026
Air quality conformity activities	April 1, 2026 - April 27, 2026
Interagency Consultation Group (IAC) Coordination	April 17, 2026
Public comment period	April 28 2026 - May 12, 2026
Comments sent to the Transportation Policy Committee (TPC)	May 13, 2026
Transportation Technical Coordinating Committee (TTCC) Recommendation	May 13, 2026
TPC Action	May 29, 2026

ADDITIONAL INFORMATION

Amendment 4 to the TIP and Amendment 13 to the MTP are identical lists of project updates. TIP amendment numbering restarted with the adoption of the FY25-FY28 TIP. MTP amendment numbering will continue until a new MTP is adopted.

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/

MTP Action:	Clarify description details, update OTP and remove from 2030 modeling scenario				
TIP Action:	Phase shifts and update OTP				
Exempt/Non Exempt:	Non-Exempt		**Model Impact:**	Remove from 2030 Scenario	
Project Sponsor:	Indiana Department of Transportation (INDOT)	**KIPDA ID:**	2943	**State ID:**	2000288
County:	Floyd	**Parent ID:**	N/A	**Group ID:**	N/A
Project Name:	I-64 and Spring Street Interchange Modification	**Funding Source:**	National Highway Performance Plan (NHPP)	**Open to Public (OTP) Date:**	~~2029~~ 2033
Total Estimated Project Cost:	$3,597,837		**Total Cost Programmed in TIP to date:**	$3,597,837	
Description:	Interchange modification at ramp junctions with Spring Street, including Spring Street from W. 5th Street to State Street and W. 5th St. from Main St. to Spring St ~~and Spring Street from 5th Street to Washington Place~~.				
Justification:	The City of New Albany is evaluating the effects of converting Spring Street from one-way operation to two-way operation between W. 5th Street and State Street. Clark Dietz was hired to develop proposed lane configurations on Spring Street to accomplish the conversion and to perform a traffic capacity analysis of the Spring Street corridor to determine the effects of the conversion on existing traffic operations. This traffic capacity analysis evaluates three scenarios along the Spring Street corridor. While the proposed one-way to two-way conversion of Spring Street will redistribute traffic within the existing traffic network, the surrounding intersections will still operate efficiently if the recommended signal timing, cycle length, and storage length adjustments are incorporated. With these adjustments incorporated, the LOS for the existing intersections will not be negatively impacted, and in most cases will be improved compared to the existing conditions.				
FY 25-28 TIP Funding:	~~FY 2028 Utilities (U) phase with NHPP funds:~~ ~~$40,000 (Federal) + $10,000 (Other) = $50,000 (Total)~~ *FY 2030 Utilities (U) phase with NHPP funds: $40,000 (Federal) + $10,000 (Other) = $50,000 (Total) ~~*FY 2029 Construction (CN) phase with NHPP funds:~~ ~~$2,541,470 (Federal) + $282,386 (Other) = $2,823,856 (Total)~~ *FY 2033 Construction (CN) phase with NHPP funds: $2,541,470 (Federal) + $282,386 (Other) = $2,823,856 (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:**	2400094
County:	Floyd	**Parent ID:**	N/A	**Group ID:**	N/A
Project Name:	ADA Ramp Junctions on Spring Street from W. 5th to State St, and on W. 5th at Market St. and Main St.	**Funding Source:**	Highway Safety Improvement Program (HSIP)- State	**Open to Public (OTP) Date:**	2030
Total Estimated Project Cost:	$137,145		**Total Cost Programmed in TIP to date:**	$137,145	
Description:	In conjunction with the I-64 and Spring Street Interchange Modification projeect (Des. No. 2000288), this project includes the removal of existing non-compliant curb ramps and their replacement with ADA compliant curb ramps that are presently located within the project limits of Des. No. 2000288.				
Justification:	The City of New Albany is evaluating the effects of converting Spring Street from one-way operation to two-way operation between 5th Street and State Street. Clark Dietz was hired to develop proposed lane configurations on Spring Street to accomplish the conversion and to perform a traffic capacity analysis of the Spring Street corridor to determine the effects of the conversion on existing traffic operations. This traffic capacity analysis evaluates three scenarios along the Spring Street corridor. While the proposed one-way to two-way conversion of Spring Street will redistribute traffic within the existing traffic network, the surrounding intersections will still operate efficiently if the recommended signal timing, cycle length, and storage length adjustments are incorporated. With these adjustments incorporated, the LOS for the existing intersections will not be negatively impacted, and in most cases will be improved compared to the existing conditions.				
FY 25-28 TIP Funding:	*FY 2030 Construction (CN) phase with HSIP-ST funds: $109,716 (Federal) + $27,429 (Other) = $137,145 (Total)				
*Funds programmed in fiscal years outside of the current 2025-2028 TIP years					

MTP Action:	Update Total Estimated Project Cost and Re-enter Removed Project				
TIP Action:	Re-enter Removed Project and Update TIP Funding and Source				
Exempt/Non Exempt:	Exempt		**Model Impact:**	No change to the model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	**KIPDA ID:**	3194	**State ID:**	2200050
County:	Clark	**Parent ID:**	N/A	**Group ID:**	N/A
Project Name:	SR 60 & Perry Crossing Road Intersection Improvement	**Funding Source:**	~~National Highway Performance Plan (NHPP)~~ Highway Safety Improvement Program (HSIP)- State	**Open to Public (OTP) Date:**	~~2027~~ 2029
Total Estimated Project Cost:	~~$3,626,722~~ $3,577,445		**Total Cost Programmed in TIP to date:**	~~$3,626,722~~ $3,577,445	
Description:	Intersection improvement at SR 60 and Perry Crossing Road.				
Justification:	This project will address safety concerns at the intersection of SR 60 and Perry Crossing Road.				
FY 25-28 TIP Funding:	~~*FY 2024 Preliminary Engineering (PE) phase with NHS funds:~~ ~~$827,730 (Federal) + $91,970 (Other) = $919,700 (Total)~~ *FY 2024 Preliminary Engineering (PE) phase with Safety funds: $284,000 (Federal) + $0 (Other) = $284,000 (Total) ~~FY 2025 ROW phase with NHPP funds:~~ ~~$80,000 (Federal) + $20,000 (Other) = $100,000 (Total)~~ FY 2026 Preliminary Engineering (PE) phase with HSIP-ST funds: $635,945 (Federal) + $0 (Other) = $635,945 (Total) FY 2027 Right of Way (ROW) phase with HSIP-ST funds: $100,000 (Federal) + $0 (Other) = $100,000 (Total) ~~FY 2027 Utilities (U) phase with NHPP funds:~~ ~~$40,000 (Federal) + $10,000 (Other) = $50,000 (Total)~~ ~~FY 2027 Construction (CN) phase with NHPP funds:~~ ~~$2,045,618 (Federal) + $511,404 (Other) = $2,557,022 (Total)~~ FY 2027 Construction (CN) phase with HSIP-ST funds: $2,557,500 (Federal) + $0 (Other) = $2,557,500 (Total)				
*Funds programmed in fiscal years outside of the current 2025-2028 TIP years					

MTP Action:	Add to MTP				
TIP Action:	Update TIP Funding, Remove Group ID and Correct Clerical Error				
Exempt/Non Exempt:	Exempt		**Model Impact:**	No change to the model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	**KIPDA ID:**	3155	**DES Number:**	1900373
County:	Clark	**Parent ID:**	N/A	**Group ID:**	~~2678~~
Project Name:	SR 60 Intersection Improvement	**Funding Source:**	National Highway Performance Plan (NHPP)	**Open to Public (OTP) Date:**	~~2028~~ 2029
Total Estimated Project Cost:	~~$1,264,876~~ $1,498,808		**Total Cost Programmed in TIP to date:**	~~$1,264,876~~ $1,498,808	
Description:	Intersection improvement with added turn lanes at the intersection of SR 60 and Twinbrook Drive/Old SR 60 in Sellersburg.				
Justification:	This project will improve the safety of the intersection by adding eastbound and westbound left turn lanes on SR 60.				
FY 25-28 TIP Funding:	~~FY 2025 Preliminary Engineering (PE) phase with NHPP funds:~~ ~~$116,800 (Federal) + $29,200 (Other) = $146,000 (Total)~~ FY 2025 Preliminary Engineering (PE) phase with NHPP funds: $278,960 (Federal) + $69,740 (Other) = $348,700 (Total) FY 2027 Right of Way (ROW) phase with NHPP funds: $6,000 (Federal) + $1,500 (Other) = $7,500 (Total) ~~FY 2028 Construction (CN) phase with NHPP funds:~~ ~~$889,101 (Federal) + $222,275 (Other) = $1,111,376 (Total)~~ *FY 2029 Construction (CN) phase with NHPP funds: $914,086 (Federal) + $228,522 (Other) = $1,142,608 (Total)				
*Funds programmed in fiscal years outside of the current 2025-2028 TIP years					

MTP Action:	Add to MTP				
TIP Action:	Remove Group ID and Correct Clerical Error				
Exempt/Non Exempt:	Exempt		**Model Impact:**	No change to the model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	**KIPDA ID:**	3054	**State ID:**	2200052
County:	Clark	**Parent ID:**	N/A	**Group ID:**	~~2680~~
Project Name:	SR 60 at St. Joe Road West Intersection Improvement	**Funding Source:**	National Highway Performance Plan (NHPP)	**Open to Public Date:**	2028
Total Estimated Project Cost:	$2,421,116		**Total Cost Programmed in TIP to date:**	$2,421,116	
Description:	Intersection improvement with added turn lanes at SR 60 and St. Joe Road West.				
Justification:	This project will improve safety concerns at the intersection of SR 60 and St. Joe Road West.				
FY 25-28 TIP Funding:	FY 2025 ROW phase with NHS funds: $48,000 (Federal) + $12,000 (Other) = $60,000 (Total) FY 2027 Utilities phase with NHS funds: $40,000 (Federal) + $10,000 (Other) = $50,000 (Total) FY 2027 Construction (CN) phase with NHS funds: $1,072,813 (Federal) + $268,203 (Other) = $1,341,016 (Total)				

PLEASE NOTE - KIPDA ID 3054 / DES 2200052 should be removed from the Amendment 4 packet per INDOT request at the May 13, 2026 Transportation Technical Committee Meeting.

MTP Action:	Add New Project				
TIP Action:	Add New Project				
Exempt/Non Exempt:	Non-Exempt		**Model Impact:**	Add to 2030, 2025, 2040 and 2050 Scenarios	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	**KIPDA ID:**	NEW	**State ID:**	
County:	Jefferson	**Parent ID:**	N/A	**Group ID:**	N/A
Project Name:	Louisville Transportation Safety Improvement Project	**Funding Source:**	Highway Safety Improvement Program (HSIP)- State	**Open to Public (OTP) Date:**	2028
Total Estimated Project Cost:	$15,900,000		**Total Cost Programmed in TIP to date:**	$15,900,000	
Description:	The Project will deliver a data-driven program of multimodal safety improvements across Jefferson County, targeting corridors and signalized intersections along the High Injury Network (HIN). Using a Progressive Design Build approach, anticipated improvements could include: road reconfigurations, striping enhancements, signage, pedestrian crossing improvements, etc.				
Justification:	This project is needed because vulnerable roadway users account for a disproportionate number of fatalities and serious injuries from traffic crashes. There is a gap in the multimodal network and current designs, limiting consistency and user awareness.				
FY 25-28 TIP Funding:	FY 2026 Design (D) phase with HSIP-ST funds: $2,700,000 (Federal) + $300,000 (Other) = $3,000,000 (Total) FY 2027 Right of Way (ROW) phase with HSIP-ST funds: $45,000 (Federal) + $5,000 (Other) = $50,000 (Total) FY 2027 Utilities (U) phase with HSIP-ST funds: $45,000 (Federal) + $5,000 (Other) = $50,000 (Total) FY 2028 Construction (C) phase with HSIP-ST funds: $10,710,000 (Federal) + $1,190,000 (Other) = $11,900,000 (Total)				

MTP Action:	Add to MTP				
TIP Action:	Remove Group ID, update TIP funding, OTP and total cost				
Exempt/Non Exempt:	Exempt		**Model Impact:**	No change to the model	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	**KIPDA ID:**	3312	**State ID:**	5-9046.00
County:	Bullitt, Jefferson, Oldham	**Parent ID:**	N/A	**Group ID:**	~~2675~~
Project Name:	Pavement Markers and Lens Replacements	**Funding Source:**	Highway Safety Improvement Program HSIP-State	**Open to Public (OTP) Date:**	~~2027~~ 2029
Total Estimated Project Cost:	~~$1,455,000~~ $4,350,000		**Total Cost Programmed in TIP to date:**	~~$1,455,000~~ $4,350,000	
Description:	Installation of Pavement Markers on Various Routes in District 5				
Justification:	To increase the safety level on portions of several routes in Bullitt, Jefferson, and Oldham counties				
FY 25-28 TIP Funding:	~~*FY 2024 Construction phase with HSIP-State funds:~~ ~~$995,000 (Federal) + $0 (Other) = $995,000 (Total)~~ ~~FY 2026 Construction phase with HSIP-State funds:~~ ~~$460,000 (Federal) + $0 (Other) = $460,000 (Total)~~ *FY 2024 Construction phase with HSIP-State funds: $620,000 (Federal) + $0 (Other) = $620,000 (Total) FY 2025 Construction phase with HSIP-State funds: $835,000 (Federal) + $0 (Other) = $835,000 (Total) FY 2026 Construction phase with HSIP-State funds: $945,000 (Federal) + $0 (Other) = $945,000 (Total) FY 2027 Construction phase with HSIP-State funds: $950,000 (Federal) + $0 (Other) = $950,000 (Total) FY 2028 Construction phase with HSIP-State funds: $1,000,000 (Federal) + $0 (Other) = $1,000,000 (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:	Exempt		**Model Impact:**	No change to the model	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	**KIPDA ID:**	NEW	**State ID:**	
County:	Oldham	**Parent ID:**	N/A	**Group ID:**	N/A
Project Name:	I-71 Rest Area Renovation	**Funding Source:**	National Highway System (NHS)	**Open to Public (OTP) Date:**	2029
Total Estimated Project Cost:	$4,400,000		**Total Cost Programmed in TIP to date:**	$4,400,000	
Description:	KYTC D-5 Oldham Co Rest Area NB & SB I-71 Renovations (MP 13)				
Justification:	To maintain the infrastructure in state of good repair				
FY 25-28 TIP Funding:	FY 2026 Design (D) phase with NHS funds: $400,000 (Federal) + $0 (Other) = $400,000 (Total) FY 2027 Construction (C) phase with NHS funds: $4,000,000 (Federal) + $0 (Other) = $4,000,000 (Total)				

MTP Action:	Update total estimated project cost				
TIP Action:	Update TIP funding and OTP				
Exempt/Non Exempt:	Non-Exempt		**Model Impact:**	Remove from the 2027 scenario	
Project Sponsor:	Louisville Metro	**KIPDA ID:**	2733	**State ID:**	5-80324.00
County:	Jefferson	**Parent ID:**	N/A	**Group ID:**	N/A
Project Name:	Reimagine 9th Street	**Funding Source:**	Various	**Open to Public (OTP) Date:**	~~2027~~ 2028
Total Estimated Project Cost:	~~$30,003,000~~ $27,639,000		**Total Cost Programmed in TIP to date:**	~~$30,003,000~~ $27,639,000	
Description:	~~This project will transform 9th Street/Roy Wilkins Avenue just west of the downtown Louisville from the Main Street to Broadway from a six-lane thoroughfare with extremely wide right-of-way into a "Complete Street." Improvements to be considered during the Design process include: Reduce the number and width of lanes, convert one-way traffic to two-way (with a two-way left turn lane) on Muhammad Ali Boulevard and Chestnut Street/River Park Drive, eliminate negative offset left-turn lanes, adequately dimensioned turn bays, traffic signal upgrades, expanded fiber throughout the corridor, protected/permissive left turns at signals, sidewalk expanded up to 20-feet wide, curb extensions, pedestrian refuge islands, pedestrian scale lighting, crosswalk visibility enhancements, tabled intersections, protected bike lanes, improved signage, bus shelters, kiosks with real-time bus information, dedicated bus lanes, bus bulbs, increased tree canopy, bioswales, and improved storm drainage.~~ This project will improve 9th Street/Roy Wilkins from Main Street to Broadway, including converting one-way traffic to two-way (with a two-way left turn lane) on Muhammad Ali Boulevard and Chestnut Street/River Park Drive between Southwestern Parkway and 6th St. Project will include traffic signal upgrades, protected/permissive left turns at signals, and improved lighting, sidewalks, crosswalks, and bus stops.				

KIPDA ID 2733 continued on the next page

KIPDA ID 2733 **Justification:**	Eliminate the physical and psychological barrier that the "9th Street divide" creates between Louisville's Central Business District and the West End neighborhoods; create a safe and accessible travel experience for all users including pedestrians, cyclists and transit riders; increase economic vitality through creating a safe, attractive and comfortable environment; provide opportunities for parks and open spaces, playgrounds, recreation access, street tree canopy and storm water management features; and provide a safe and efficient corridor for vehicle and freight travel.
KIPDA ID 2733 **FY 25-28 TIP Funding:**	FY 2025 Planning (P) phase with Local funds: $0 (Federal) + $100,000 (Other) = $100,000 (Total) FY 2025 Design (D) phase with Local funds: $0 (Federal) + $2,200,000 (Other) = $2,200,000 (Total) FY 2025 Construction (C) phase with RAISE funds: $3,400,000 (Federal) + $1,050,000 (Other) = $4,450,000 (Total) FY 2026 Planning (P) phase with Local funds: $0 (Federal) + $200,000 (Other) = $200,000 (Total) FY 2026 Utilities (U) phase with Local funds: $0 (Federal) + $200,000 (Other) = $200,000 (Total) FY 2026 Construction (C) phase with RAISE funds: $12,184,000 (Federal) + $0 (Other) = $12,184,000 (Total) ~~FY 2026 Construction phase with STBG-MPO funds:~~ ~~$3,896,000 (Federal) + $974,000 (Other) = $4,870,000 (Total)~~ FY 2026 Construction phase with STBG-MPO funds: $1,976,000 (Federal) + $494,000 (Other) = $2,470,000 (Total) FY 2027 Design (D) phase with SPP funds: $0 (Federal) + $2,990,000 (Other) = $2,990,000 (Total) FY 2028 Right of Way (ROW) phase with SPP funds: $0 (Federal) + $220,000 (Other) = $220,000 (Total) FY 2028 Utilities (U) phase with SPP funds: $0 (Federal) + $390,000 (Other) = $390,000 (Total)

MTP Action:	Add new project				
TIP Action:	Add new project				
Exempt/Non Exempt:	Exempt		**Model Impact:**	No change to the model.	
Project Sponsor:	Louisville Metro	**KIPDA ID:**	NEW	**State ID:**	
County:	Jefferson	**Parent ID:**	N/A	**Group ID:**	N/A
Project Name:	9th St Pedestrian Improvements	**Funding Source:**	Community Project Funding (CPF)	**Open to Public (OTP) Date:**	2029
Total Estimated Project Cost:	$3,025,000		**Total Cost Programmed in TIP to date:**	$3,025,000	
Description:	This placemaking project will enhance the use of the public right-of-way by creating safe and accessible infrastructure for pedestrians and cyclists, including a public plaza and linear park, allowing for enhanced connections between new and existing neighborhood amenities along 9th St between Main St and Broadway.				
Justification:	This project will serve to improve pedestrian and bicyclist access to the 9th st corridor.				
FY 25-28 TIP Funding:	FY 2026 Design (D) phase with CPF: $500,000 (Federal) + $125,000 (Other) = $625,000 (Total) FY 2026 Construction (C) phase with STBG-MPO: $1,920,000 (Federal) + $480,000 (Other) = $2,400,000 (Total)				

MTP Action:	N/A				
TIP Action:	Update total estimated project cost				
Exempt/Non Exempt:	Exempt		**Model Impact:**	No change to the model.	
Project Sponsor:	Louisville Metro	**KIPDA ID:**	2624	**State ID:**	5-3709.00
County:	Jefferson	**Parent ID:**	1273	**Group ID:**	N/A
Project Name:	Olmsted Parkways Multi-Use Path System Section III	**Funding Source:**	Surface Transportation Block Group - MPO (STBG-MPO)	**Open to Public (OTP) Date:**	2028
Total Estimated Project Cost:	~~$2,564,383~~ $5,835,639		**Total Cost Programmed in TIP to date:**	$1,292,889	
Description:	Construction of a 0.30 mile shared use path system along Algonquin Parkway between Beech Street and Cypress Street.				
Justification:	To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop.				
FY 25-28 TIP Funding:	FY26 Design phase with STBG-MPO funds: $111,111 (Federal) + $27,778 (Other) = $138,889 (Total) FY26 ROW phase with STBG-MPO funds: $942,000 (Federal) + $212,000 (Other) = $1,154,000 (Total)				

MTP Action:	N/A				
TIP Action:	Add new child project to KIPDA ID 585				
Exempt/Non Exempt:	Exempt		**Model Impact:**	No change to the model	
Project Sponsor:	Transit Authority of River City (TARC)	**KIPDA ID:**	NEW	**ALI Code:**	11.43.03
County:	Jefferson	**Parent ID:**	585	**Group ID:**	N/A
Project Name:	Construct Maintenance / Administrative Facility	**Funding Source:**	Section 5339	**Open to Public (OTP) Date:**	2027
Total Estimated Project Cost:	$2,980,000		**Total Cost Programmed in TIP to date:**	$2,980,000	
Description:	Construct bus brake maintenance addition at TARC Union Station facility.				
Justification:	There are two clear goals for the proposed facility expansion. The first is to locate brake repairs closer to inspection, running repair, and operations to allow for operational efficiency and prompt return to service. The second is to provide an updated workspace in recognition of the end-of-life equipment at the 2905 W. Broadway location and the differences in brake service associated with new braking systems.				
FY 25-28 TIP Funding:	FY 2027 Transit Capital phase with Section 5339 funds: $2,384,000 (Federal) + $596,000 (Other) = $2,980,000 (Total)				

MTP Action:	N/A				
TIP Action:	Update TIP funding and OTP				
Exempt/Non Exempt:	Exempt		**Model Impact:**	No change to the model	
Project Sponsor:	Transit Authority of River City (TARC)	**KIPDA ID:**	3164	**Transit ALI Code:**	11.41.03
County	Jefferson	**Parent ID:**	585	**Group ID:**	N/A
Project Name:	Architectural and Engineering Services	**Funding Source:**	Section 5307	**Open to Public (OTP) Date:**	~~2026~~ 2027
Total Estimated Project Cost:	~~$704,965~~ $1,004,965		**Total Cost Programmed in TIP to date:**	~~$704,965~~ $1,004,965	
Description:	Architectural & engineering consulting for TARC renovation projects at Union Station and other TARC facilities.				
Justification:	These projects will improve TARC's energy and operational efficiency, allowing the agency to focus resources on customer service.				
FY 25-28 TIP Funding:	FY 2025 Transit Capital phase with Section 5307 funds: $160,000 (Federal) + $40,000 (Other) = $200,000 (Total) FY 2026 Transit Capital phase with Section 5307 funds: $83,972 (Federal) + $20,993 (Other) = $104,965 (Total) FY 2027 Transit Capital phase with Section 5339 funds: $240,000 (Federal) + $60,000 (Other) = $300,000 (Total)				

MTP Action:	N/A				
TIP Action:	Update TIP funding and OTP				
Exempt/Non Exempt:	Exempt		**Model Impact:**	No change to the model	
Project Sponsor:	Transit Authority of River City (TARC)	**KIPDA ID:**	3457	**Transit ALI Code:**	11.7C.00
County:	Jefferson	**Parent ID:**	585	**Group ID:**	N/A
Project Name:	Purchase Paratransit Vehicles	**Funding Source:**	Transit Capital	**Open to Public (OTP) Date:**	~~2026~~ 2027
Total Estimated Project Cost:	~~$2,162,500~~ $6,717,281		**Total Cost Programmed in TIP to date:**	~~$2,162,500~~ $6,717,281	
Description:	Purchase modified vans for paratransit service.				
Justification:	TARC will replace a number of modified vans used for paratransit operations. The vehicles to be replaced have exceeded their useful life and TARC's useful life benchmark.				
FY 25-28 TIP Funding:	FY 2025 Transit Capital phase with Section 5339 funds: $560,000 (Federal) + $140,000 (Other) = $700,000 (Total) FY 2026 Transit Capital phase with Section 5307 funds: $320,000 (Federal) + $80,000 (Other) = $400,000 (Total) FY 2026 Transit Capital phase with Community Project Funding (CPF) funds: $850,000 (Federal) + $212,500 (Other) = $1,062,500 (Total) FY 2027 Transit Capital phase with Section 5339 funds: $3,643,825 (Federal) + $910,956 (Other) = $4,554, 781 (Total)				

AIR QUALITY CONFORMITY

At this time, the Louisville, KY-IN transportation planning study area consists of Clark and Floyd counties in Indiana, and Bullitt, Jefferson, 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.

Recently, the Louisville Metro Air Pollution Control District (LMAPCD) submitted an Exceptional Events demonstration to US EPA, Region 4 to support their contention that the Canadian wildfires in 2023 led to exceedances of the Ozone standard that year. US EPA, Region 4 reviewed the demonstration and has proposed to determine that the Kentucky portion of the Louisville, KY-IN area attained the 2015 Ozone standard by the Moderate attainment date. Also, LMAPCD submitted a request to US EPA, Region 4 to remove the requirement that the only Reformulated Gasoline (RFG) could be sold in the local area, and US EPA has reviewed the information submitted by LMAPCD and granted the request.

KIPDA is amending C*onnecting Kentuckiana 2050*, the metropolitan transportation plan (MTP), and the FY 2025 – FY 2028 Transportation Improvement Program (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 STANDARD

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 1997 8-hour ozone standard or during the previous conformity process for *Connecting Kentuckiana 2050*.

The IAC meeting was held as a video conference on April 17, 2026 at 10:00 AM EDT. A summary of the meeting follows.

Participants:

EPA – Simone Jarvis, Sunday Gotvald, Gillian Walsh Langford, Tony Maietta
FHWA – Tonya Higdon, Erica Tait
KYTC – Tom Hall, Isidro Delgado, Dasha McGinnis
INDOT – Frank Baukert
LMAPCD – Flannery O'Neil, Matt King, Hayley Thayer
KYDAQ – Claire Oyler, Kevin Davis, Emma Moreo
IDEM – Shawn Seals, Anna Meyers
TARC – Geoffrey Hobin
KIPDA – Brady Hill, Chris Nicolas, Eronmonsele Esekhaigbe, Randy Simon, Darian Koch, Andy Rush

Welcome/Roll Call:
A total of 25 participants, representing nine local, state, regional, and federal agencies participated in the IAC Conference Call for Amendment 13 of KIPDA's *Connecting Kentuckiana 2050* Metropolitan Transportation Plan (MTP) cross listed as Amendment 4 of the *FY 2025-2028 Transportation Improvement Program* (TIP). Andy Rush started the meeting at 10:02am and took the roll. Chris Nicolas reviewed the keys steps and schedule for this amendment.

Project Discussion:
Chris Nicolas began to review the list of projects slated for Amendment 4 after discussing the current schedule for this amendment. Indiana projects were discussed first. Ms. Nicolas discussed what changes are proposed to occur for the listed projects and how such changes affect or do not affect air quality analysis. No comments were made about any Indiana projects within this amendment.

Ms. Nicolas began to discuss the projects in Kentucky. Eronmonsele Esekhaigbe stated that of the 56 locations for the Louisville Transportation Safety Improvement Project a small portion affect the model including roadway reconfigurations, one-way to two-way conversions, and right-sizing projects. Ms. Nicolas stated that these adjustments will be provided for public review in greater detail. Ms. Nicolas explained the reorganization of funding for the Louisville Metro Reimagine 9th Street project among other Metro, KYTC, and TARC projects. No comments are made upon the initial review of the projects.

Other Discussion:
Andy Rush discussed how this amendment analysis is the first analysis that retired the 2025 model analysis year, but it does include a new 2027 model analysis year to meet 10-year requirement federal rule. Randy Simon expanded upon what changes will occur with the updated 2027 model analysis—specifically updating the input assumptions for items such as

gasoline type, vehicle speed distribution, emission source type population, age distribution, etc... The IAC group concurred with Mr. Simon that his proposed adjustments for the 2027 analysis year are reasonable. Mr. Rush confirmed that the latest scenario year will still be 2050 for now. Sunday Gotvald confirmed that the cut-off date for transitioning from the MOVES 4 model to the MOVES 5 model is in December 2026, so that will be a change that KIPDA is preparing for later in 2026. Simone Jarvis requested that Mr. Simon send her agency a copy of his MOVES 4 model run.

Mr. Rush reminded the group of KIPDA's upcoming federal certification review on May 6th-7th.

Meeting adjourned at 10:32am

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 have 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 that 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 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 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. As part of the process of developing amendment 12 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.

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 and transit 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 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 provide 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 MOVES4 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 NOx) 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 NOx 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), and
(3) 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 NOx 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, and
(3) improvements in internal model calculations to account for emission controls, driving profiles and engine characteristics.

KIPDA staff developed emission estimates of VOCs and NOx 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. Other necessary data was received from LMAPCD.
(3) The MOVES model was run in inventory mode to determine emission estimates of each precursor for each county for each analysis year.

As mentioned above, the requirement for the Kentucky portion of the local area to use Reformulated Gasoline (RFG) has been removed. So the MOVES modeling has been changed to indicate that conventional gasoline will be used for the Bullitt, Jefferson, and Oldham counties during the years used in the air quality analysis.

RESULTS OF THE ANALYSIS

The 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 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 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 analyses 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 2035 motor vehicle emission budgets established in the 2015 8-hour ozone redesignation SIP. Table 3 shows that for 2025, 2030, 2035, 2040, and 2050, 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 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	**8123**	**26658**	**34781**
2030	**8460**	**27868**	**36328**
2035	**8849**	**28867**	**37716**
2040	**9256**	**29766**	**39022**
2050	**10091**	**31855**	**41946**

TABLE 2

SUMMER WEEKDAY EMISSIONS FOR THE 8-HOUR NONATTAINMENT AREA (kg/day)				
EMISSION LEVELS FOR VARIOUS YEARS				
YEAR	Area	VOCs	NOx	PASS
2027	Regional	6899	13316	YES
2030		5831	9964	YES
2035		4618	6418	YES
2040		3765	4783	YES
2050		2796	3613	YES

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

2027 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.

2027 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 8-HOUR NONATTAINMENT AREA (kg/day)				
EMISSION LEVELS FOR VARIOUS YEARS				
YEAR	Area	VOCs	NOx	PASS
2025	Regional	6899	13316	YES
2030		5831	9964	YES
2035		4618	6418	YES
2040		3765	4783	YES
2050		2796	3613	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.

Amendments to the FY 2025-2028 Transportation Improvement Program and *Connecting Kentuckiana* 2050 Metropolitan Transportation Program
Public Comments

Project Name: **Reimagine 9th Street**
KIPDA ID: 2733
Project Sponsor: Louisville Metro

Comments: "This is a good project. Is this schedule doable in 2028 with all project phases? (Ranked 5 from scale of 1-5)

"Top priority should be reducing vehicle lanes and slowing speeds. (Ranked 5 from scale of 1-5)

One other additional ranking of 5 from scale of 1-5; no comment left.

Project Name: **Louisville Transportation Safety Improvement Project**
KIPDA ID: New
Project Sponsor: KYTC

Comments: "Hoping that this $16 million can go a long way to adding protected bike lanes, traffic calming, road lane removal and narrowing, speed cushions, etc for these myriad of High Injury streets." (Ranked 5 from scale of 1-5)

Project Name: **9th St Pedestrian Improvements**
KIPDA ID: New
Project Sponsor: Louisville Metro

Comments: "Happy to see this project and hope that the cycling infrastructure will be protected with vertical separation." (Ranked 5 from scale of 1-5)

One other additional ranking of 5 from scale of 1-5; no comment left.

Project Name: **Olmsted Parkways Multi-Use Path System Section III**
KIPDA ID: 2624
Project Sponsor: Louisville Metro

Comments: "Seems good. Please add multi use paths along all of the Olmsted Parkways." (Ranked 5 from scale of 1-5)