

MEMORANDUM

TO: **Transportation Policy Committee**

Kentucky Member **Counties**

Bullitt

Henry

Jefferson

Oldham

Shelby

Spencer

Trimble

FROM: David Burton and Nick Vail

DATE: July 9, 2020

SUBJECT: Amendment 1 to the Connecting Kentuckiana 2040 MTP, FY 2020 - FY 2025 TIP, and the

KIPDA Performance Management Plan

KIPDA staff is ready to present Amendment 1 to the committees for consideration. Sponsors were given until April 13th to submit project changes. In addition to the project changes that are being proposed, staff is also updating the Federally required safety performance measures and targets. Staff have already completed the air quality conformity analysis and the public comment period. All public comments were sent to the Transportation Policy Committee (TPC) for their consideration. The TTCC did recommend approval at the July 8th meeting. Please find attached the full Amendment 1

packet for your review.

Action is requested for TPC approval of Amendment 1 to the Connecting Kentuckiana 2040 MTP, the FY 2020 - 2025 TIP, and the Safety Targets found in the KIPDA Performance Management Plan.

Indiana Member **Counties**

Clark

Floyd

Equal Opportunity **Employer**



11520 Commonwealth Drive Louisville, KY 40299 502-266-6084 Fax: 502-266-5047 KY TDD 1-800-648-6056 www.kipda.org



Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020 – FY 2025 Transportation Improvement Program

Kentucky Member Counties The Kentuckiana Regional Planning and Development Agency (KIPDA) is the metropolitan transportation planning organization for the five county region including Jefferson, Bullitt and Oldham counties in Kentucky and Clark and Floyd counties in Indiana. Our responsibilities include producing a long range transportation document, Connecting Kentuckiana 2040 Metropolitan Transportation Plan (MTP) as well as a short range planning document the Transportation Improvement Program (TIP).

Henry

Bullitt

Changes have been proposed to the MTP and TIP. The MTP with the proposed changes is financially reasonable, and the proposed TIP is fiscally constrained. You will find a two page document that provides information about the proposed project changes. KIPDA has also proposed changes to KIPDA's <u>Performance Management Plan</u>. The proposed changes are being made to three pages of the Performance Management Plan. You will find the specific changes are highlighted in vallow in this packet.

Oldham Shelby

Jefferson

changes are highlighted in yellow in this packet.

Spencer

Trimble

We invite you to review the proposed changes and submit comments to the following address from June 12 to June 26, 2020.

Indiana Member Counties TIP & MTP Amendment
KIPDA
11520 Commonwealth Drive

Louisville, KY 40299

Clark

Or, email comments to: kipda.trans@kipda.org

Floyd Floyd

You can also review the documents, project map and provide comments by visiting http://kipdatransportation.org/amendment1/.

Last, you can ask questions or provide comments in person during a virtual open house held at the following date and time:

Equal Opportunity Employer • June 25, 2020, 5:00 p.m. – 7:00 p.m. A link to the virtual meeting is provided at http://kipdatransportation.org/amendment1/.

For additional information, call Nick Vail at 502-266-6144, ext. 118.



11520 Commonwealth Drive Louisville, KY 40299 502-266-6084 Fax: 502-266-5047 KY TDD 1-800-648-6056 www.kipda.org

Amendment 1 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020 - 2025 Transportation Improvement Program

Proposed Project Changes

To Be Presented to the Transportation Policy Committee on July 23, 2020

Project Sponsor		KIPDA ID	State ID	Project Name	Description	Purpose & Need	MTP Project Cost	Open to Public Date Funding Source	Change to TIP	Change to MTP
INDIANA P	INDIANA PROJECTS									
					Upgraded to added travel lanes I-65 from RP 19+0.995 to RP 28+0.883 is a composite pavement section, and is					
					exhibiting severe stripping in the HMA layers beneath the surface. During the last construction contract (RS-					
					37549), the centerline and edgelines were patched to the top of concrete to mitigate severe joint deterioration.					
					Unfortunately, these partial depth patches effectively created a dam in the stripped layers, forcing water to come					
					up through the new surface under traffic loading. 71 wet spots have been inventoried and are creating a safety hazard, especially during the winter months, when the water turns to ice. Additionally, questionable subgrade					
					conditions were discovered under the last contract on the southern portion of the job from 16+0.417 to RP					
					19+0.995 (R-33813) demonstrating yet another water issue. Given these observations, it is likely that the existing				Revise project name to: Widening of I-65	Revise project name to: Widening of I-65
					underdrains are not performing as intended. 3 pavement drains were installed as experimental features on					
					October 26, 2017 in the driving lane between Scottsburg and Henryville. These consisted of 2.5" wide trenches				Revise project description to: Widen I-65 from 4	Revise project description to: Widen I-65 from 4 to
					that were milled to the top of the underlying concrete (approx. 8" depth) and backfilled with permeable concrete. 1" PVC drains were also installed at the HMA/concrete interface to facilitate drainage. During the installation of				to 6 lanes from 0.25 miles S of Biggs Road (RP 16+42) in Clark County to Scottsburg (RP 28.88).	6 lanes from 0.25 S of Biggs Road (RP 16+42) in Clark County to Scottsburg (RP 28.88).
					the drains, stripped aggregate was observed beneath the surface and water flowed out of the HMA layers at a				20.42/ in clark county to scottsburg (in 20.00).	clark county to scottsburg (m 20.00).
					fairly substantial rate. These drains were considered a success, at least temporarily, since the water that was				Revise Purpose & Need to: The purpose of this	Revise Purpose & Need to: The purpose of this
					permeating to the surface was eliminated. Thus, the safety was improved especially during the winter months					project is to address the safety concern of the wet
					when freezing occurs. However, during this field work, the concerns of stripping were validated leaving the	The numbers of this project is to address the safety consern of the wet spets			spots, remove the stripped HMA pavement,	spots, remove the stripped HMA pavement, replace
					element of time as the unknown variable before substantial pavement distress occurs. Traffic will be maintained utilizing a 3/1 configuration to maintain 2 lanes in each direction throughout construction, with all ramps	The purpose of this project is to address the safety concern of the wet spots, remove the stripped HMA pavement, replace the existing underdrain system, and			replace the existing underdrain system, and improve the subgrade beneath the pavement and	the existing underdrain system, and improve the subgrade beneath the pavement and construct
				I- 65 Road	remaining open. Restricting the length allowed between crossovers is being considered. Project length is 7.25	improve the subgrade beneath the pavement and construct added travel lanes in		Interstate	construct widening from 4 to 6 added travel lanes	widening from 4 to 6 added travel lanes in this
INDOT	Clark	2616	1700135	Reconstruction	miles in Clark County.	this portion of I-65.	\$155,923,188	2024 Maintenance	in this portion of I-65.	portion of I-65.
									Add project to the TIP with the following project	
									phases:	
						The addition of the mainline through and auxiliary lanes on I-64 as well as		National	FY 2024 Construction using NHPP funds	
						additional ramp lanes at the US 150 and I-265 interchanges will provide improved		Highway	\$27,000,000 (Federal)	
				I-64 Added Trave		densities, levels of service and travel times with significant reduction in driver delay		Performance	\$3,000,000 (Other)	
INDOT	Floyd	NEW	1900162	Lanes	Added Travel Lanes Project from US 150 to I-64 and Spring Street Interchange	west of I-265.	\$30,000,000	2026 Program (NHPP)		Add project to the MTP
									Add project to the TIP with the following project phases:	
									FY 2023 Right of Way using STBG-ST funds	
									\$200,000 (Federal)	
									\$50,000 (Other)	
									\$250,000 (Total)	
								Surface	FY 2024 Construction using STBG-ST funds	
						To improve the geometrics to allow for safer and more efficient operation without		Transportation	\$1,681,268 (Federal)	
						adjacent residential impacts. Certain trucks cannot turn WB from US 150 to NB TO		Block Grant	\$420,317 (Other)	
INDOT	Floyd	NEW	1900118	US 150	Intersection Improvement with added turn lanes at the intersection of Scenic Valley/Brush College Road	EB on Brush College without impacting the adjacent or opposing lanes.	\$2,126,585	2024 (STBG) - State	\$2,101,585 (Total)	Add project to the MTP
									Add project to the TIP with the following project phases:	
								Surface	FY 2022 Right of Way using STBG-ST funds	
						To help reduce congestion at IN 64 and Copperfield Drive due to traffic at large		Transportation	\$136,000 (Federal)	
					Intersection Improvement with Added Turn Lanes on IN 64 at Copperfield Drive to reduce queueing and delay for			Block Grant	\$34,000 (Other)	
INDOT	Floyd	NEW	1800318	SR 64	motorists at this intersection. Traffic Signal Madornization in undouglesstiens in the Source District on SP 60 SP 46 US 150 and US 21	be extended to allow for widening of road.	\$1,523,957	2024 (STBG) - State	\$170,000 (Total)	Add project to the MTP
					Traffic Signal Modernization in various locations in the Seymour District on SR 60, SR 46, US 150, and US 31. Locations in KIPDA MPO area are:				Add project to the TIP with the following project	
					SR 60 @ Old 311 (Sellersburg)				phases:	
					SR 60 @ Payne Kohler Rd (Sellersburg)	To modernize the signals in order to meet current standards. All locations will need	1	National	FY 2021 Construction using NHPP funds	
					SR 60 @ I-65 NB (Sellersburg)	new backplates, heads, span/tether/catenary/overhead signage, conduit, and		Highway	\$1,305,000 (Federal)	
INDOT	Clark	NEW		Traffic Signal	SR 60 @ I-65 SB (Sellersburg) US 150 @ Navilleton Rd (Greenville)	upgraded signal equipment in the cabinets. Navilleton intersection will need upgraded signal cabinet and new foundation.	\$1,450,000	Performance 2021 Program (NHPP)	\$145,000 (Other) \$1,450,000 (Total)	Add project to the MTP
INDUI	rioya	INEW	2000220	IVIUUS	03 T20 @ MANINGOLL VO (GLEGUAINE)	upgraueu signar caumer anu new rounuarion.	\$1,450,000	ZUZ1 Program (NHPP)	31,430,000 (Total)	Add project to the IVITP
					Traffic signal modernization at various locations in Decatur and Floyd Counties. Locations in Floyd County (New				Add project to the TIP with the following project	
					Albany) are:				phases:	
					Spring and Scribner; US 150 and Paoli Pike; Charlestown Road and St . Joe Road; Charlestown Road and Kamer		1	National	FY 2022 Construction using NHPP funds	
				Traffic Modernization in	Miller; IN 111 and Budd Road; IN 111 and Corydon Pike.	To modernize the signals at various locations in Floyd County to most surrent		Highway Performance	\$1,242,000 (Federal) \$138,000 (Other)	
INDOT	Floyd	NEW	1901977	Floyd County		To modernize the signals at various locations in Floyd County to meet current standards.	\$1,460,946	2022 Program (NHPP)		Add project to the MTP
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Amendment 1 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020 - 2025 Transportation Improvement Program

Proposed Project Changes

To Be Presented to the Transportation Policy Committee on July 23, 2020

Project Sponsor	County	KIPDA ID	State ID	Project Name	Description	Purpose & Need	MTP Project Cost	Open to Public Date	Funding Source	Change to TIP	Change to MTP
KENTUCKY PROJECTS											
										Add project to the TIP with the following project phases: FY 2020 Design using STBG-MPO funds SS1,000 (Federal) SO (Other) SS1,000 (Total)	
					KYTC Highway Plan (June, 2018): Reconstruct US 42 and widen from 2 lanes to 3 lanes (3rd lane will be a center turn lane) from Jefferson/Oldham County Line to Ridgemoor Drive. Project will include the consideration of	CHAF Purpose: The purpose of the project is to improve traffic flow, minimize congestion, and address safety issues on US 42 between the Jefferson County/Oldham County line and Ridgemoor Drive. CHAF Need: Due to an increase in commuters to and from Louisville and the development along the project corridor, the traffic volumes are expected to double in the next 20 years. The accident data			Surface Transportation Block Grant	FY 2020 Utilities using STBG-MPO funds \$300,000 (Federal) \$0 (Other) \$300,000 (Federal) FY 2020 Construction using STBG-MPO funds \$5,020,000 (Federal) \$0 (Other)	
кутс	Oldham	1271	441.01		improvements to the Hayfield Way intersection (2004BOPC).	for the last 3 years shows that there are between 10 and 14 rear end	\$10,284,000	2021	(STBG-MPO)	\$5,020,000 (Total)	None
Louisville				US 60 Premium Transportation		The US 60 Premium Transportation Corridor Project will improve access and mobility along one of Louisville Metro's most heavily travelled corridors. It highly-prioritized in Move Louisville, Louisville Metro's Cy-eyaer transportation plan, as both a "Major Corridor" and a "Premium Transit Corridor." US 60's success as a commercial destination has led to major mobility challenges in the area. Transitioning from a "traditional neighborhood marketplace" to a "suburban marketplace corridor" about halfway through the project area, Section 1 of this project will need to account for various demands across its 7.84 mile length; however, these two sub-areas, despite their differences are united in their demand for significantly improved mass transit service and complete multi-modal connections. The vibrant commercial corridor, anchored by two of Louisville's three regional malls, needs investment and improvements to maintain its success over the years to come. The improvements outlined in this design-build project are comparable to those seen in the "Transforming Dise Highway" project, which received 1.6.3 million in federal flunds. US 60 generally has poor access management, crash-inducing typical cross-sections, and poor transit accommodations and connections. It also fails to provide complete pedestrian connections and few to no safe bicycle facilities. Taken together, these issues need to be addressed for ensure that the US 60 of the flutive continues to succeed while					Revise project description to: The US 60 Premium Transportation Corridor Project is a design-build project that will: 1) streamline transit service on a key corridor by adding traffic signal bus prioritization, new bus stops, and increasing bus service frequency; 2) bring intelligent signal upgrades, which will include upgraded traffic signals and communication equipment to support premium transit and and overall mobility; 3) incorporate complete streets roadway improvements by including bicycle and pedestrian facilities, intersection safety improvements, access management stratepies for surrounding land uses
Louisville		4252				to be addressed to ensure that the US 60 of the future continues to succeed while	¢45,000,000	2020		None	management strategies for surrounding land uses,
Metro	Jefferson	1352		Section 1	Parkway) and English Station Road, approximately 4.1 miles.	providing even greater access to people of all ages and abilities.	\$16,000,000	2030	None	None	and new streetscape design elements.

PERFORMANCE MANAGEMENT PLAN

UPDATED APRIL 2020



KIPDA PERFORMANCE MANAGEMENT PLAN

TABLE 2: PERFORMANCE MEASURES, BASELINES, AND TARGETS

	SAFETY							
REQUIRED BY:	Р	ERFORMANCE MEASURE		BASELINE		TARGET		
FHWA	<u>\$1</u>	Number of Fatalities	<mark>127.8</mark>	Fatalities (2014-2018 5-year rolling average)	132.0	Fatalities (2016-2020 5-year rolling average)		
FHWA	<u>\$2</u>	Fatality Rate	<mark>1.14</mark>	Fatalities per 100 million VMT (2014-2018 5-year rolling average)	1.16	Fatalities per 100 million VMT (2016-2020 5-year rolling average)		
FHWA	<u>\$3</u>	Number of Serious Injuries	817.0	Serious Injuries (2014-2018 5-year rolling average)	707.9	Serious Injuries (2016-2020 5-year rolling average)		
FHWA	<u>\$4</u>	Serious Injury Rate	<mark>7.26</mark>	Serious Injuries per 100 million VMT (2014-2018 5-year rolling average)	6.19	Serious Injuries per 100 million VMT (2016-2020 5-year rolling average)		
FHWA	<u>\$5</u>	Number of Non- Motorized Fatalities and Serious Injuries	115.2	Non-Motorized Fatalities and Serious Injuries (2014-2018 5-year rolling average)	117.2	Non-Motorized Fatalities and Serious Injuries (2016-2020 5-year rolling average)		
МРО	<u>\$6</u>	Crash Rate	399.0	Crashes per 100 million VMT (2012-2016 5-year rolling average)	3:	Reduce by 20% by 2040 to 19 crashes per 100 million VMT		

KIPDA PERFORMANCE MANAGEMENT PLAN

Target-Setting Methodology

At the time of target-setting in early 2018, four out of five of the target years were completed. Actual crash data for 2014 to 2017 had already been downloaded by KIPDA. A projection for 2018 was developed using a linear trendline. The five-year rolling average using four years of actual data plus one year of projected data was calculated at 131.4 fatalities.

In February 2020, KIPDA's Transportation Policy Committee approved a change to the target setting methodology utilized to develop the 2016-2020 Targets for the FHWA-required safety performance measures listed on Page 9 of this document. In place of using a linear trendline to project the estimate for the fifth and final year of the five-year target, as is described above, the target was set by assuming that the number of fatalities in 2020 would be equal to the number of fatalities that occurred in 2019. This updated methodology was consistently utilized for the updates of the 2016-2020 Targets for Measures S2 through S5 as well.

AIR QUALITY CONFORMITY

The Louisville, KY-IN transportation planning study area consists of Clark and Floyd counties and 0.1 square miles of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and approximately 4 square miles of Shelby County in Kentucky. Much of this area coincides with the local ozone nonattainment area. In the past, a portion of the planning study area also coincided with a local 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 nonattainment 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. One of the requirements of this designation as a nonattainment area is that it will once again be necessary to determine conformity for the local area.

KIPDA is amending *Connecting Kentuckiana 2040*, the metropolitan transportation plan (MTP) and the FY 2021 – FY 2025 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 both 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 was set by US EPA when the standard is promulgated.

Subsequent to being designated as nonattainment of the 1997 8-hour ozone standard and prior to being redesignated as attainment of the standard, the Louisville area

relied on the use of interim tests to demonstrate conformity. These tests had been established during a 2004 update to the federal conformity rule. When the Louisville area was designated as nonattainment of the 2015 8-hour ozone standard, there were no MVEBs for that standard. However, there were MVEBs for the 1997 8-hour ozone standard, and they were used in the process of determining conformity to both the 1997 and 2015 standards.

When the local area was designated as nonattainment of the 1997 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 the actions to reduce precursor emissions were to be incorporated into the Indiana and Kentucky SIPs. It was during this process that MVEBs were established. Originally, the SIPs were to include sets of actions to bring the local area into attainment of the ozone standard. This type of SIP is known as an attainment demonstration. However, while these SIPs were being developed, the data from the air quality monitors in the area indicated that the 1997 8hour ozone standard had been met. With this data in hand, the air quality agencies were able to submit a SIP known as a redesignation request instead. 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.

CONSULTATION FOR CONNECTING KENTUCKIANA 2040

The first step in determining conformity of *Connecting Kentuckiana 2040* was to consult with the interagency consultation (IAC/ICG) group concerning matters not explicitly determined by the conformity rule. Conformity under the 1997 8-hour ozone standard had been previously determined. Therefore, many of the issues normally arising in conformity had undergone consultation previously. Since these issues were not raised during consultation this time, the portions of the analysis involving those issues were accomplished consistent with established practice.

A consultation conference call was held on May 7 to discuss issues relative to the amendment of the MTP. It involved a review and discussion of the following items:

(a) important dates in the schedule for the amendment;

June	5	Regional Emissions (Air Quality) Analysis completed
_	_	

June 12 -- Public Review begins

July 8 -- Action by the Transportation Technical Coordinating
Committee

July 23 -- Action by the Transportation Policy Committee

- July 24 -- Documentation sent to review agencies for the federal conformity determination;
- (b) a draft list of projects—sent to the IAC/ICG with consultation notice—included in accompanying documentation;
- (c) the horizon year of the transportation plan—2040;
- (d) the proposed conformity test methodology/ies and analysis years—see the discussion of issues and ESTABLISHED PRACTICE sections below;
- (e) the pollutant(s)/precursor(s) of concern and the motor vehicle emissions budget(s), if applicable—see table 2 at the end of the report;
- (f) information concerning the inputs for the travel demand model and the approved emissions model—see the issues section below, the list of projects included in accompanying documentation, and the items concerning the travel demand model and emissions model under Other Planning Issues; and
- (g) a listing of any transportation control measures (TCMs) in SIPs, if applicable—there are none.

Issues

Discussion of Schedule

KIPDA staff discussed the schedule for amendment 1. KIPDA staff also noted the schedule for amendment2, which is expected to occur later this year. There were no questions concerning either amendment.

Discussion of Projects

KIPDA staff had provided the IAC/ICG with a list of 8 projects that will be amended in *Connecting Kentuckiana 2040*. The projects are a mix of new projects and projects already in the MTP that were being amended. Key details about the projects were presented, including information on how the projects were included in or excluded from the regional travel demand model.

Other points of discussion of the projects included:

• US 42 Reconstruction and Widen, KIPDA ID 1271: A clarification was noted. Only the construction phase of this project is being amended into the TIP at this time. There were no comments or questions concerning this project.

- Widening of I-65, KIPDA ID 2616: This INDOT project was discussed, but there were no comments or questions concerning it.
- Widening of I-64, new project no KIPDA ID yet: This INDOT project was discussed, but there were no comments or questions concerning it.

Conclusion: The IAC/ICG members, after discussing the details of the projects listed above, accepted the recommendations of KIPDA staff concerning the incorporation of these projects and the other projects described in the documentation into the regional emissions analysis.

Discussion of the Conformity Analysis

KIPDA staff discussed the key components of the conformity analysis that are expected to be presented to the KIPDA TPC in July. The analysis years will be the ones that were used when the existing MTP was updated.

The Budget Test utilizing the Year 2020 Motor Vehicle Emissions Budgets created for the 1997 8-Hour Ozone Standard will continue to be used until a new set of budgets are established. By not exceeding these budgets in the year 2020, 2025, 2030, 2035, and 2040 travel model scenarios, *Connecting Kentuckiana 2040* will demonstrate conformity to both the 1997 and 2015 8-Hour Ozone Standards.

Louisville Metro Air Pollution Control District (LMAPCD) staff reported that he had recently prepared the 2018 Kentucky fleet data for use in the MOVES model. He will be using that data is in the upcoming analysis. MOVES 2014b will be used for the analysis.

Federal Highway Administration—Kentucky Division staff asked about the age of the Indiana fleet data. When told that the most recent version is from 2014, she questioned when newer data will be available. Indiana Department of Transportation staff indicated that there may be 2017 Indiana fleet data available. After some discussion, it was decided that it would not be available for this analysis, but it would probably be available for amendment 2, which will occur later this year.

NOTE: (See also the "Analysis Years and Conformity Tests" portion of the "ESTABLISHED PRACTICE" section below for more information on these issues.)

Other Discussion

KIPDA staff sought information concerning the status of an updated State Implementation Plan (SIP) for the 2015 ozone standard. LMAPCD staff noted that an updated emissions inventory was being developed. She also stated that the local region had been designated as a marginal non-attainment area, and therefore, new emission budgets were not required to be developed at this time. It was also

stated that if the local region were to be reclassified as a moderate non-attainment area, the development of a new SIP would be necessary, and emission budgets would be included in that SIP.

In another matter, a question was raised about the necessity of using the 2020 scenario as an analysis year in calendar year 2021 and beyond. It was stated that the 2020 scenario will be necessary through the end of calendar year 2020 but will not be required in calendar year 2021 and beyond.

KIPDA Staff offered the opportunity for any other business or questions to be brought to the IAC/ICG. There was no other business discussed.

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 consultation call of May 7, 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/ICG 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.

<u>Issues related to the KIPDA travel demand forecasting model</u>

During recent changes to the MTP, there were three changes of note to the KIPDA travel demand forecasting model.

- (1) First, the census urbanized area has recently been updated to include a small area in northwest Shelby County, KY. The metropolitan planning area has been updated to reflect the 2010 census urbanized area. This area was added to the KIPDA travel demand forecasting model to be consistent with this amendment.
- (2) Second, the proposed toll structure for the Louisville Southern Indiana Ohio River Bridges project changed. Changes were made to the KIPDA travel demand forecasting model to reflect the changes in the toll structure.
- (3) During recent years, KIPDA staff have updated and calibrated the travel demand forecasting model. This activity involved updating the inputs to the model and developing new values for the parameters of the model. The resulting model was

considered calibrated when the model outputs matched observed data (e.g. HPMS VMT), within reason, for the baseyear. This update established 2015 as the baseyear (the year on which calibration was based) for the model.

Conclusion: The IAC/ICG members have been informed that the KIPDA travel demand forecasting model has been updated and calibrated and that 2015 is now the baseyear for the model.

Analysis Years and Conformity Tests

Motor Vehicle Emissions Budgets (MVEBs) for the 1997 8-hour ozone standard were approved by EPA in July, 2007. The MVEBs were for the precursors of ozone, volatile organic compounds (VOCs) and oxides of Nitrogen (NOx), The Federal Register notice can be found at 72 FR 36601. The budgets are shown in Table 2 at the end of this document. Since there are MVEBs for the ozone precursors, the conformity rule requires that ozone analyses be done for the attainment year and the last year of the transportation plan. In addition, other intermittent year(s) are required such that no two analysis years are more than ten years apart. The maintenance plan established when the local area was redesignated established MVEBs for VOCs and NOx for 2003 (the attainment year) and 2020 (the last year of the maintenance plan). Since the attainment year is now in the past, that year is no longer included in the analysis.

In order to have the required analysis years, several changes were made in recent years. During an amendment of the MTP in 2013, it was necessary to replace 2012 as an analysis year because it was in the past, and 2015 was chosen. When the MTP was updated in 2020, the horizon year of the plan was being changed to 2040, and that year had to be added to the analysis years. At the same time, in order to allow for more orderly transition as time progressed, 2025 and 2035 have been added as analysis years, allowing for analysis years every five years. By having the analysis years five years apart throughout the life of the MTP, it was noted that there would always be an analysis year within five years of the time of the analysis. Further, when the horizon year of the MTP is extended, that year will be added as an analysis year. Otherwise, the analysis years can remain constant except for the removal of an analysis year when it occurs in the past. Recently, 2015 was removed because it is in the past. Because of the previous practice to have analysis years five years apart, it was not necessary to add another analysis year. 2020 was already an analysis year and within five years of the present.

Conclusion: The established practice is that the analysis years and conformity tests for the regional emissions analysis are as shown in the tables below. Years prior to the present year have been removed from the list.

1997 8-hour Ozone Standard					
Analysis Year	Conformity Test(s)				
2020	Budget test using the 2020 MVEBs for the 1997 8-hour standard				
2025	Budget test using the 2020 MVEBs for the 1997 8-hour standard				
2030	Budget test using the 2020 MVEBs for the 1997 8-hour standard				
2035	Budget test using the 2020 MVEBs for the 1997 8-hour standard				
2040	Budget test using the 2020 MVEBs for the 1997 8-hour standard				

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/ICG. As discussed above, the vehicle registration data now being used for the Indiana counties is for 2014, and the registration data now being used for the Kentucky counties is for 2018. This data represents the most recent information available for this issue.

Conclusion: Based on a consensus of the IAC/ICG members, vehicle registration data for 2014 for the Indiana counties and for 2018 for the Kentucky counties is now being used in developing emission estimates.

CONFORMITY OF CONNECTING KENTUCKIANA 2040

The MTP, *Connecting Kentuckiana 2040*, 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 2040* 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 2040* 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 the 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 the amendment of *Connecting Kentuckiana 2040*, a group of projects had been proposed for 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 being exempt, non-exempt, etc. 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/ICG as described under the section entitled "CONSULTATION FOR *CONNECTING KENTUCKIANA 2040*." (please see above.) Those projects in *Connecting Kentuckiana 2040* which were not changed will be analyzed as they were previously. The projects which were newly added to the MTP or had been changed in *Connecting Kentuckiana 2040* were analyzed as indicated on the list provided to IAC/ICG.

In addition, there were several projects which could not be analyzed using the travel model. In the past, most of these projects had been evaluated using spreadsheet methods factors. 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.

Also, there was one project affecting Bullitt County that could not be included in the travel model. Unlike the projects described in the paragraph above, this project could have the potential to increase emissions. Therefore, a special effort was made to include its impacts in the analysis of travel behavior impacts and, consequently, in the regional emissions analysis. This project is the relocated (southern) section of US 31E. This project, which had been discussed during consultation in the past, involves 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 were developed using a spreadsheet approach. The VMT estimates were the product of the estimated traffic volumes for each of the analysis years and the length of the relocated section in Bullitt County. The VMT estimates for this project were then added to other Bullitt County VMT estimates of the same functional class. Consequently, the VMT estimates from this project were included with the other Bullitt County VMT, and the emissions in Bullitt County associated with this project were included in the overall emission estimates for Bullitt County.

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 consists of Clark and Floyd counties, and 0.1 square miles in Harrison County 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 recently. This update established 2015 as the new base year for the model. The model update utilized the information incorporated into the travel model during previous updates. In particular, information from the 2000 KIPDA Household Travel Survey, and the 2004 on-board survey of transit riders by the Transit Authority of River City had been previously incorporated. Information from

2010 Census, the 2012-2016 American Community Survey, the 1990 and 1995 National Personal Transportation Surveys, and the 2001 and 2009 National Household Travel Surveys was incorporated to update the previous source data, particularly the 2000 KIPDA Household Travel Survey. During the update, the model parameters were adjusted such that the model output matched—within reason—three 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; (2) the distribution of trip lengths (duration in time) for each of the main trip purposes used in the model; and (3) 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 2015. 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. 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 and utilizes different trip rates for each. 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.

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. The friction factors used in the gravity model were developed as part of the calibration effort performed during the model update. In addition, information from a study which investigated the behavior of travelers crossing the Ohio River and traffic count information from years near 2015 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.

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*. 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 2040* utilizes transit information from the previous travel demand model. The results of the 2004 TARC on-board survey had been used to supplement the previous information. This was deemed acceptable for several reasons. The primary reason was that the transit network envisioned by *Connecting Kentuckiana 2040* 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 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 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 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 MTP update, the time penalties used in the KIPDA travel model were likewise changed to reflect the effect of the new toll structure.

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 2015. 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 2015 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 2015 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).

The HERS equations were used to estimate speeds on 6239 sections for five functional classifications of urban roadways and 2278 sections 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.

There were not many HPMS minor collector and local roadway sections with data that allowed for the calculation of adjustment factors. Since the model contained the minor collector roadways in the area and these roadways were similar to the major collector roadways in the area, the adjustment factor for the rural major collectors was used for the rural minor collector roadways, and the adjustment factor for the urban major collectors was used for the urban minor collector roadways.

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 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 provided adjusted travel model output data in the form of vehicle-miles-traveled (VMT), VMT by speed bin, and VMT fractions by speed bin by county and by MOBILE 6 facility type to the staff of the Louisville Metro Air Pollution Control District (LMAPCD). LMAPCD 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). They then provided these estimates to KIPDA staff. This analysis is explained below in further detail in the section below.

MOVES Emissions Model

As previously mentioned, the Louisville region is a nonattainment 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 emissions model. The staff of the Louisville Metro Air Pollution Control District (LMAPCD) produced the emissions for all of the counties in the nonattainment 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/ICG partners.

The assumptions used in developing the emissions for Clark, Floyd, and Jefferson (KY) counties were the same as those that were used in developing the ozone budget update (for VOCs and NOx) in 2003 with a few exceptions where newer data was incorporated. 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 2014) for Clark and Floyd counties (provided by IDEM),
- (3) the development and use of newer vehicle registration data (for 2018) for Jefferson County (KY), 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 LMAPCD. Most of the inputs to the MOVES model were defaults and/or data used that was consistent with previous SIPs. 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 or had only been designated under the 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 was modeled the same as for Jefferson County.

The assumptions used for Bullitt and Oldham counties were consistent with those for the 2003 ozone budget update with the following exceptions:

- (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) new 2018 vehicle registration data for Bullitt and Oldham counties, and
- (4) improvements in internal model calculations to account for emission controls, driving profiles and engine characteristics.

LMAPCD developed emission estimates of VOCs and NOx using the MOVES model. To review, the following steps were undertaken.

- (1) LMAPCD staff received (from KIPDA staff) the adjusted travel model output in the form of VMT, VMT by speed bin, and VMT fractions by speed bin, all by county and by MOBILE facility type by analysis year.
- (2) LMAPCD reformatted the data from KIPDA to prepare it as input to the MOVES model. Other necessary data was also prepared.
- (3) The MOVES model was run in inventory mode to determine emission estimates of each precursor for each county for each analysis year.
- (4) LMAPCD staff provided the emission estimates to KIPDA staff.

RESULTS OF THE ANALYSIS

The transportation plan, *Connecting Kentuckiana 2040*, 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 maintenance 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 and 2. Table 1 shows the summer weekday vehicle-miles-traveled from the analysis. Table 2 shows that for 2020, 2025, 2030, 2035 and 2040, the summer weekday VOC and NOx emission levels for the 2015 8-hour nonattainment area are less than the emission budgets established in the 1997 8-hour ozone maintenance SIP.

Conclusions – 8-hour Ozone

The regional emissions analysis of *Connecting Kentuckiana 2040* 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 Table 2 indicates that *Connecting Kentuckiana 2040* has met the requirements of conformity under the 1997 and 2015 8-hour ozone standards. In summary, it can be concluded that *Connecting Kentuckiana 2040* conforms to the SIPs and meets the requirements of the federal conformity rule.

TABLE 1

SUMMER	SUMMER WEEKDAY VEHICLE-MILES-TRAVELED (VMT) ESTIMATED FOR THE 8-HOUR OZONE NONATTAINMENT AREA (in 1000's of vmt/day)						
YEAR	INDIANA	KENTUCKY	TOTAL				
2020	7346	25935	33281				
2025	7888	27301	35189				
2030	8426	28719	37145				
2035	8961	30059	39020				
2040	9441	31182	40623				

TABLE 2

SUMMER WEEKDAY EMISSIONS FOR THE 8-HOUR								
	NONATTAINMENT AREA (kg/day)							
	EMISSION LEVELS FOR VARIOUS YEARS							
YEAR Area VOCs NOx PASS								
2020		13652	23746	YES				
2025	Regional	9448	16912	YES				
2030		6621	11889	YES				
2035		5341	9795	YES				
2040		4974	9422	YES				

NOTE: The criteria for conformity are as follows:

2020, 2025, 2030, 2035, and 2040 Regional emission levels for VOCs must be below the maintenance plan emission budget of 22.92 tons/day or 20,793 kg/day.

2020, 2025, 2030, 2035, and 2040 Regional emission levels for NOx must be below the maintenance plan emission budget of 29.46 tons/day or 26,726 kg/day.



Connecting Kentuckiana 2040 Metropolitan Transportation Plan Amendment 1 FY 2020-2025 Transportation Improvement Program Amendment 1 Interagency Consultation Group Conference Call Meeting Minutes May 7, 2020 10:00 AM EDT

Participants:

FHWA – Bernadette Dupont & Erica Tait

KYTC – Tom Hall, Tonya Higdon, & Jahan Khan

INDOT - Jay Mitchell

EPA - Sarah LaRocca, Kelly Sheckler & Anthony Maietta

KYDAQ - Anna Bowman

IDEM - Shawn Seals

LMAPCD - Michelle King, Craig Butler, & Matt King

Louisville Metro - Mike King

KIPDA – Elizabeth Farc, David Burton, Randy Simon, Nick Vail, Andy Rush, & Amanda Spencer

Welcome/Roll Call:

A total of 21 participants, representing nine local, state, regional, and federal agencies participated in the IAC Conference Call for Amendment 1 of KIPDA's *Connecting Kentuckiana 2040* Metropolitan Transportation Plan and the FY 2020-2025 Transportation Improvement Program. The meeting began shortly after 10:00 AM EDT on May 7, 2020.

Schedule Discussion:

KIPDA staff discussed the anticipated schedule for the amendment, including the various steps and in the amendment process. The amendment is tentatively scheduled to be presented to KIPDA's Transportation Policy Committee (TPC) for adoption on July 23rd. Also discussed by KIPDA staff was Amendment 2 of the MTP & TIP, which is currently scheduled for TPC adoption in October 2020. There were no questions from other agencies.

Project Discussion:

KIPDA staff presented the list of eight (8) projects that are included in Amendment 1. A change to KIPDA ID 1271 (US 42 Reconstruction and Widen) was noted. Only the Construction phase of that project is being amended into the TIP at this time. Two INDOT interstate widening projects (KIPDA ID 2616: Widening of I-65 and KIPDA ID (New): I-64 Added Travel Lanes) were discussed. There were no comments or questions about those three projects.

KIPDA staff asked if there were any questions about the other five projects on the list. There were no questions.

Conformity Analysis Discussion:

KIPDA staff discussed the key components of the conformity analysis that is expected to be presented to the KIPDA TPC in July. KIPDA will continue to utilize Year 2020, 2025, 2030, 2035, and 2040 scenarios for analysis years in the upcoming analysis. The regional emissions estimates for all scenarios will be compared to Year 2020 Budgets established for ozone precursors.

Other than the changes to the two INDOT projects mentioned earlier, the only change to this analysis from the analysis performed in 2019 for the MTP and TIP Updates will be the inclusion of new vehicle fleet mix information for the Kentucky counties. Craig Butler, Louisville Metro Air Pollution Control District (LMAPCD) staff, recently prepared the Year 2018 Kentucky fleet data for its use in the MOVES Model. Mr. Butler noted that the data were summarized and distributed via email to the IAC recently for their review. Mr. Butler also noted that he believes that the impact of the new fleet Kentucky fleet data will be positive (reduces modeled emissions) should VMT remain constant from prior analyses.

Bernadette Dupont, FHWA-Kentucky Division staff, inquired about the age of the fleet data from each state. Mr. Butler responded that the recently updated data from Kentucky is from 2018, and the most recent version of Indiana fleet data is from 2014. Ms. Dupont asked about when Indiana might update their data. Jay Mitchell, INDOT staff, noted that he believes that 2017 fleet data for Indiana may exist. Ms. Dupont asked if the 2017 Indiana data could be used for the Amendment 1 Regional Emissions Analysis. KIPDA and LMAPCD staff noted that it takes some time to prepare the data for its use as input in a regional emissions analysis. They are hopeful that if the 2017 Indiana data exists in a usable format, it can be prepared to be available to use for Amendment 2, which is currently scheduled to occur later this year.

KIPDA staff asked if there were any other questions or comments concerning the analysis. Mr. Butler noted that the version of MOVES to be used for this analysis is MOVES 2014b, which is consistent with the most recent analysis.

SIP Status Discussion:

KIPDA staff sought input on the status of an updated Ozone State Implementation Plan (SIP) for the 2015 ozone standard. Michelle King, LMAPCD staff, noted that LMAPCD is currently developing an updated emission inventory, which will be submitted later this year. She also noted that the region has been designated as a Marginal Non-Attainment Area, and therefore new motor vehicle emissions budgets are not required. Should the region be reclassified as a Moderate Non-Attainment Area, new budgets would be developed in a new SIP that would be required to be developed at that time. There was additional discussion.

The discussion continued into the status of 2020 as an analysis year and budget year in future regional emissions analyses. For the time being, and at least through the end of Calendar Year 2020, 2020 will be a required analysis and budget year. It will remain a budget year until further notice. KIPDA staff asked if in Calendar Year 2021, could a Year 2020 scenario be dropped from the analysis as an analysis year. Kelly Sheckler, EPA Region 4 staff, answered affirmatively.

Other Discussion:

KIPDA staff offered the opportunity for any other business or questions to be brought to the IAC. There was no other business discussed. The conference call adjourned at approximately 10:45 AM EDT.

Amendment 1 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan (MTP) and FY 2020 - 2025 Transportation Improvement Program (TIP)

Public Comments

1. Project Sponsor: Indiana Department of Transportation

Project Name: Widening of I-65

KIPDA ID: 2616

Project Description: Widen I-65 from 4 to 6 lanes from 0.25 S of Biggs Road (RP 16+42) in Clark

County to Scottsburg (RP 28.88).

Public Comment: No! Do not add lanes to our interstate system.

2. Project Sponsor: Indiana Department of Transportation

Project Name: I-64 Added Travel Lanes

KIPDA ID: NEW (not yet assigned)

Project Description: Added Travel Lanes Project from US 150 to I-64 and Spring Street

Interchange

Public Comment: No! Please do not add lanes to our interstate system!! More lanes EQUALS

more driving - instead, we MUST reduce VMT for our community.

3. Project Sponsor: Kentucky Transportation Cabinet

Project Name: US 42

KIPDA ID: 1271

Project Description: Reconstruct US 42 and widen from 2 lanes to 3 lanes (3rd lane will be a center turn lane) from Jefferson/Oldham County Line to Ridgemoor Drive. Project will include

the consideration of improvements to the Hayfield Way intersection (2004BOPC).

Public Comment: In support of this project

4. General comment: Need for commuter rail and other alternative modes of transportation between Louisville and Lexington.

Amendment 1 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan (MTP) and FY 2020 - 2025 Transportation Improvement Program (TIP)

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Public Comment: In support of this project

4. General comment: Need for commuter rail and other alternative modes of transportation between Louisville and Lexington.

Responses from TPC Members to Public Comments

1. The Indiana Department of Transportation (INDOT) strives to maintain an appropriate balance between safety, mobility, and maintaining infrastructure for economic development with safety being INDOT's priority. INDOT believes that the added travel lanes for this project will result in reduced congestion and a safer network while providing Hoosiers and others with the infrastructure to support economic stability and growth.



Kentucky Division

September 3, 2020

330 West Broadway Frankfort, KY 40601 PH (502) 223-6720 FAX (502) 223-6735 http://www.fhwa.dot.gov/kydiv

In Reply Refer To: HDA-KY

Mr. Jarrett Haley, Executive Director Louisville Area Metropolitan Planning Organization c/o Kentuckiana Regional Planning and Development Agency 11520 Commonwealth Drive Louisville, KY 40299

Dear Mr. Haley:

The Kentucky Division Office of the Federal Highway Administration (FHWA) and Region 4 of the Federal Transit Administration (FTA), in consultation with the Indiana Division Office of the Federal Highway Administration and Regions 4 and 5 of the United States Environmental Protection Agency (EPA), have reviewed the following documents:

Amendment 1 to the 2020-2025 Transportation Improvement Program (TIP) and Amendment 1 to the 2040 Metropolitan Transportation Plan (MTP) for the Louisville Area Metropolitan Planning Organization (MPO) (MPO approval date July 23, 2020)

The Kentucky Environmental and Public Protection Cabinet's Division for Air Quality, the Kentucky Transportation Cabinet's Division of Planning, the Kentucky Transportation Cabinet's Office of Transportation Delivery, the Louisville Metro Air Pollution Control District, and the Transit Authority of River City also had an opportunity to review and comment on the aforementioned documents.

We found that these documents meet the five primary criteria of the Transportation Conformity Rule (40 CFR Part 93):

- use of the latest planning assumptions,
- use of the latest emissions model,
- use of appropriate consultation procedures,
- consistency with the mobile vehicle emission budgets in the State Implementation Plan (SIP), and
- provisions for timely implementation of transportation control measures in the SIP.

Page 2 Mr. Haley

We found that these documents met the criteria outlined in the July 1, 2004 Transportation Conformity Rule Amendments for New 8-hr Ozone and PM_{2.5} National Ambient Air Quality Standards (NAAQS), Response to March 1999 Court Decision and Additional Rule Changes (69 FR 40004). We therefore find that these amendments conform to the 2015 8-hour Ozone NAAQS.

Sincerely,

Todd Jeter Division Administrator

cc: Aviance Webb, FTA-R4
Erica Tait, FHWA-IN
Jane Spann, EPA-R4
Melissa Duff, KEEC-DAQ
Keith Talley Sr., Louisville Metro APCD
Laura Douglas and Margaret Handmaker, TARC
Ron Rigney, KYTC-Program Management
Mikael Pelfrey, KYTC-Planning
Amanda Spencer, LOU MPO



Kentucky Division

January 5, 2021

330 West Broadway Frankfort, KY 40601 PH (502) 223-6720 FAX (502) 223 6735 http://www.fhwa.dot.gov/kydiv

In Reply Refer To: HDA-KY

Mr. Jarrett Haley, Executive Director Louisville Area Metropolitan Planning Organization c/o Kentuckiana Regional Planning and Development Agency 11520 Commonwealth Drive Louisville, KY 40299

Dear Mr. Haley:

The Kentucky Division Office of the Federal Highway Administration (FHWA) and Region 4 of the Federal Transit Administration (FTA), in consultation with the Indiana Division Office of the Federal Highway Administration and Regions 4 and 5 of the United States Environmental Protection Agency (EPA), have reviewed the following documents:

Amendment 2 to the 2020-2025 Transportation Improvement Program (TIP) and Amendment 2 to the 2040 Metropolitan Transportation Plan (MTP) for the Louisville Area Metropolitan Planning Organization (MPO) (MPO approval date November 24, 2020)

The Kentucky Environmental and Public Protection Cabinet's Division for Air Quality, the Kentucky Transportation Cabinet's Division of Planning, the Kentucky Transportation Cabinet's Office of Transportation Delivery, the Louisville Metro Air Pollution Control District, and the Transit Authority of River City also had an opportunity to review and comment on the aforementioned documents.

We found that these documents meet the five primary criteria of the Transportation Conformity Rule (40 CFR Part 93):

- use of the latest planning assumptions,
- use of the latest emissions model.
- use of appropriate consultation procedures,
- consistency with the mobile vehicle emission budgets in the State Implementation Plan (SIP), and
- provisions for timely implementation of transportation control measures in the SIP.

Mr. Haley Page 2

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Carrie Butler, TARC
Ron Rigney, KYTC-Program Management
Mikael Pelfrey, KYTC-Planning
Amanda Spencer, LOU MPO



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

Agenda Item #9

MEMORANDUM

TO: Transportation Policy Committee

FROM: David Burton and Nick Vail

DATE: November 13, 2020

SUBJECT: Amendment 2 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan

(MTP), FY 2020 – FY 2025 Transportation Improvement Program (TIP) and the KIPDA

Performance Management Plan

KIPDA staff is ready to present Amendment 2 to the committees for consideration. Sponsors were given until August 31st to submit project changes. In addition to the project changes that are being proposed, staff is also updating the Federally required transit asset management performance measures and targets set by the Transit Authority of River City (TARC). Staff have already completed the air quality conformity analysis and the public comment period. TTCC recommended TPC approval of all three actions listed below. All public comments were sent to the Transportation Policy Committee (TPC) for their consideration.

Three actions are requested of TPC:

- 1) Approval of Amendment 2 to the Connecting Kentuckiana 2040 MTP,
- 2) Approval of Amendment 2 to the FY 2020 2025 TIP, and
- 3) Approval of the transit asset management targets found in the KIPDA Performance Management Plan.

11520 Commonwealth Drive Louisville, KY 40299 Phone: 502.266.6084

Fax: 502.266.5047 TDD: 800.648.6056





A Resolution of the

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #2 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan

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 Metropolitan Planning Area encompassing Clark and Floyd counties and a portion of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and a portion of Shelby County in Kentucky; and,

Whereas, Federal laws require the Transportation Policy Committee periodically review and update its Metropolitan Transportation Plan to reflect progress and changes regarding its implementation using the latest forecasts of regional demographic and socioeconomic data; and,

Whereas, pursuant to 23 CFR Section 450.322, the Metropolitan Transportation Plan is based on the latest available estimates and assumptions with regard to population, land use, travel, employment, congestion, and economic activity developed in conjunction with local jurisdictions; and,

Whereas, consistent with Federal and state mandates, states' environmental requirements, and with the KIPDA Transportation Policy Committee's Memorandum of Agreement, *Participation Plan, Title VI: Environmental Justice 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; has made draft documents available for public review, has held public meetings and other efforts including providing data and information related to the Metropolitan Transportation Plan update on the KIPDA website, to involve citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of persons with disabilities, and other interested parties in order to facilitate their ability to provide input, discussion, and review of *Connecting Kentuckiana 2040*, and has incorporated the work of local governments, and the suggestions of citizens, businesses, and interests throughout the MPA in this document; and,

Be it further resolved, that the KIPDA staff is authorized to transmit Amendment #2 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan for the Louisville/Jefferson County KY-IN Metropolitan Planning Area 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 24th day of November 2020.

Mayor J. Byron Chapman Chair Transportation Policy Committee

Amanda Spencer

KIPDA Transportation Division Director



A Resolution of the

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #2 of the FY 2020 - FY 2025 Transportation Improvement Program

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 and a portion of Harrison County in 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, Title VI: Environmental Justice 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, the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is a subset of Connecting Kentuckiana 2040, 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 FY2020 -FY 2025 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 2019 - 2022 Statewide Transportation Improvement Program (STIP), and the Indiana FY 2020 - 2024 STIP, respectively, and will become part of the end of fiscal year "fiscal constraint" recalculations; and,

Now, therefore be it resolved, by the Transportation Policy Committee of KIPDA that this amendment of the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is adopted by official action at the November 24, 2020 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 2040 complies with all of 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 2040, 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 #2 of the Connecting Kentuckiana 2040 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 this amendment of the Connecting Kentuckiana 2040 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 24th day of November 2020.

J. Byron Chapman, Chair

Transportation Policy Committee

Amanda Spencer

KIPDA Transportation Division Director

KIPDA's 2020 Amendment Schedules

Connecting Kentuckiana (CK) 2040 Metropolitan Transportation Plan (MTP) Fiscal Year (FY) 2020 - 2025 Transportation Improvement Program (TIP)

Why are there amendments to the MTP & TIP?

New non-regionally significant projects that qualify as Group Projects, as well as many minor changes to existing projects, can be made through an administrative modification. Administrative modifications have few requirements and can be processed within 30 days.

Any projects 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. The amendment process can take up to 6 months due to all of the Federal requirements regarding air quality conformity and providing an opportunity for the public to comment.

Amendment 1

This amendment will include changes to projects and a small number of new projects that were waiting to be amended with the adoption of the new MTP. There will be limited time to submit other project changes.

Amendment 2 (Updated 9.28.2020)

Anticipating several new projects and changes to existing MTP projects coming from the MPO's Kentucky Call for Projects and KYTC's Six Year Highway Plan. Other new projects and changes are also welcome.

	Steps
and	Timing

March 23 - April 13	Sponsors submit new projects and changes to existing projects	May 15 - August 31
April 14 - 28	KIPDA staff reviews projects	September 1 - 28
April 29 - June 5	Air quality conformity activities	September 28 - October 23
June 12 - 26	Public comment period	October 24 - November 7
July 8 and 23	Committee Consideration	November 11 & 24
July 24 - September 7	Federal Review	November 5 - December 18

The MTP & TIP amendment process is NOT an opportunity to request MPO dedicated funds.

Additional Information

All new projects and changes to existing projects will be submitted through the updated electronic Project Information Form (ePIF) found on KIPDA's Transportation Planning Portal.

The Portal will be updated by April 15, 2020. KIPDA staff will offer virtual/online training assistance between April 15th and April 30th to ensure sponsors are up-to-speed on how to use the new forms.



Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020 – FY 2025 Transportation Improvement Program

Kentucky Member Counties

The Kentuckiana Regional Planning and Development Agency (KIPDA) is the metropolitan planning organization (MPO) for the five-county region covering Jefferson, Bullitt and Oldham counties in Kentucky and Clark and Floyd counties in Indiana. The MPO's responsibilities include producing a long-range transportation document, Connecting Kentuckiana 2040 Metropolitan Transportation Plan (MTP) as well as a short-range planning document, the Fiscal Year (FY) 2020 – 2025 Transportation Improvement Program (TIP). The public comment period begins on October 24th and ends on November 7th, 2020.

Henry

Bullitt

Jefferson

Oldham

Shelby

Spencer

Trimble

Indiana Member Counties

Clark

Floyd

Changes have been proposed to the MTP and TIP. The MTP, with the proposed changes, is financially reasonable and the TIP is still fiscally constrained. This packet includes the following documents:

- A listing of all the projects being added, removed, or modified
- Revisions to the Performance Management Plan (changes highlighted in yellow)
- Air quality conformation documentation

Please review the proposed changes and submit comments by:

- Meeting minutes from the Interagency Consultation (IAC) conference call

- Visiting http://kipdatransportation.org/amendment2/ and click on the Amendment 2 Map link

- Emailing your comments to kipda.trans@kipda.org
- Mailing your comments to us at
 - TIP & MTP Amendment, KIPDA, 11520 Commonwealth Drive, Louisville, KY 40299
- Asking questions or providing comments in-person during a virtual open house to be held on October 27, 2020 from 5:00 p.m. 7:00 p.m. A link to the virtual meeting can be found at the bottom of the following webpage http://kipdatransportation.org/amendment2/

Equal Opportunity Employer If you have questions or additional information is needed, call Greg Burress at 502-266-6144 ext. 123.



11520 Commonwealth Drive Louisville, KY 40299 502-266-6084 Fax: 502-266-5047 KY TDD 1-800-648-6056 www.kipda.org

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project						
MTP Action:	Update estimated cost						
Exempt/Non- Exempt:	Exempt Model No change to model Impact:						
Project Sponsor:	Air Pollution Control District (APCD)	KIPDA ID:	369	State ID:	TBD		
County	Bullitt / Jefferson / Oldham	Parent ID:	N/A	Group ID:	N/A		
Project Name:	Kentuckiana Air Education		Total Estimated Cost in MTP (i.e. CK 2040):	\$ 5	5,492,000 5,492,000		
			Total Cost Programmed in TIP to Date:	\$6,492,000 \$5,492,000			
Funding Source:	Surface Transportation Block Grant (ST	BG) - MPO	Open to Public Date:	N/A (on	going program)		
Description:	Information/outreach campaign to educ choices.	ate public ab	out air quality issues and encourage	the public to ma	ake air-friendly		
Purpose & Need:	Reduce ozone levels in Louisville ozone rair quality and influence positive behavior		area. Raise public awareness of conn	ections betwee	n transportation ar		
	FY 2021 Operations phase with the follo \$200,000 (Federal) + \$50,000 (Other) = \$	_					
	FY 2022 Operations phase with the follo \$200,000 (Federal) + \$50,000 (Other) = \$	_					
FY 20-25 TIP Funding:	FY 2023 Operations phase with the follo \$200,000 (Federal) + \$50,000 (Other) = \$	_					
	The state of the s	*FY 2024 Operations phase with the following STBG-MPO funds: \$200,000 (Federal) + \$50,000 (Other) = \$250,000 (Total)					
	*FY 2025 Operations phase with the following STBG-MPO funds: \$200,000 (Federal) + \$50,000 (Other) = \$250,000 (Total)						

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	None				
MTP Action:	Remove project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	e to model	
Project Sponsor:	Bullitt County	KIPDA ID:	2765	State ID:	N/A
County	Bullitt	Parent ID:	N/A	Group ID:	N/A
Project Name:	I- 65 Barrier Wall MP 116 to MP		Total Estimated Cost in MTP (i.e. CK 2040):		300,000
rroject Name.	1- 05 barrier Wall Wil 110 to Wil	110	Total Cost Programmed in TIP to Date:	N/A	
Funding Source:	N/A		Open to Public Date:	2	026
Description:	Sound barrier wall on I-65 from MP 116	to MP 118 po	st northbound side.		
Purpose & Need:	To provide relief of interstate noise to re	esidents that b	oound the northbound lanes of I-65 f	rom MP 116 to M	IP 118.
FY 20-25 TIP	None				
Funding:					
	Add musicate				
TIP Action: MTP Action:	Add project Add project				
TIP Action:	• •	Model Impact:	Project will be added to 2030, 203 project replaces KIPDA IDs 4		
TIP Action: MTP Action: Exempt/Non-	Add project		•		
TIP Action: MTP Action: Exempt/Non- Exempt:	Add project Non-Exempt	Impact:	project replaces KIPDA IDs 4	93 and 1926 in th	e analysis.
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County	Add project Non-Exempt Bullitt County Bullitt	Impact: KIPDA ID:	project replaces KIPDA IDs 4	93 and 1926 in th State ID: Group ID:	e analysis. TBD
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor:	Add project Non-Exempt Bullitt County	Impact: KIPDA ID:	project replaces KIPDA IDs 4 NEW N/A Total Estimated Cost in MTP	93 and 1926 in th State ID: Group ID: \$43,3	TBD N/A
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County	Add project Non-Exempt Bullitt County Bullitt	Impact: KIPDA ID: Parent ID:	project replaces KIPDA IDs 4 NEW N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed	93 and 1926 in th State ID: Group ID: \$43,3	TBD N/A 300,000
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name:	Add project Non-Exempt Bullitt County Bullitt KY 44	Impact: KIPDA ID: Parent ID:	project replaces KIPDA IDs 4 NEW N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date:	93 and 1926 in th State ID: Group ID: \$43,3 \$1,0	TBD N/A 300,000 000,000
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name: Funding Source:	Add project Non-Exempt Bullitt County Bullitt KY 44 Surface Transportation Block Grant (ST	Impact: KIPDA ID: Parent ID: TBG) - MPO 31 E to Kings Courface transporte congestion,	project replaces KIPDA IDs 4 NEW N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Church Road and a 3 lane section from order to account of the contact of the	93 and 1926 in th State ID: Group ID: \$43,3 \$1,0 2 m Kings Church Ro	TBD N/A B00,000 000,000 c030 coad to Spencer

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

Exempt/Non-	lone					
Exempt:	Exempt	Model Impact:	No change	to model		
Project Sponsor:	INDOT	KIPDA ID:	2519	State ID:	1800706	
County	Floyd	Parent ID:	N/A	Group ID:	2676	
Project Name:	US 150 Bridge Painting Over I-64 F	:R/\M/R	Total Estimated Cost in MTP (i.e. CK 2040):		N/A	
Project Name.	US 150 Bridge Painting Over I-64 EB/WB		Total Cost Programmed in TIP to Date:	\$400,170		
Funding Source:	Surface Transportation Block Garnt (STBG) - State		Open to Public Date:	2024		
Description: Br	ridge painting on US 150 located 08.81	miles east of	IN 335 over I-64 EB/WB.			
Purpose & Need: Br	ridge painting					
FY 20-25 TIP Funding:	FY 2021 Preliminary Engineering phase with the following STBG-ST funds: \$160,000 (Federal) + \$40,000 (Other) = \$200,000 (Total) *FY 2024 Construction phase with the following STBG-ST funds: \$160,136 (Federal) + \$40,034 (Other) = \$200,170 (Total)					

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project					
MTP Action:	None					
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	No change to model. Neither the chan	ne description nor the OTP Date a anging.		
Project Sponsor:	Jeffersontown	KIPDA ID:	2774	State ID:	TBD	
County	Jefferson	Parent ID:	N/A	Group ID:	N/A	
Project Name	Galene Drive/Sprowl Road Collector	Extension	Total Estimated Cost in MTP (i.e. CK 2040):	\$3,	250,500	
Project Name:	Galetie Drive/Sprowi Road Collector	Extension	Total Cost Programmed in TIP to Date:	\$3	75,000	
Funding Source:	Surface Transportation Block Grant (S	ГВG) - MPO	Open to Public Date:	: 2028		
Description:	Improve capacity along Galene Drive fro Watterson Trail. Potential improvement Taylorsville Road to Bluebird Lane and S sidewalk and bicycle facilities, turning m	s include reali helby Street, v	gning Galene Drive and Sprowl Road widening Galene Drive, Sprowl Road	, extending Spro	wl Road across	
	Realign Galene Drive and Sprowl Road t Extend Sprowl Road across Taylorsville I intersection. The project includes wider will include turning movements and sign	Road and conr ing the collect	e right turn/left turn movement as it lect up with Shelby Street and wider or roadway, curb and gutters, sidew	Shelby Street to	lorsville Road. Watterson Trail	
Purpose & Need:	Extend Sprowl Road across Taylorsville I	Road and conring the collect nalization as we the downtown at the Taylorsv	e right turn/left turn movement as it lect up with Shelby Street and wider or roadway, curb and gutters, sidew arranted. In business district of Jeffersontown a ville Road/Watterson Trail Intersection	shelby Street to valks and bicycle to and provide a nev	lorsville Road. Watterson Trailfacilities. Project	

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project		24, 2020		
MTP Action:	Revise project description				
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	No changes to model. Changes are limited to funding changes and change to the description that does impact the way that the project represented in the model.		
Project Sponsor:	КҮТС			State ID:	5-80000.00
County	Jefferson, Shelby	Parent ID:	N/A	Group ID:	N/A
Project Name:	1-64	I-64 Total Estimated Cost in MTI (i.e. CK 2040): Total Cost Programmed in TIP to Date:		\$1	4,240,000 5,750,000 ,000,000
Funding Source:	State		Open to Public Date:		2029
Description:	Eastwood Fisherville Connector to I-64 (KY 148 to US 60 (Shelbyville Road) with Gilliland Road. New interchange and connector road fr would be in the vicinity of Gilliland Road	a new interch	range on the I-64 corridor. Interchang	ge would be in tl	ne vicinity of
Purpose & Need:	CHAF Purpose: Eastwood Fisherville Cor Jefferson County between I-265 (Gene S CHAF Need: This project is needed beca interstate system and local roadway net 265 (Gene Snyder Freeway) in Jefferson contributed to ever increasing traffic vo	Snyder Freewa use in light of twork is need County to KY	eay) in Jefferson County to KY 1848 (Bo existing and anticipated growth, local ed due to their being a distance of 9 of 1848 (Buck Creek Road) in Shelby Co	uck Creek Road) al and regional a miles between a	in Shelby County.
FY 20-25 TIP Funding:	FY 2021 Preliminary Engineering phase \$0 (Federal) + \$750,000 (Other) = \$750,000 (Pederal) + \$5,000,000 (Other) = \$5,000 (Pederal) + \$5,000,000 (Other) = \$5,000 (Pederal) + \$8,000,000 (Other) = \$8,000 (Pederal) + \$8,000,000 (Other) = \$8,000 (Pederal) + \$2,000,000 (Other) = \$2,000 (Pederal) + \$2,000 (Pederal	OOO (Total) g State funds: OOO,OOO (Total Ollowing State OOO,OOO (Total	t funds:		

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Modify TIP funding and update open to	public (OTP) (date				
MTP Action:	Update open to public date						
Exempt/Non- Exempt:	Exempt	Model Impact:	No changes				
Project Sponsor:	күтс	KIPDA ID:	2596	State ID:	5-10016.00		
County	Jefferson	Parent ID:	N/A	Group ID:	N/A		
Project Name:	L64 Bridge Painting		Total Estimated Cost in MTP (i.e. CK 2040):	\$30	0,000,000		
Project Name.	roject Name: I-64 Bridge Painting Total Cost Programmed in TIP to date:	\$30	0,000,000				
Funding Source:	National Highway Performance Progra Surface Transportation Block Grant (ST		Open to Public Date: 2027 2022				
Description:	KYTC Highway Plan (June, 2018): Bridge 056B00300N, 056B00301N, 056B00302N CHAF: TBD.				800299N,		
Purpose & Need:	Maintain the existing transportation net	work in a stat	te of good repair.				
FY 20-25 TIP Funding:	*FY 2024 Construction phase with NHPP \$4,000,000 (Federal) + \$1,000,000 (Othe *FY 2025 Construction phase with NHPP \$12,000,000 (Federal) + \$3,000,000 (Othe *FY 2021 Construction phase with STBG S	r) = \$5,000,0 funds: eer) = \$15,000 T funds:),000 (Total)				
	\$7,800,000 (Federal) + \$10,800,000 (Other) = \$18,600,000 (Total) FY 2021 Construction phase with NHPP funds: \$11,400,000 (Federal) + \$0 (Other) = \$11,400,000 (Total)						

Connecting Kentuckiana 2040 Metropolitan Transportation Plan

FY 2020 - FY 2025 Transportation Improvement Program

Exempt/Non- Exempt: Project Sponsor: County Project Name: Funding Source: Nation Nation	pen to public (OTP) date a Non-Exempt KYTC Oldham I-71	Model Impact: KIPDA ID: Parent ID:	No change: 2788 N/A Total Estimated Cost in MTP (i.e. CK 2040):	State ID: Group ID:	5-483.2 N/A
Exempt: Project Sponsor: County Project Name: Funding Source: Nation Description:	KYTC Oldham	Impact: KIPDA ID:	2788 N/A Total Estimated Cost in MTP (i.e. CK 2040):	State ID: Group ID:	N/A
County Project Name: Funding Source: Nation Description:	Oldham		N/A Total Estimated Cost in MTP (i.e. CK 2040):	Group ID:	N/A
Project Name: Funding Source: Nation Description:		Parent ID:	Total Estimated Cost in MTP (i.e. CK 2040):		
Funding Source: Nation Description: KYTC High	I-71	·	(i.e. CK 2040):	\$7	•
Funding Source: Nation Description: KYTC High	1-71				1,300,000
Description: KYTC High			Total Cost Programmed in TIP to Date:	\$5	5,500,000
Description:	National Highway Performance Program (NHPP)		Open to Public Date:	2027 2030	
ID: IP201	hway Plan (June, 2018): V 60193.	Viden I-71 from fou	r to six lanes from KY 393 (MP 18.0) t	o KY 53 (MP 22	4). (16CCN) CHAF
Purpose & Need: CHAF Nee volumes	et currently characterize to throug ed: The needs being addre	the existing corridor	reconstruction is to address the capa r and provide increased efficiency and sed I-71 project are based on the follo traffic flow characteristics. In 2009, t	d safety for the	traveling public. It
FY 20-25 HP	Design phase with the folloo 00 (Federal) + \$1,100,000	•			

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	I KY 53 interchange to the Henry Cou		•
Project Sponsor:	күтс	KIPDA ID:	NEW	State ID:	5-552.00
County	Oldham	Parent ID:	N/A	Group ID:	N/A
Project Name:	I-71	•	Total Estimated Cost in MTP (i.e. CK 2040):	\$6	4,000,000
Project Name.	1-/1		Total Cost Programmed in TIP to Date:	\$5	5,600,000
Funding Source:	National Highway Performance Program (NHPP)		Open to Public Date:	2029	
Description:	Improve safety and reduce congestion KIPDA Note: The project limits are from MP 24.727 to MP 28.00, outside the N	m MP 22.033 to	o MP 24.727 (Oldham/Henry County I		
Purpose & Need:	This project is necessary because of a large amount of truck traffic on I-71 fr along this section of I-71 is 30% in Old the March 2014 I-71 Study of 17.4%. T 0.47% cited in the study. The critical compercentage in 2013 was 25% with a 20 and truck generators near MP 22.0. Do	om KY 53 in Ol ham Co. and 1 he percent of rash rate factor 138 truck perce	dham County to KY 153 in Henry Cour 7.5% in Henry Co., which exceeds the fatal crashes of 1.4% in Oldham Co. ex r (CCRF) on this section in Henry Co. w nt growth rate of 1.4%/yr projected b	nty. The percent Interstate avera acceeds the Inter as 1.033 in 201 by the study. The	at of injury crashes age as referenced in state average of 3. The truck
FY 20-25 TIP Funding:	FY 2023 Design phase with the followi \$4,480,000 (Federal) + \$1,120,000 (Ot	•			

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Remove project				
MTP Action:	Remove project				
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	Remove from 2035 a	and 2040 scena	ırios
Project Sponsor:	КҮТС	KIPDA ID:	493	State ID:	5-347.5
County	Bullitt	Parent ID:	N/A	Group ID:	N/A
Due in at Nove	KY 44		Total Estimated Cost in MTP (i.e. CK 2040):	\$7	7,860,000
Project Name:	KT 44		Total Cost Programmed in TIP to Date:	\$7,860,000	
Funding Source:	: State Open to Public Date:			2032	
Description:	CHAF: Mt. Washington-Taylorsville R	oad; Reconstruct	t KY 44 from Mt. Washington Bypass E	East 2.0 miles (0	04CCN).
Purpose & Need:	31E/150 (Bardstown Road) to KY 131 CHAF Need: KY 44's intersection with reveals 252 crashes along the subject collisions and 42KY 44's intersection data reveals 252 crashes along the sucollisions and 42 single vehicle collisioner ear end collisions. The significance of access for emergency vehicles. The K particularly at the intersections with	9 (Kings Church US 31E has a cu section of KY 44 with US 31E has abject section of ons. Of the 29 cra f crashes along t Y 44 vertical aligness	rrent overall LOS of C and a projected l over the last ten years, including 122 a current overall LOS of C and a proje	I 2033 overall Log rear end collist cted 2033 over ag 122 rear end I US 31E (Bardstein narrow roadwance at the easongestion and congestion an	OS of F. Crash data sions, 50 angle all LOS of F. Crash collisions, 50 angle town Road), 21 were ay providing poor t end of the project, delays for traffic
FY 20-25 TIP	FY 2020 Construction phase with the	following State f	funda.		
Funding:	\$0 (Federal) + \$4,680,000 (Other) = \$	_			

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Remove project					
MTP Action:	Remove project					
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	Remove from 2030, 203	5, and 2040 sc	enarios	
Project Sponsor:	КҮТС	KIPDA ID:	1926	State ID:	5-347.56	
County	Bullitt	Parent ID:	N/A	Group ID:	N/A	
Drainst Name	KY 44		Total Estimated Cost in MTP (i.e. CK 2040):	\$1	1,719,000	
Project Name:	K1 44		Total Cost Programmed in TIP to Date:	\$8	,760,000	
Funding Source:	State		Open to Public Date:	2028		
Description:	CHAF:-KY 44 Section 2 from Parkland Tr ID: IP20150246. Additional Considerations: Add center to		olors Drive eastward to Kings Church I	Road (KY 1319)	. (2008BOPC) CHAF	
Purpose & Need:	CHAF Purpose: Improve capacity, reliev Drive to KY 1319 (Kings Church Road). CHAF Need: This project is needed becaintersections with East Sanders Lane and (Kings Church Road). Existing delays es High School/Old Mill Elementary Schoo	nuse the vertic d Kings Churc pecially during	al alignment provides inadequate sigh h Road on KY 44 from Parkland Trace/ g the AM peak periods also occur due	nt distances, pa 'Winning Color	rticularly at the s Drive to KY 1319	
FY 20-25 TIP Funding:	None					

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non-	Non-Exempt	Model	Change KY 44 to a 5-lane section fron	•	_
Exempt:	Non Exempt	Impact:	the 2030, 2035, an	d 2040 scenari	os
Project Sponsor:	күтс	KIPDA ID:	NEW	State ID:	5-80103.00
County	Bullitt	Parent ID:	N/A	Group ID:	N/A
Part of No.	107.44		Total Estimated Cost in MTP (i.e. CK 2040):	\$28	3,200,000
Project Name:	KY 44		Total Cost Programmed in TIP to Date:	\$28	3,200,000
Funding Source:	State		Open to Public Date:		2027
Description:	Reconstruct KY 44 from Bogard Lane to A continuous center turn lane.	Armstrong La	ne (2020CCN). Improvements may inc	lude additiona	l travel lanes and a
Purpose & Need:	The project is intended to reduce conges consider five lane widening and bike/ped adequately accommodate existing or future crash rate due to the volume of traffic.	d accommod	ations. This project is needed because	the capacity o	f KY 44 does not
FY 20-25 TIP Funding:	FY 2021 Design phase with the following \$0 (Federal) + \$2,300,000 (Other) = \$2,300 (Pederal) + \$4,700,000 (Other) = \$4,700 (Pederal) + \$4,700,000 (Other) = \$4,700 (Pederal) + \$6,600,000 (Other) = \$6,600 (Pederal) +	00,000 (Tota owing State 00,000 (Tota ng State fund	funds: I) Is:		

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	Reflect KY 155 as a 3-lane roadway f KY 148 intersection in the 2030, 203 will be considered to be a continuius it is known where the extended	5, and 2040 sce s center turn lan	narios. The 3rd lane e in the model until
Project Sponsor:	КҮТС	KIPDA ID:	NEW	State ID:	5-8954.00
County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Due in at Name	IVV 4FF	•	Total Estimated Cost in MTP (i.e. CK 2040):	\$17	7,890,000
Project Name:	KY 155		Total Cost Programmed in TIP to Date:	\$17	7,890,000
Funding Source:	State Surface Transportation Block Grant (STBG) - State	Open to Public Date:		2027
Description:	Construct a 2+1 road on KY 155 (Taylor lane that serves as an alternating passi MPO area on KY 55/KY 155 in Spencer	ng lane. (16CC	N)(18CCN)(2020CCR) KIPDA Note: Th		
Purpose & Need:	This project would seek to improve fre Parkway (Central Kentucky) and City of increase at a rate significantly higher the corridor by providing safer passing oppositions.	Louisville. Th	e current 2-lane roadway has limited Project also seeks to reduce the numb	capacity and AD er of high-speed	T is projected to
FY 20-25 TIP Funding:	FY 2021 Design phase with the followin \$800,000 (Federal) + \$200,000 (Other) FY 2023 Right of Way phase with the following the following formula in the following formula	= \$1,000,000 ollowing State oo (Total) ving State func ,000 (Total)	(Total) funds: ds:		

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project					
MTP Action:	None					
Exempt/Non- Exempt:	Exempt	Model Impact:	No changes to model			
Project Sponsor:	күтс	KIPDA ID:	2371	State ID:	5-808.00	
County	Jefferson	Parent ID:	1633	Group ID:	N/A	
Project Name:	KY 155		Total Estimated Cost in MTP (i.e. CK 2040):	\$2	,730,000	
Project Name.	K1 133		Total Cost Programmed in TIP to date:	\$2	,730,000	
Funding Source:	Surface Transportation Block Grant (ST	·	Open to Public Date:		2024 2021	
Description:	Safety project for reconstruction of Taylo Creek. (2016BOP). Project length is 0.6 m		and South Pope Lick Road intersection	n and bridge ov	er Pope Lick	
Purpose & Need:	Improve intersection safety and maintain 155/South Pope Lick Road intersection in significantly with recent developments in making it difficult for vehicles to turn on The intersection is not signalized and traat this intersection are common and signal entrance to the park on the south side or	n eastern Jeff n the area inc to KY 155 froi ffic on KY 155 nt distance is	erson County.This project is needed be luding the new 4,000 acre Parklands of m the approach roads at the KY 155/S 5 moves at 55 MPH (the posted speed limited. The South Pope Lick intersec	pecause traffic h of Floyds Fork r South Pope Lick I limit) or highe tion doubles as	nas increased ecreational area Road intersection. r. Traffic back-ups a signature	
FY 20-25 TIP Funding:	FY 2021 Right of Way phase with STBG-S \$144,000 (Federal) + \$36,000 (Other) = \$ FY 2021 Utilities phase with STBG-ST fun \$120,000 (Federal) + \$30,000 (Other) = \$	5180,000 (Tot ds:				

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

	Add project		Add project					
MTP Action:	Update estimated cost							
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	No changes to model. Changes a	re limited to ch	anges in funding			
Project Sponsor:	күтс	KIPDA ID:	147	State ID:	5-234.00			
County	Oldham	Parent ID:	N/A	Group ID:	N/A			
Project Name:	KY 393		Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date:	\$1 \$1	9,870,000 1,990,000 9,870,000 4,220,000			
Funding Source:	Surface Transportation Block Grant (STE	BG) - State	Open to Public Date:		2022			
	KY 393 reconstruction from 140 feet sout			towards KY 146	ending at Station			
Description:	12+00 (Design under 5-230.00). (Construction of the IP20160227.	ction Seq.#2)).					
Description: Purpose & Need:		oject is to imported in provements with I-71, and Y 393 at KY 10 problems assolicomplex ingues reeded becausystem conn	prove traffic flow and correct safety of struction of an underpass to replace the ents will accommodate the predicted and improve traffic service and safetyf 1.46. Sociated with existing design deficience gress and egress, emergency service of the route's importance in the nectivity and travel conditions for schools.	he at-grade cro increase in traf for the large Old cies, sight distar demands, trave local and region	ssing of the CSX fic volumes, reduce lham County school nce, grades and I safety, travel time, nal transportation			

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

MTP Action:	Modify TIP funding and revise description						
	Update estimated cost and revise desc						
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	No changes to model. The revised mo	l description has del.	on has no impact on th		
Project Sponsor:	күтс	KIPDA ID:	1819	State ID:	5-8203.00		
County	Jefferson	Parent ID:	257	Group ID:	N/A		
Project Name:	KY 1819		Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date:	\$ 2 \$7	,840,000 , 700,000 ,840,000 , 260,000		
Funding Source:	State		Open to Public Date:		2025		
Description:	(04CCN)(06CCN)(08CCR)(10CCR)(12CC modern roadway standards and impro	ve corridor wid		_	•		
	2020 scenario, which is a widening to assumed to occur when KIPDA ID 1819 MTP).	3 lanes from I-2		changes to Billto	57 beginning in th own Rd. are		
Purpose & Need:	2020 scenario, which is a widening to assumed to occur when KIPDA ID 1819	of Colonnades lders (three fee by Road with the Ruckriegel Pain 2006 and 201 of Colonnades lders (three fee	Place to south of Easum Road. (04Cd to r less) exists along the length of the raffic volumes expected to increase arkway intersection (which is expected.) Place to south of Easum Road. (04Cd to r less) exists along the length of the raffic volumes expected to increase arkway intersection (which is expected.)	changes to Billtoder removing KIF CN)(06CCN)(08CC the corridor. Histodel CN)(06CCN)(08CC the corridor. Histodel the corridor. Histodel the corridor. Histodel	CR)(10CCR)(12CC) oric traffic volume (2.0%) per year).		

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	N/A						
MTP Action:	Modify open to public date						
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	Remove from	2020 scenario			
Project Sponsor:	күтс	KIPDA ID:	257	State ID:	5-8203.00		
County	Jefferson	Parent ID:	N/A	Group ID:	N/A		
Duning at Name	VOV 4.04.0		Total Estimated Cost in MTP (i.e. CK 2040):	•	7 <mark>,840,000</mark> 2,700,000		
Project Name:	KY 1819		Total Cost Programmed in TIP to Date:		7,840,000 7,260,000		
Funding Source:	State		Open to Public Date:	2025 2020			
Description:	1	•	lane will be a center turn lane) from	I-265 (Gene Sny	yder Freeway) to KY		
Purpose & Need:	Widen KY 1819 (Billtown Road) from 2 to 3 lanes (3rd lane will be a center turn lane) from I-265 (Gene Snyder Freeway) to KY 1819 (Watterson Trail). Project length is 3.8 miles. The purpose of this project is to improve: 1) Safety, 2) Traffic flow on roadways during peak travel hours, 3) Air quality, 4) Mobility within designated freight corridors, and 5) Modal access and choice. The corridor has limited right-of-way and narrow shoulders that are under three feet. Historic traffic volumes have shown strong growth along Billtown Road with traffic volumes expected to increase by 7.5% per year along the length of Billtown Road; with the exception of the Ruckriegel Parkway intersection which is expected to increase by 8.0% per year. A speed study showed that most drivers exceed the speed limit, particularly in the north end of the study area. There are several intersections where, as of 2006, there were poor levels of service. In 2010, all intersections have at least one or more approaches with a poor level of service. At the intersection of Gellhaus Lane and Billtown Road, the queue length of the westbound left turn exceeds the available storage. At the intersection of Ruckriegel Parkway and Billtown Road, the queue lengths during peak periods exceed the available storage for the westbound left and the northbound right turn. The entire corridor operates at LOS E in 2006 and 2010. All sections except the portion of Billtown Road between Shady Acres Lane and Ruckriegel Parkway operate at LOS E in 2030. The Shady Acres Lane to Ruckriegel Parkway section operates at LOS E.						
FY 20-25 TIP Funding:	None						

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project for illustrative purposes only						
MTP Action:	Update open to public (OTP) date and change state ID						
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	Remove project fr	rom 2025 scena	rio		
Project Sponsor:	Louisville Metro	KIPDA ID:	2153	State ID:	5-80108.00 8801.00		
County	Jefferson	Parent ID:	N/A	Group ID:	N/A		
Droingt Name	Rangeland Road		Total Estimated Cost in MTP (i.e. CK 2040):	\$5	,670,000		
Project Name:			Total Cost Programmed in TIP to Date:	•	1,090,000 1,590,000		
Funding Source:	State		Open to Public Date:		2027 2025		
Description:	Widen Rangeland Road from 2 to 3 la	nes from Poplar	Level Road to Shepherdsville Road,	for 1.23 miles.			
Purpose & Need:	Reduce congestion and improve safet	y on Rangeland	Road for 1.23 miles.				
FY 20-25 TIP	*FY 2024 Right of Way phase with the	following State	funds:				
Funding:	\$0 (Federal) + \$1,250,000 (Other) = \$1						

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Modify TIP funding, revise description and update open to public (OTP) date						
MTP Action:	Revise description and update open to p	ublic (OTP) da	ate				
Exempt/Non- Exempt:	Non-Exempt Model Remove project from 2025 scena						
Project Sponsor:	КҮТС	KIPDA ID:	2598	State ID:	5-8952.00		
County	Jefferson	Parent ID:	N/A	Group ID:	N/A		
Duningt Name	US 60		Total Estimated Cost in MTP (i.e. CK 2040):	\$2	,200,000		
Project Name:	03 60		Total Cost Programmed in TIP to Date:	\$2	,200,000		
Funding Source:	Surface Transportation Block Grant (ST State	BG) - State	Open to Public Date:		2029 2024		
Description:	Widen US 60 to three lanes from Eastwo \$330,000). Improve safety and mobility.	ood Cutoff (M	P 14.7) to Rockcrest Way (MP 15.1). ((16CCN) (Locals	will do design for		
Purpose & Need:	The Critical Rate Factor (CRF) along this sannual growth rate in this area ranging FY 2021 Design phase with the following \$264,000 (Federal) + \$66,000 (Other) = \$	from 1.6% to STBG-ST fund	2.9% and a population annual growths:	-			
	FY 2023 Right of Way phase with the following STBG-ST funds: \$328,000 (Federal) + \$82,000 (Other) = \$410,000 (Total) *FY 2024 Utilities phase with the following STBG-MPO funds:						
FY 20-25 TIP Funding:	\$368,000 (Federal) + \$92,000 (Other) = \$460,000 (Total) FY 2020 Design phase with the following State funds: \$0 (Federal) + \$330,000 (Other) = \$330,000 (Total)						
	FY 2020 Right of Way phase with the following State funds: \$0 (Federal) + \$410,000 (Other) = \$410,000 (Total)						
	FY 2020 Utilities phase with the following State funds: \$0 (Federal) + \$460,000 (Other) = \$460,000 (Total)						
	-	_	÷				

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project					
MTP Action:	None					
Exempt/Non- Exempt:	Exempt	Model Impact:	No changes to model			
Project Sponsor:	Louisville Metro	KIPDA ID:	1353	State ID:	TBD	
County	Jefferson	Parent ID:	N/A	Group ID:	N/A	
Project Name:	Baxter/Bardstown Premium Transportat	ion Corridor	Total Estimated Cost in MTP (i.e. CK 2040):	\$1	1,600,000	
	- Section 1		Total Cost Programmed in TIP to Date:	\$2	2,750,000	
Funding Source:	Surface Transportation Block Grant (ST	BG) - MPO	Open to Public Date:		2030	
Description:	The Baxter/Bardstown Premium Transposervice on a key corridor by adding traffi bring intelligent signal upgrades, which premium transit and overall mobility; 3) pedestrian facilities, intersection safety i streetscape design elements.	c signal bus p will include u incorporate o	rioritization, new bus stops, and incre pgraded traffic signals and communic complete streets roadway improveme	easing bus serv ation equipme ents by includin	ice frequency; 2) nt to support g bicycle and	
Purpose & Need:	The Baxter/Bardstown Premium Transpondero's most heavily travelled corridors plan, as both a "Major Corridor" and a "lintensive Bardstown/Baxter Safety Study Bardstown Road succeed as a commerciaroad space with high-demand for each p Louisville's Highlands Neighborhoods, not The improvements outlined in this desig project, which received \$16.9 million in finterchange from a traditional marketple account for various demands across its letransit improvements and more complet activity while the area outside of the Watransit accommodations and connection few to no safe bicycle facilities. Taken to Corridor of the future continues to successions.	It is highly-peremium Trant, completed al destination ortion of the eds investmen-build projected funds. Accedent however, the multi-modatters on has poss. Both sections gether, these	rioritized in Move Louisville, Louisville nsit Corridor." A large sub-area of this by Louisville Metro's Office of Advance resulting in major mobility challenge cross-section. The vibrant commercia ent and improvements to maintain its ct are comparable to those seen in the Baxter Avenue and Bardstown Road of a suburban marketplace corridor, Sever, each two sub-areas, despite is united connections. The area inside of the poor access management, crash-inductors have room for improvement concestissues need to be addressed to ensure	e Metro's 20-ye Section was the ded Planning. But s. These two consuccess over the "Transforminal transition arout ection 1 of this ted by its need Watterson has ing typical crosserning pedestrice that the Bax	tar transportation the focus of the axter Avenue and portidors have limited stituting the heart of the years to come. If Dixie Highway'' and the I-264 project will need to for significant mass high pedestrian s-sections, and poor an connections and ter/Bardstown	
FY 20-25 TIP	FY 2021 Construction phase with the foll \$2,200,000 (Federal) + \$550,000 (Other)					
Funding:	72,200,000 (reaeral) + \$550,000 (Other)	- 92,730,00C	(TOLAT)			

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change:	s to model	
Project Sponsor:	Louisville Metro	KIPDA ID:	NEW	State ID:	TBD
County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	Blanton Lane Sidewalk		Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed		,417,500 ,417,500
Funding Source:	Transportation Alternatives (TA)	- MPO	in TIP to Date: Open to Public Date:		2025
Description:	Construct a continuous 6-foot sidewalk of This project will add approximately 5,10 gutter and will include a retaining wall.		_	•	
Purpose & Need:	There are no pedestrian connections on minor arterial (St. Andrews Church Road primarily residential corridor to the com along with a crossing at the P&L Railroad	l). New sidew mercial corri	alks will provide safe and accessible p	edestrian conr	ections from this
FY 20-25 TIP Funding:	FY 2022 Design phase with the following \$166,000 (Federal) + \$41,500 (Other) = \$ *FY 2024 Right of Way phase with the fo \$166,000 (Federal) + \$41,500 (Other) = \$	\$207,500 (Tot ollowing TA-N	al) 1PO funds:		

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt Model No changes to model				
Project Sponsor:	Louisville Metro	KIPDA ID:	NEW	State ID:	TBD
County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Due in at Name	Cogal Avenue Sidewalls		Total Estimated Cost in MTP (i.e. CK 2040):	\$1	.,765,000
Project Name:	Gagel Avenue Sidewalk		Total Cost Programmed in TIP to Date:	\$1	.,765,000
Funding Source:	Transportation Alternatives (TA) -	MPO	Open to Public Date:		2025
Description:	Construct a continuous 6-foot sidewalk or crossing at the P&L Railroad and an exten over Gagel Avenue at London Drive, then south side. This project will add approxim	nsion of the l construct a	oox culvert on the east side of the rail continuous 6-foot sidewalk from Lon	road tracks. Co	nstruct a crosswalk
Purpose & Need:	There are no pedestrian connections on C minor arterial (Manslick Road). New sides residential corridor to the commercial cor at the P&L Railroad.	walks will pro	ovide safe and accessible pedestrian o	connections fro	m this primarily
FY 20-25 TIP Funding:	FY 2022 Design phase with the following \$222,000 (Federal) + \$55,500 (Other) = \$2 *FY 2024 Right of Way phase with the fol \$133,000 (Federal) + \$33,250 (Other) = \$2 *FY 2025 Construction phase with the fol \$1,057,000 (Federal) + \$264,250 (Other) = \$2 *FY 2025 Construction phase with the fol \$1,057,000 (Federal) + \$264,250 (Other) = \$2 *FY 2025 Construction phase with the fol \$1,057,000 (Federal) + \$264,250 (Other) = \$2 *FY 2025 Construction phase with the fol \$1,057,000 (Federal) + \$264,250 (Other) = \$2 *FY 2025 Construction phase with the following \$222,000 (Federal) + \$264,250 (Other) = \$2 *FY 2025 Construction phase with the following \$222,000 (Federal) + \$264,250 (Other) = \$2 *FY 2025 Construction phase with the following \$222,000 (Federal) + \$264,250 (Other) = \$2 *FY 2025 Construction phase with the following \$222,000 (Federal) + \$264,250 (Other) = \$2 *FY 2025 Construction phase with the following phase with the following phase with the following phase with the following phase	277,500 (Tot lowing TA-N 166,250 (Tot lowing TA-N	ral) IPO funds: ral) IPO funds:		

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

Model Exempt/Non- Exempt Model Impact: No changes to model	TIP Action:	None				
Exempt: Exempt Impact: No Changes to mode	MTP Action:	Add project				
Project Sponsor: Louisville Metro KIPDA ID: NEW State ID: TBD	Exempt/Non-	Model No changes to model				
County Jefferson Parent ID: N/A Total Estimated Cost in MTP (i.e. Ck 2040): Total Cost Programmed in TIP to Date: N/A Funding Source: TBD Open to Public Date: Open to	Exempt:	Exempt	Impact:	NO changes	s to model	
Project Name: Louisville CBD Streetlight Rehabilitation Total Cost Programmed in The to Date: Promoting Source: TBD Open to Public Date: No changes to model No changes to model The Action: Exempt None Exempt None Exempt Model Impact: Project Sponsor: Louisville Metro No County Iefferson Parent ID: Olmsted Parkways Multi-Use Path System Section 1 Total Cost Programmed in TIP to Date: Open to Public Date: Open to Publi	Project Sponsor:	Louisville Metro	KIPDA ID:	NEW	State ID:	TBD
Project Name: Louisville CBD Streetlight Rehabilitation Total Cost Programmed in TIP to Date: N/A Funding Source: TBD Open to Public Date: Overnment. This project is for the rehabilitation including updating to LED lighting or replacement of these street lights. Many of the street lights within the CBD are nearing the end of their useful life and require replacement. This project will identify those street lights requiring replacement and updating to current standards. Purpose & Need: Updating street lights will increase safety for pedestrians and assists in providing a State of Good Repair for Metro streets. PY 20-25 TIP Funding: Model Impact: No changes to model Exempt/Non-Exempt: Project Sponsor: Louisville Metro KIPDA ID: 2622 State ID: 5-3709.00 County Jefferson Parent ID: 1273 Group ID: N/A Project Name: Olmsted Parkways Multi-Use Path System Section 1 Construction of a 2.0 mile shared use path system along Southwestern and Algonquin Parkway between West Broadway and 4st Street. To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop. Fy 20-25 TIP Fy 20-25 TIP Fy 20-25 TIP Fy 20-25 TIP Project Name: Louisville Loop. Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed for Metro Street Street. Purpose & Need: To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop. Fy 20-25 TIP Fy 20-25 TIP Fy 20-25 TIP	County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Funding Source: TBD Open to Public Date: Within the Louisville Central Business District (CBD), the street lights are owned and maintained by Louisville Metro Government. This project is for the rehabilitation including updating to LED lighting or replacement of these street lights. Many of the street lights within the CBD are nearing the end of their useful life and require replacement. This project will identify those street lights requiring replacement and updating to current standards. Purpose & Need: Updating street lights will increase safety for pedestrians and assists in providing a State of Good Repair for Metro streets. FY 20-25 TIP Funding: N/A TIP Action: MTP Action: Mone Exempt, None Exempt, None Exempt Exempt Model Impact: Project Sponsor: Louisville Metro KIPDA ID: 2622 State ID: 5-3709.00 County Jefferson Parent ID: 1273 Group ID: N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Total Cost Programmed in TIP to Date: Total Cost Programmed in TIP to Date: Construction of a 2.0 mile shared use path system along Southwestern and Algonquin Parkway between West Broadway and 41st Street. Purpose & Need: Purpose & Need: PY 20-25 TIP FY 20-25 TIP FY 20-25 TIP FY 20-25 TIP Sy 2000 (Total) Sy 2000 (Total) Assistance and Algonquin Parkways that extend and link to existing and proposed Louisville Loop.	Project Name:	Louisville CBD Streetlight Rehabili	tation	(i.e. CK 2040):	\$1	.,250,000
Description: Within the Louisville Central Business District (CBD), the street lights are owned and maintained by Louisville Metro Government. This project is for the rehabilitation including updating to LED lighting or replacement of these street lights. Many of the street lights within the CBD are nearing the end of their useful life and require replacement. This project will identify those street lights requiring replacement and updating to current standards. Purpose & Need: Updating street lights will increase safety for pedestrians and assists in providing a State of Good Repair for Metro streets. N/A TIP Action: Exempt Model No changes to model Exempt None Exempt Model No changes to model Exempt Project Sponsor: Louisville Metro KIPDA ID: 2622 State ID: 5-3709.00 County Jefferson Parent ID: 1273 Group ID: N/A Project Name: Olmsted Parkways Multi-Use Path System Section 1 Funding Source: Surface Transportation Block Grant (STBG) - MPO Open to Public Date: S2,750,000 Funding Source: Construction of a 2.0 mile shared use path system along Southwestern and Algonquin Parkway between West Broadway and 41st Street. To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop. FY 20-25 TIP FY 20-25 TIP S 2000 (Other) S 27 50 000 (Total) S 27 50 0	-					N/A
Description: Government. This project is for the rehabilitation including updating to LED lighting or replacement of these street lights. Many of the street lights within the CBD are nearing the end of their useful life and require replacement. This project will identify those street lights requiring replacement and updating to current standards. Purpose & Need: Updating street lights will increase safety for pedestrians and assists in providing a State of Good Repair for Metro streets. FY 20-25 TIP Funding: N/A TIP Action: MTP Action: MTP Action: Exempt No changes to model Exempt: Project Sponsor: Louisville Metro KIPDA ID: 2622 State ID: 5-3709.00 County Jefferson Parent ID: 1273 Group ID: N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Surface Transportation Block Grant (STBG) - MPO Open to Public Date: 2023 Construction of a 2.0 mile shared use path system along Southwestern and Algonquin Parkway between West Broadway and 41st Street. Purpose & Need: FY 20-25 TIP ST 2000 (State ID: FY 20-25 TIP ST 2000 (State ID:	Funding Source:	TBD		Open to Public Date:		2022
FY 20-25 TIP Funding: N/A TIP Action: Add project MTP Action: None Exempt/Non- Exempt: Exempt Model Impact: No changes to model Project Sponsor: Louisville Metro KIPDA ID: 2622 State ID: 5-3709.00 County Jefferson Parent ID: 1273 Group ID: N/A Project Name: Olmsted Parkways Multi-Use Path System Section 1 Funding Source: Surface Transportation Block Grant (STBG) - MPO Open to Public Date: 2023 Description: Construction of a 2.0 mile shared use path system along Southwestern and Algonquin Parkway between West Broadway and 41st Street. Purpose & Need: FY 20-25 TIP Suppose Section 1 FY 20-21 Construction phase with the following STBG-MPO funds: 52,750,000 (Other) = 52,750,000 (Total) (Total)	Description:	Government. This project is for the reha Many of the street lights within the CBD	bilitation incl are nearing t	uding updating to LED lighting or repl he end of their useful life and require	acement of the	se street lights.
TIP Action: Add project MTP Action: None Exempt/Non- Exempt:	Purpose & Need:	Updating street lights will increase safet	y for pedestri	ans and assists in providing a State of	Good Repair fo	or Metro streets.
MTP Action: Exempt/Non- Exempt: Project Sponsor: Louisville Metro KIPDA ID: Parent ID: Project Name: Olmsted Parkways Multi-Use Path System Section 1 Funding Source: Surface Transportation Block Grant (STBG) - MPO Description: Purpose & Need: Py 20-25 TIP Fy 20-25 TIP Project Sponsor: Louisville Metro KIPDA ID: Model Impact: No changes to model N		N/A				
Exempt Non-Exempt: Exempt Model Impact: No changes to model	TIP Action:	Add project				
Project Sponsor: Louisville Metro KIPDA ID: 2622 State ID: 5-3709.00	MTP Action:	None				
County Jefferson Parent ID: 1273 Group ID: N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Surface Transportation Block Grant (STBG) - MPO Description: Construction of a 2.0 mile shared use path system along Southwestern and Algonquin Parkway between West Broadway and 41st Street. Purpose & Need: To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop. FY 20-25 TIP FY 20-25 TIP Secription: Parent ID: 1273 Group ID: N/A N/A N/A Open to Public Date: 2023 Construction of a 2.0 mile shared use path system along Southwestern and Algonquin Parkway between West Broadway and 41st Street. FY 20-25 TIP FY 20-21 Construction phase with the following STBG-MPO funds: Secription: Secription: To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop. FY 20-25 TIP		Exempt		No changes to model		
Project Name: Olmsted Parkways Multi-Use Path System Section 1 Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Surface Transportation Block Grant (STBG) - MPO Open to Public Date: Construction of a 2.0 mile shared use path system along Southwestern and Algonquin Parkway between West Broadway and 41st Street. Purpose & Need: To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop. FY 20-25 TIP FY 20-25 TIP FY 20-25 TIP Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: 2023 2023 FY 2023 FY 2021 Construction phase with the following STBG-MPO funds: \$2,750,000 (Total)	Project Sponsor:	Louisville Metro	KIPDA ID:	2622	State ID:	5-3709.00
Project Name: Olmsted Parkways Multi-Use Path System Section 1 (i.e. CK 2040): Total Cost Programmed \$2,750,000 in TIP to Date: Surface Transportation Block Grant (STBG) - MPO Open to Public Date: Construction of a 2.0 mile shared use path system along Southwestern and Algonquin Parkway between West Broadway and 41st Street. Purpose & Need: To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop. FY 20-25 TIP FY 2021 Construction phase with the following STBG-MPO funds: \$2,750,000 (Total)	County	Jefferson	Parent ID:	1273	Group ID:	N/A
Funding Source: Surface Transportation Block Grant (STBG) - MPO Open to Public Date: 2023 Construction of a 2.0 mile shared use path system along Southwestern and Algonquin Parkway between West Broadway and 41st Street. Purpose & Need: To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop. FY 20-25 TIP FY 20-25 TIP FY 20-25 TIP FY 20-25 TIP Total Cost Programmed \$2,750,000 Open to Public Date: 2023 To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop. FY 20-25 TIP FY 20-25 TIP FY 20-25 TIP Total Cost Programmed \$2,750,000 Open to Public Date: 2023	Duningt Names	Classical Deglaces Multi-Har Deth Costs			N/A	
Description: Construction of a 2.0 mile shared use path system along Southwestern and Algonquin Parkway between West Broadway and 41st Street. To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop. FY 20-25 TIP	Project Name:	Olmsted Parkways Multi-Use Path System Section 1			\$2,750,000	
Purpose & Need: Purpose & Need: To improve and enhance bicycle and pedestrian access opportunities along parkways that extend and link to existing and proposed Louisville Loop. FY 20-25 TIP	Funding Source:	Surface Transportation Block Grant (ST	BG) - MPO	Open to Public Date:		2023
Purpose & Need: proposed Louisville Loop. FY 20-25 TIP	Description:	-	th system alo	ng Southwestern and Algonquin Park	way between \	West Broadway and
\$2 200 000 (Federal) + \$550 000 (Other) = \$2 750 000 (Total)	Purpose & Need:	proposed Louisville Loop.			extend and link	to existing and
L L						

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Update open to public (OTP) date and modify TIP funding				
MTP Action:	Update open to public (OTP) date				
Exempt/Non- Exempt:	Non-Exempt Model Remove project from 2020 scenario			rio	
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	One Way Street Conversion to Tue Way Phase 1		\$4,390,000	
		.,	Total Cost Programmed in TIP to Date:	\$4,390,000	
Funding Source:	Surface Transportation Block Grant (ST	BG) - MPO	Open to Public Date:		2021 2020
Description:	Design and construction for the conversi Jefferson Street (Floyd to Baxter Avenue Connector); Chestnut Street (Jackson to Street (Gray to Main Street); and Campb); Liberty Stre Chestnut Con	eet (Jackson to Baxter); Muhammad A nnector); 8th Street (Kentucky to Main	li Blvd. (Jacksor	to Chestnut
Description: Purpose & Need:	Jefferson Street (Floyd to Baxter Avenue Connector); Chestnut Street (Jackson to); Liberty Stre Chestnut Con ell Street (Che ers of traffic, k e for higher t t as certain b erous. They t he area, they	eet (Jackson to Baxter); Muhammad Annector); 8th Street (Kentucky to Main estnut to Main Street). but can often introduce safety concertravel speeds than two-way streets an usinesses have a formal policy against tend to have slower travel speeds than provide better access to both busine	li Blvd. (Jackson n); 7th Street (Construction ns for motorist d in some case t locating on or n one-way stre	n to Chestnut lack to Main); Shel s, bicyclists and s hinder ne-way streets. ets, they reduce

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Change project sponsor, update open to public (OTP) date and add TIP funding				
MTP Action:	Change project sponsor and update open to public (OTP) date				
Exempt/Non- Exempt:	Non-Exempt Model Impact:		No changes to model		
Project Sponsor:	Oldham County KYTC KIPDA ID:		414	State ID:	TBD
County	Oldham Parent ID		N/A	Group ID:	N/A
Project Name:	KY 22		Total Estimated Cost in MTP (i.e. CK 2040):	\$1	2,140,000
Project Name.	KY ZZ		Total Cost Programmed in TIP to Date:	\$	281,250 \$0
Funding Source:	Surface Transportation Block Grant (STBG) - MPO Open to Public Date: 2030 2028				
Description:	Improve safety and reduce congestion on KY 22 from Haunz Lane to KY 329. Includes consideration of a three lane widening and bike/ped accommodations.				
Purpose & Need:	The purpose of this project is to improve safety and reduce congestion on KY 22 from Haunz Lane to KY 329. This project is needed because the crash rate is high (particularly at the end of the project near KY 329), multiple roadway deficiencies exist, and projected growth results in inadequate capacity on KY 22 from Haunz Lane to KY 329. Roadway deficiencies include horizontal curves and numerous vertical curves. Continued development in the area along this corridor will contribute to congestion issues in the future.				
FY 20-25 TIP Funding:	FY 2021 Planning phase with the following STBG-MPO funds: \$225,000 (Federal) + \$56,250 (Other) = \$281,250 (Total)				

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Remove project from the first four years	of the FY 20	20 - 2025 TIP, modify TIP funding and	update open t	o public (OTP) date	
MTP Action:	Update open to public (OTP) date					
Exempt/Non- Exempt:	Non-Exempt Model Impact:			No changes to model		
Project Sponsor:	Oldham County	KIPDA ID:	2615	State ID:	TBD	
County	Oldham	Oldham Parent ID: N/A Group ID:		N/A		
Project Name:	Total Estimated Cost in MTP \$3,279,688 (i.e. CK 2040): Total Cost Programmed \$406,250 in TIP to Date: \$3,279,688					
Funding Source:	Surface Transportation Block Grant (ST	BG) - MPO	Open to Public Date:		2030 2026	
Description:	Construct a new urban roadway section to connect KY 146 and KY 393 Bypass in Crestwood. The proposed facility will be three-lanes with a continuous, center left-turn lane, curb, gutter, a sidewalk, and a potential traffic signal. Lane width will be 11 feet with a proposed posted speed of 25 MPH.					
Purpose & Need:	The purpose of this project is to improve access and mobility within the northern portion of Crestwood by improving connectivity between KY 329 B and KY 146. The development of a new roadway connector between these facilities will reduce congestion at the existing intersection between KY 329 B and KY 146 and increase travel alternatives for residents and truck traffic while also providing greater access to the South Oldham school campus.					
	*FY 2024 Design phase with the followin \$325,000 (Federal) + \$81,250 (Other) = \$	_				
	FY 2020 Design phase with the following \$0 (Federal) + \$468,750 (Other) = \$468,7		-			
FY 20-25 TIP Funding:	FY 2021 Right of Way phase with the foll \$0 (Federal) + \$143,750 (Other) = \$143,7	_	funds:			
	FY 2022 Utilities phase with the following \$0 (Federal) + \$664,063 (Other) = \$664,0	-	÷			
	FY 2023 Construction phase with the foll \$0 (Federal) + \$2,003,125 (Other) = \$2,00					

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Revise project name, update open to pul		e, revise description and add new TI	IP funding	
MTP Action:	Revise project name, update total estimated cost, update open to public (OTP) date and revise description				
Exempt/Non- Exempt:					
Project Sponsor:	University of Louisville	KIPDA ID:	2150	State ID:	5-8805.00
County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	Campus Improvements Floyd Street Roundabout, Cardinal Boulevard, Brandies Arthur Street Intersection and Other Belknap Campus Improvements Total Estimated Cost in MTP (i.e. CK 2040): \$27,037,500 (i.e. CK 2040): \$24,000,000 Total Cost Programmed \$14,687,500 in TIP to Date: \$11,650,000				1,000,000 1,687,500
Funding Source:	Surface Transportation Block Grant (STBG) - MPO Open to Public Date: 2022 2021				
Description:	multimodal improvements at the South 3rd Street and Brandeis intersection and along W. Brandeis Avenue between South 3rd Street and South 4th Street. Project would provide better connectivity between new university facilities with the main Belknap campus by the creation a multi-modal corridor along W. Brandeis Avenue between South 3rd Street and South 4th Street. The proposed multi-modal corridor would improve pedestrian and bicycle safety with the creation of a designated street crossing location and also include geometric improvements to South 3rd Street with the straightening of the turn lane and thru lanes southbound at the W. Brandeis Avenue intersection. D&C for Multi-modal directional non-vehicle and vehicle safety project at UofL Belknap. 1st year to include construction fundsfor roundabout at Floyd Street and Cardinal Boulevard, and intersection at Brandeis and Arthur Street. UofL Foundation will-pay upfront \$4.5M of \$22.5M (80/20) in 1st year. (14CCN). CHAF IP20160278.				
Purpose & Need:	The following needs have been identified for this project: 1) Improve Roadway Safety, 2) Improve Access and Increase Capacity for all vehicle types.				
FY 20-25 TIP Funding:	FY 2021 Design phase with the following STBG-MPO funds: \$180,000 (Federal) + \$45,000 (Other) = \$225,000 (Total) FY 2022 Utilities phase with the following STBG-MPO funds: \$750,000 (Federal) + \$187,500 (Other) = \$937,500 (Total) FY 2022 Construction phase with the following STBG-MPO funds: \$1,500,000 (Federal) + \$375,000 (Other) = \$1,875,000 (Total)				

^{*} This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four active years of the FY 2020 - 2025 TIP.

PERFORMANCE MANAGEMENT PLAN

UPDATED NOVEMBER 2020



KIPDA PERFORMANCE MANAGEMENT PLAN

	TRANSIT						
REQUIRED BY:			PERFORMANCE MEASURE	Baseline		TARGET	
				R	IDERSHIP		
МРО	<u>1</u>	<u>1</u>	Transit Ridership	11,811,902	Boardings on TARC buses during FY 2017	Increase by 20% by 2040 to 14,174,282 boardings	
				AG	e of Fleet		
			Percent of non-revenue vehicles	<mark>27%</mark>	of TARC's non-revenue service vehicle fleet (equipment) exceed the ULB	≤ 25% of non-revenue service vehicles exceed default ULB of 8 years	
		<u>(a)</u>	exceeding the useful life benchmark (ULB)	<mark>53%</mark>	of TARC's trucks and other rubber tire vehicles exceed the ULB	≤ 50% of truck and other rubber tire vehicle fleet exceeds default ULB of 10 years	
FTA	<u>T2</u>			<mark>29%</mark>	of TARC's revenue bus fleet (rolling stock) exceed the ULB	≤ 20% of bus fleet exceeds ULB of 15 years	
	<u>(b</u>	<u>(b)</u>	Percent of revenue vehicles exceeding the useful life benchmark (ULB)	<mark>3%</mark>	of TARC's revenue cutaway bus fleet (rolling stock) exceed the ULB	0% of cutaway bus fleet exceeds ULB of 10 years	
				<mark>0%</mark>	of TARC's revenue van fleet exceed the ULB	≤ 10% of van fleet exceeds ULB of 8 years	
			Trans	IT ACCESS T	o Clusters and Schools		
		<u>(a)</u>	Community Access Clusters served by transit	91.03%	of land area within these clusters are within $\frac{1}{2}$ mile of a transit route	Increase to 100% by 2040	
МРО	Т3	<u>(b)</u>	High Density Medical Clusters served by transit	100%	of land area within these clusters are within $\frac{1}{2}$ mile of a transit route	Maintain at current levels in 2040	
	13	<u>(c)</u>	High Density Shopping Clusters served by transit	100%	of land area within these clusters area within $\frac{1}{2}$ mile of a transit route	Maintain at current levels in 2040	
		<u>(d)</u>	High Density Housing Clusters served by transit	TBD	of land area within these clusters are within ¼ mile of a transit route	Increase by 20% by 2040	
МРО	I	<u>'4</u>	Enhance transit access to schools	230	Schools are within ¼ mile of a transit route	Increase by 20% by 2040 to 276 schools	

KIPDA PERFORMANCE MANAGEMENT PLAN

	TRANSIT (CONTINUED)					
REQUIRED BY:	PERFORMANCE MEASURE			BASELINE	TARGET	
			НЕА	ADWAY TIME		
МРО	<u>T5</u>	Reduce average headway time on TARC's defined Title VI routes	1:04	Average weekday headway time on TARC Title VI Routes	Reduce by 40% by 2040 to 0:38 average weekday headway time	
		Pari	K AND RID	E LOTS AND RIDESHARE		
МРО	<u>T6</u>	Number of Park and Ride lot spaces occupied during peak hours	TBD	# of Park and Ride lot spaces that are occupied during weekday business hours	Increase by 40% by 2040	
MPO	<u>(a)</u>	Number of Park and Ride lots with pedestrian access	24	Park and Ride lots have pedestrian access	Increase by 20% by 2040 to 29 lots	
WIFO	<u>T7</u> (b)	Number of Park and Ride lots with dedicated bicycle access	3	Park and Ride lots have dedicated bicycle access	Increase by 10% by 2040 to 4 lots	
МРО	<u>T8</u>	Number of commuters in the Ticket to Ride program	1,377	Active commuters in the Ticket to Ride program	5,000 commuters in the Ticket to Ride program by 2040	
	TARC FACILITIES					
FTA	<u>T9</u>	Transit Facilities	<mark>11%</mark>	of admin/maintenance facilities rated under 3.0 on the TERM scale	0% of admin/maintenance facilities rated under 3.0 on the TERM scale	

KIPDA PERFORMANCE MANAGEMENT PLAN

FTA-REQUIRED MEASURES

This section includes all four FTA performance measures that are required per federal regulation <u>49 CFR</u> Part 625 and 49 CFR Part 630.

<u>T2a - Percent of Non-Revenue Service Vehicles Exceeding ULB - 625.43(a)</u> <u>T2b - Percent of Revenue Vehicles Exceeding ULB - 625.43(b)</u>

Detailed Description

These performance measures seek to reduce the percent of TARC's transit fleet, both non-revenue service vehicles (equipment) and revenue vehicles (rolling stock), that are classified as above the useful life benchmark (ULB). These measures are primarily a maintenance component, ensuring transit vehicles are in a state of good repair.

Data Sources and Review Frequency

- Age of transit fleet, percent above the useful life: TARC
 - This data is available on an ongoing basis, thus it will be updated yearly.

Historical Data

The availability of historical data of this type varies. Data regarding the age and mileage of the transit fleet exists, but the percentage of all types of vehicles below the ULB was not calculated historically.

Baseline Data

KIPDA Staff use fleet data provided by TARC Staff to calculate the baseline condition.

Transit Agency Targets

o TARC: Transit Authority of River City

Class	Performance Target
Automobile	≤ 25% of non-revenue service vehicles exceed default ULB of 8 years
Buses	≤ 20% of fleet exceeds default ULB of 15 years
Cutaway Buses	0% of fleet exceeds default ULB of 10 years
Trucks and Other Rubber Tire Vehicles	≤ 50% of fleet exceeds default ULB of 10 years
Vans	≤ 10% of fleet exceeds default ULB of 8 years

Target (as required by FTA)

These are the targets that are established in TARC's Transit Asset Management Plan (TAM) which was last updated in July 2020.

Target-Setting Methodology

TARC set targets that could be reasonably attained.

KIPDA PERFORMANCE MANAGEMENT PLAN

<u>T9 - Percent of Facilities Rated Under 3.0 on the TERM Scale - 625.43(d)</u> **Detailed Description**

This performance measure seeks to reduce the percent of TARC's facilities that are rated below condition 3 on FTA's <u>Transit Economic Requirements Model (TERM)</u> scale. Transit agencies are required to report the overall condition of each administrative, maintenance, and passenger facility that is listed in the NTD Asset Inventory Module. The overall condition of a facility is specified using the following scale: 5—Excellent, 4—Good, 3—Adequate, 2—Marginal, 1—Fair. A facility is deemed to be in good repair if it has a condition rating of 3, 4, or 5 on this scale and is deemed to not be in good repair if it has a rating of 1 or 2.

Data Sources and Review Frequency

- Facility condition rating: TARC
 - Transit agencies must update facility conditions every three years at a minimum, thus this will be updated every 3 years.

Historical Data

Data regarding the historical condition of transit facilities is unlikely to exist.

Baseline Data

KIPDA Staff used data provided by TARC

Transit Agency Target

o TARC: Transit Authority of River City

Class	Performance Target	
Admin/Maintenance	0% of facilities rated under 3.0 on the TERM scale	
Facilities	0% of facilities faced under 5.0 off the TERM scale	

Target (as required by FTA)

This is the target that is established in TARC's Transit Asset Management Plan (TAM) which was last updated in July 2020.

Target-Setting Methodology

TARC set targets that could be reasonably attained.

AIR QUALITY CONFORMITY

The Louisville, KY-IN transportation planning study area consists of Clark and Floyd counties and 0.1 square miles of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and approximately 4 square miles of Shelby County in Kentucky. Much of this area coincides with the local ozone nonattainment area. In the past, a portion of the planning study area also coincided with a local 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 nonattainment 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. One of the requirements of this designation as a nonattainment area is that it will once again be necessary to determine conformity for the local area.

KIPDA is amending *Connecting Kentuckiana 2040*, the metropolitan transportation plan (MTP) and the FY 2021 – FY 2025 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 both 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.

Subsequent to being designated as nonattainment of the 1997 8-hour ozone standard and prior to being redesignated as attainment of the standard, the Louisville area relied on the use of interim tests to demonstrate conformity. These tests had been established during a 2004 update to the federal conformity rule. When the Louisville area was designated as nonattainment of the 2015 8-hour ozone standard, there were no MVEBs for that standard. However, there were MVEBs for the 1997 8-hour ozone standard, and they were used in the process of determining conformity to both the 1997 and 2015 standards.

When the local area was designated as nonattainment of the 1997 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 the actions to reduce precursor emissions were to be incorporated into the Indiana and Kentucky SIPs. It was during this process that MVEBs were established. Originally, the SIPs were to include sets of actions to bring the local area into attainment of the ozone standard. This type of SIP is known as an attainment demonstration. However, while these SIPs were being developed, the data from the air quality monitors in the area indicated that the 1997 8-hour ozone standard had been met. With this data in hand, the air quality agencies were able to submit a SIP known as a redesignation request instead. 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.

CONSULTATION FOR CONNECTING KENTUCKIANA 2040

The first step in determining conformity of *Connecting Kentuckiana 2040* was to consult with the interagency consultation (IAC/ICG) group concerning matters not explicitly determined by the conformity rule. Conformity under the 1997 8-hour ozone standard had been previously determined. Therefore, many of the issues normally arising in conformity had undergone consultation previously. Since these issues were not raised during consultation this time, the portions of the analysis involving those issues were accomplished consistent with established practice.

A consultation zoom meeting was held on October 6 to discuss issues relative to the amendment of the MTP. It involved a review and discussion of the following items:

(a) important dates in the schedule for the amendment;

October 23 -- Regional Emissions (Air Quality) Analysis completed

October 24 -- Public Review begins

November 10 -- Action by the Transportation Technical Coordinating

Committee

November 24 -- Action by the Transportation Policy Committee

November 25 -- Documentation sent to review agencies for the federal

conformity determination;

- (b) a draft list of projects—sent to the IAC/ICG with consultation notice—included in accompanying documentation;
- (c) the horizon year of the transportation plan—2040;
- (d) the proposed conformity test methodology/ies and analysis years—see the discussion of issues and ESTABLISHED PRACTICE sections below:

- (e) the pollutant(s)/precursor(s) of concern and the motor vehicle emissions budget(s), if applicable—see table 2 at the end of the report;
- (f) information concerning the inputs for the travel demand model and the approved emissions model—see the issues section below, the list of projects included in accompanying documentation, and the items concerning the travel demand model and emissions model under Other Planning Issues; and
- (g) a listing of any transportation control measures (TCMs) in SIPs, if applicable—there are none.

Issues

Discussion of Schedule

KIPDA staff discussed the schedule for amendment 2. There were no questions concerning the amendment schedule.

Discussion of Projects

KIPDA staff had provided the IAC/ICG with a list of 28 projects that will be amended in *Connecting Kentuckiana 2040*. The projects are a mix of new projects and projects already in the MTP that were being amended. Key details about the projects were presented in the list, including recommendations on whether each project was exempt or non-exempt and how the projects were included in or excluded from the regional travel demand model.

KIPDA staff pointed out to the IAC/ICG that the project list was in a new format. A question was asked about including a date indicating when each project was amended into the MTP or TIP. KIPDA staff indicated that amendments are currently documented on KIPDA's website. There were no other comments concerning the project sheet format.

KIPDA staff noted that the Sherman Minton Bridge Maintenance project, KIPDA IDs 2533 and 351, is part of an accompanying Administration Modification. The changes in the project are limited to the schedule and funding, which makes it unnecessary to have those changes in this amendment.

Other points of discussion of the projects included:

Galene Dr/Sprowl Rd Collector Extension, KIPDA ID 2774: A clarification was
requested about the increase in capacity associated with this project. KIPDA staff
indicated that the project involved aligning two offset intersections and a minor
extension of Sprowl Rd to Watterson Trail via Shelby St and/or Bluebird Ln.
Therefore, the increase in capacity is minor. There were no other comments or
questions concerning this project.

Baxter/Bardstown Premium Transportation Corridor – Section 1, KIPDA ID 1353: A question was asked about how changes in modeling were done for this project. KIPDA staff indicated that the KIPDA model does not include a robust transit component that models changes in transit directly. It also was noted that the funding for this project was not for transit. The questioner indicated that she was aware of the funding situation but reiterated the importance of continuously improving the travel demand model to measure the effects of transit projects.

Conclusion: The IAC/ICG members, after discussing the details of the projects listed above, accepted the recommendations of KIPDA staff concerning the incorporation of these projects and the other projects described in the documentation into the regional emissions analysis.

Discussion of the Conformity Analysis

KIPDA staff discussed the key components of the conformity analysis that are expected to be presented to the KIPDA TPC in November. The analysis years will be the ones that were used when the existing MTP was previously amended.

The Budget Test utilizing the Year 2020 Motor Vehicle Emissions Budgets created for the 1997 8-Hour Ozone Standard will continue to be used until a new set of budgets are established. By not exceeding these budgets in the year 2020, 2025, 2030, 2035, and 2040 travel model scenarios, *Connecting Kentuckiana 2040* will demonstrate conformity to both the 1997 and 2015 8-Hour Ozone Standards.

The pollutants of concern are the precursors of Ozone, volatile organic compounds (VOCs) and oxides of Nitrogen (NOx). The emission budgets for these pollutants are 20,793 kg/day and 26,726 kg/day, respectively.

Louisville Metro Air Pollution Control District (LMAPCD) staff reported that he had recently prepared the 2017 Indiana fleet data for use in the MOVES model. He made a PowerPoint presentation concerning his analysis of the new Indiana fleet data and the results of that analysis. He will be using that data in the upcoming analysis. MOVES 2014b will be used for the analysis.

NOTE: (See also the "Analysis Years and Conformity Tests" portion of the "ESTABLISHED PRACTICE" section below for more information on these issues.)

KIPDA Staff offered the opportunity for any other business or questions to be brought to the IAC/ICG. There was no other business discussed.

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 consultation zoom meeting of October 6, 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/ICG 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.

<u>Issues related to the KIPDA travel demand forecasting model</u>

During recent changes to the MTP, there were three changes of note to the KIPDA travel demand forecasting model.

- (1) First, the census urbanized area now includes a small area in northwest Shelby County, KY. The metropolitan planning area was updated to reflect the 2010 census urbanized area. This area was added to the KIPDA travel demand forecasting model in order to be consistent with the census urbanized area. Because this section of Shelby County is not in the local nonattainment, the vehicle-miles-traveled calculated for this area are not included in the regional emissions analysis.
- (2) Second, the proposed toll structure for the Louisville Southern Indiana Ohio River Bridges project changed earlier this year. Changes were made to the KIPDA travel demand forecasting model to reflect the changes in the toll structure.
- (3) During recent years, KIPDA staff have updated and calibrated the travel demand forecasting model. This activity involved updating the inputs to the model and developing new values for the parameters of the model. The resulting model was considered calibrated when the model outputs matched observed data (e.g. HPMS VMT), within reason, for the baseyear. This update established 2015 as the baseyear (the year on which calibration was based) for the model.

Conclusion: The IAC/ICG members have been informed that the KIPDA travel demand forecasting model has been updated and calibrated and that 2015 is now the baseyear for the model.

Analysis Years and Conformity Tests

Motor Vehicle Emissions Budgets (MVEBs) for the 1997 8-hour ozone standard were approved by EPA in July, 2007. The MVEBs were for the precursors of ozone, volatile organic compounds (VOCs) and oxides of Nitrogen (NOx), The Federal Register notice can be found at 72 FR 36601. The budgets are shown in Table 2 at the end of this document. Since there are MVEBs for the ozone precursors, the conformity rule requires that ozone analyses be done for the attainment year and the last year of the transportation plan. In addition, other intermittent year(s) are required such that no two analysis years are more than ten years apart. The maintenance plan established when the local area was redesignated established MVEBs for VOCs and NOx for 2003 (the attainment year) and 2020 (the last year of the maintenance plan). Since the attainment year is now in the past, that year is no longer included in the analysis.

In order to have the required analysis years, several changes were made in recent years. During an amendment of the MTP in 2013, it was necessary to replace 2012 as an analysis year because it was in the past, and 2015 was chosen. When the MTP was updated in 2020, the horizon year of the plan was being changed to 2040, and that year had to be added to the analysis years. At the same time, in order to allow for more orderly transition as time progressed, 2025 and 2035 have been added as analysis years, allowing for analysis years every five years. By having the analysis years five years apart throughout the life of the MTP, it was noted that there would always be an analysis year within five years of the time of the analysis. Further, when the horizon year of the MTP is extended, that year will be added as an analysis year. Otherwise, the analysis years can remain constant except for the removal of an analysis year when it occurs in the past. Recently, 2015 was removed because it is in the past. Because of the previous practice to have analysis years five years apart, it was not necessary to add another analysis year. 2020 was already an analysis year and within five years of the present.

Conclusion: The established practice is that the analysis years and conformity tests for the regional emissions analysis are as shown in the tables below. Years prior to the present year have been removed from the list.

1997 8-hour Ozone Standard					
Analysis Year	Conformity Test(s)				
2020	Budget test using the 2020 MVEBs for the 1997 8-hour standard				
2025	Budget test using the 2020 MVEBs for the 1997 8-hour standard				
2030	Budget test using the 2020 MVEBs for the 1997 8-hour standard				
2035	Budget test using the 2020 MVEBs for the 1997 8-hour standard				
2040	Budget test using the 2020 MVEBs for the 1997 8-hour standard				

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/ICG. As discussed above, the vehicle registration data now being used for the Indiana counties has been updated to 2017, and the registration data now being used for the Kentucky counties is for 2018. This data represents the most recent information available for this issue.

Conclusion: Based on a consensus of the IAC/ICG members, vehicle registration data for 2017 for the Indiana counties and for 2018 for the Kentucky counties is now being used in developing emission estimates.

CONFORMITY OF CONNECTING KENTUCKIANA 2040

The MTP, Connecting Kentuckiana 2040, 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 2040* 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 2040* 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 the 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 the amendment of *Connecting Kentuckiana 2040*, a group of projects had been proposed for 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 being exempt, non-exempt, etc. 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/ICG as described under the section entitled "CONSULTATION FOR CONNECTING KENTUCKIANA 2040." (please see above.) Those projects in Connecting Kentuckiana 2040 which were not changed were analyzed as they had been previously. The projects which were newly added to the MTP or had been changed in Connecting Kentuckiana 2040 were analyzed as indicated on the list provided to IAC/ICG.

In addition, there were several projects which could not be analyzed using the travel model. In the past, most of these projects had been evaluated using spreadsheet methods factors. 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.

Also, there was one project affecting Bullitt County that could not be included in the travel model. Unlike the projects described in the paragraph above, this project could have the potential to increase emissions. Therefore, a special effort was made to include its impacts in the analysis of travel behavior impacts and, consequently, in the regional emissions analysis. This project is the relocated (southern) section of US 31E. This project, which had been discussed during consultation in the past, involves 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 were developed using a spreadsheet approach. The VMT estimates were the product of the estimated traffic volumes for each of the analysis years and the length of the relocated section in Bullitt County. The VMT estimates for this project were then added to other Bullitt County VMT estimates of the same functional class. Consequently, the VMT estimates from this project were included with the other Bullitt County VMT, and the emissions in Bullitt County associated with this project were included in the overall emission estimates for Bullitt County.

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 consists of Clark and Floyd counties, and 0.1 square miles in Harrison County 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 recently. This update established 2015 as the new base year for the model. The model update utilized the information incorporated into the travel model during previous updates. In particular, information from the 2000 KIPDA Household Travel Survey had been previously incorporated. Information from 2010 Census, the 2012-2016 American Community Survey, the 1990 and 1995 National Personal Transportation Surveys, and the 2001 and 2009 National Household Travel Surveys was incorporated to update the previous source data, particularly the 2000 KIPDA Household Travel Survey. During the update, the model parameters were adjusted such that the model output matched—within reason—three 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; (2) the distribution of trip lengths (duration in time) for each of the main trip purposes used in the model; and (3) 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 2015. 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. 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 and utilizes different trip rates for each. 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.

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. The friction factors used in the gravity model were developed as part of the calibration effort performed during the model update. In addition, information from a study which investigated the behavior of travelers crossing the Ohio River and traffic count information from years near 2015 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.

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 2040* utilizes transit information from the previous travel demand model. 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 2040* 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 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 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 MTP update, the time penalties used in the KIPDA travel model were likewise changed to reflect the effect of the new toll structure.

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 2015. 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 2015 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 2015 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).

The HERS equations were used to estimate speeds on 6239 sections for five functional classifications of urban roadways and 2278 sections 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.

There were not many HPMS minor collector and local roadway sections with data that allowed for the calculation of adjustment factors. Since the model contained the minor collector roadways in the area and these roadways were similar to the major collector roadways in the area, the adjustment factor for the rural major collectors was used for the rural minor collector roadways, and the adjustment factor for the urban major collectors was used for the urban minor collector roadways.

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 provided adjusted travel model output data in the form of vehicle-miles-traveled (VMT), VMT by speed bin, and VMT fractions by speed bin by county and by MOBILE 6 facility type to the staff of the Louisville Metro Air Pollution Control District (LMAPCD). LMAPCD 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). They then provided these estimates to KIPDA staff. This analysis is explained below in further detail in the section below.

MOVES Emissions Model

As previously mentioned, the Louisville region is a nonattainment 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 emissions model. The staff of the Louisville Metro Air Pollution Control District (LMAPCD) produced the emissions for all of the counties in the nonattainment 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/ICG partners.

The assumptions used in developing the emissions for Clark, Floyd, and Jefferson (KY) counties were the same as those that were used in developing the ozone budget update (for VOCs and NOx) in 2003 with a few exceptions where newer data was incorporated. 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 2017) for Clark and Floyd counties (provided by INDOT),
- (3) the development and use of newer vehicle registration data (for 2018) for Jefferson County (KY), 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 LMAPCD. Most of the inputs to the MOVES model were defaults and/or data used that was consistent with previous SIPs. 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 or had only been designated under the 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 was modeled the same as for Jefferson County.

The assumptions used for Bullitt and Oldham counties were consistent with those for the 2003 ozone budget update with the following exceptions:

- (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) new 2018 vehicle registration data for Bullitt and Oldham counties, and
- (4) improvements in internal model calculations to account for emission controls, driving profiles and engine characteristics.

LMAPCD developed emission estimates of VOCs and NOx using the MOVES model. To review, the following steps were undertaken.

- (1) LMAPCD staff received (from KIPDA staff) the adjusted travel model output in the form of VMT, VMT by speed bin, and VMT fractions by speed bin, all by county and by MOBILE facility type by analysis year.
- (2) LMAPCD reformatted the data from KIPDA to prepare it as input to the MOVES model. Other necessary data was also prepared.
- (3) The MOVES model was run in inventory mode to determine emission estimates of each precursor for each county for each analysis year.
- (4) LMAPCD staff provided the emission estimates to KIPDA staff.

RESULTS OF THE ANALYSIS

The transportation plan, *Connecting Kentuckiana 2040*, 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 maintenance 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 and 2. Table 1 shows the summer weekday vehicle-miles-traveled from the analysis. Table 2 shows that for 2020, 2025, 2030, 2035 and 2040, the summer weekday VOC and NOx emission levels for the 2015 8-hour nonattainment area are less than the emission budgets established in the 1997 8-hour ozone maintenance SIP.

Conclusions - 8-hour Ozone

The regional emissions analysis of *Connecting Kentuckiana 2040* 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 Table 2 indicates that *Connecting Kentuckiana 2040* has met the requirements of conformity under the 1997 and 2015 8-hour ozone standards. In summary, it can be concluded that *Connecting Kentuckiana 2040* 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			
2020	7346	25934	33280			
2025	7888	27299	35187			
2030	8427	28715	37142			
2035	8962	30052	39014			
2040	9442	31183	40625			

TABLE 2

SUMMER WEEKDAY EMISSIONS FOR THE 8-HOUR NONATTAINMENT AREA (kg/day)						
EMISSION LEVELS FOR VARIOUS YEARS						
YEAR	Area	VOCs	NOx	PASS		
2020	Regional	13054	25586	YES		
2025		8845	16368	YES		
2030		5912	10852	YES		
2035		4739	8680	YES		
2040		4503	8351	YES		

NOTE: The criteria for conformity are as follows:

2020, 2025, 2030, 2035, and 2040 Regional emission levels for VOCs must be below the maintenance plan emission budget of 22.92 tons/day or 20,793 kg/day.

2020, 2025, 2030, 2035, and 2040 Regional emission levels for NOx must be below the maintenance plan emission budget of 29.46 tons/day or 26,726 kg/day.



Connecting Kentuckiana 2040 Metropolitan Transportation Plan Amendment 2 FY 2020-2025 Transportation Improvement Program Amendment 2 Interagency Consultation Group Conference Call Meeting Minutes October 6, 2020 3:00 PM EDT

Participants:

FHWA – Bernadette Dupont & Erica Tait

KYTC - Tom Hall, Larry Chaney & Jahan Khan

INDOT – Jay Mitchell

EPA - Sarah LaRocca, Dianna Myers & Tony Maietta

KYDAQ - Anna Bowman & Ashlee Smither

IDEM - Shawn Seals

LMAPCD – Michelle King & Craig Butler

FTA – Cecilia Godfrey

TARC – Aida Copic

KIPDA – Elizabeth Farc, David Burton, Randy Simon, Nick Vail, Andy Rush, Amanda Spencer, Mikaela Gerry, Greg Burress, & Dane Hoskins

Welcome/Roll Call:

A total of 25 participants, representing ten local, state, regional, and federal agencies participated in the IAC Conference Call for Amendment 2 of KIPDA's *Connecting Kentuckiana 2040* Metropolitan Transportation Plan and the FY 2020-2025 Transportation Improvement Program. The meeting began shortly after 3:00 PM EDT on October 6, 2020.

Schedule Discussion:

Andy Rush discussed the anticipated schedule for the amendment. The amendment is tentatively scheduled to be presented to KIPDA's Transportation Policy Committee (TPC) for adoption on November 24th. The public review period is currently scheduled to run from October 24th through November 7th, with a (virtual) public meeting scheduled for October 26th. There were no comments or questions from other agencies.

Project Discussion:

KIPDA Staff developed a new format for presenting projects and project changes to the IAC. Bernadette Dupont asked if KIPDA would continue to include a picture or map for each project. Andy Rush indicated that having a map or picture was not commonly included in the list of projects provided to the IAC. David Burton explained that a website would be available (as was included for Amendment 1) where the public will be able to view and comment on each project via an interactive map.

Ms. Dupont asked about including a date for when each project is amended in the MTP and TIP. KIPDA Staff explained how Administrative Modifications and Amendments are currently documented on KIPDA's website and shared that improvements for the future will be examined. There were no other comments about the new project sheet format.

Andy Rush noted that the Sherman Minton Bridge maintenance project (KIPDA ID 2533 and KIPDA ID 351) is part of Administrative Modification 9. The changes that are proposed at this time are limited to the schedule and funding, and therefore have been included in Administrative Modification 9, which is scheduled to proceed in advance of Amendment 2. This was brought to the attention of the IAC to note that despite the high project cost and its significance the proposed changes are considered relatively minor. When asked for questions or concerns, the group had none.

Andy Rush presented the list of 28 projects that are included in Amendment 2 and asked if there were any project-specific questions or concerns. Bernadette Dupont asked a question about how the Galene Dr/Sprowl Rd project (KIPDA ID 2774) was modeled. Andy Rush explained that the project will align offset intersections and that a connection on the north side of Taylorsville Road will likely be made to Watterson Trail via other streets (e.g. Shelby St. and/or Bluebird Ln.) He stated that the additional capacity/widening was envisioned to be a center turn lane and not major widening. He also noted that the amendment is not introducing changes to the travel model.

Aida Copic asked how changes in modeling were done for the Baxter/Bardstown Premium Transportation Corridor (KIPDA ID 1353). Andy Rush shared that the KIPDA model does not include a robust transit component. Nick Vail mentioned that the funding for the project in question was not for transit. Ms. Copic was aware of the funding and project intent but reiterated the importance of continuously improving the travel demand model to capture/measure transit projects.

There were no additional comments or discussion about the other projects.

Analysis Details:

Andy Rush noted that the key components of the analysis for Amendment 2 will remain the same as they were for Amendment 1. These include:

- a. Horizon Year of Connecting Kentuckiana Metropolitan Transportation Plan: 2040
- b. **AQ Conformity Test:** Budget Test utilizing Year 2020 Motor Vehicle Emissions Budgets created for the 1997 8-Hour Ozone Standard
- c. Analysis years: 2020, 2025, 2030, 2035, 2040
- d. **Pollutants/Precursors of concern and related budgets:** 2020 regional MVEB for 8-Hour Ozone Standard:
 - i. VOCs: 22.92 tons/day (20,793 kg/day)
 - ii. NOx: 29.46 tons/day (26,726 kg/day)

There were no comments or questions.

Additional Travel Model Discussion:

Andy Rush indicated that aside from the changes to the travel model mentioned in the project information sheets, nothing else changed for Amendment 2. Those changes have been incorporated in the series of scenarios to be analyzed in the MOVES Model.

MOVES Model Discussion:

Craig Butler presented his recent work to bring the 2017 Indiana fleet mix into the analysis. Andy Rush asked Mr. Butler about the probable impact of this change on the emissions for the Regional Emissions Analysis. Mr. Butler stated that this new fleet mix data will not likely change the emissions much.

Other Discussion:

There was no other business discussed. The conference call adjourned at approximately 3:45 PM EDT.

Amendment 2 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan (MTP) and FY 2020 - 2025 Transportation Improvement Program (TIP)

Public Comments

1. Project Sponsor: KYTC

Project Name: I-64

KIPDA ID: 390

Project Description: Eastwood Fisherville Connector to I-64. Project will consider a new interchange and connector road from KY 148 to US 60 with a new interchange on the I-64 corridor.

Public Comment: The intersection at Eastwood Cutoff and Shelbyville Rd is already a NIGHTMARE! Adding traffic from all the approved & proposed subdivisions PLUS a school AND an interchange will create gridlock, chaos and DEATHS. Move the interchange farther east.

Public Comment: This project is desperately needed in view of increasing development outside the Snyder Freeway. The comments of the three Luddites about local road traffic obviously don't live here and should be totally ignored.

Public Comment: I do not support this project. We should not be investing money in a new ramp or new lanes because we need to discourage more interstate car travel. The traffic on local roads is not a problem.

Public Comment: This plan is way overdue. Moderation of infrastructure to deal with the overbuilt housing developments which have grown faster than area roads is long overdue. Smart plan, very smart.

Public Comment: This will ease traffic on 265/64 interchange and also 64/Shelbyville rd. interchange. I am all for it, please be smart about Eastwood design

Public Comment: Way past due. Please incorporate roundabouts. stoplights are soo yesterday!

Public Comment: As the owner of 814 Gilliand Road-I do not support the project

Public Comment: I full support this project. The growth in this area is creating traffic concerns and this interchange is needed.

Public Comment: I do not agree with this project...this area should remain residential and agricultural... I suggest improvements in the I64 to Gene Synder to Shelbyville Rd to handle

increased east flow on Shelbyville Rd. The I64 to Gene Synder ramps can be improved.

Public Comment: Well. I live here and the traffic at the Eastwood Fisherville Cutoff is indeed a nightmare and accident liability now and getting worse. We do not need the extra traffic! No we're not Luddites, we're just realistic.

Public Comment: I think it's a great idea would relieve some of the congestion.

Public Comment: This is a horrible project. Eastwood Fisherville would need to expand to four lanes to handle the added traffic, imagine traffic going south under the 1 lane bridge

Public Comment: I think deflecting existing traffic that has to exit onto the Gene Synder to a more eastern exit is a great idea. Just not sure this particular road is the best one for it.

Public Comment: I do not support this project because I do live in this area and my Road cannot support the traffic it already has. There are numerous accidents and private property destruction caused by too many cars on the road. It would take ANOTHER widening.

Public Comment: Will this project include revising the already F rated intersection at US60 & Eastwood cutoff? This intersection cannot withstand the current & projected growth here along w/ a new school & new interchange.

Public Comment: were in less populated areas allowing for future growth

Public Comment: While both sides of this argument have good points, my concern is for the residents closest to where the entry/exit onto shelbyville road will be effected. Sound, speed, and population safety seem to be unconsidered. It would be better if the ramps were.

Public Comment: This is NOT the appropriate location for an inter change. Besides the fact that it will NOT be convenient to Shellbyville road, it has a one lane area under a railroad overpass near Taylorsville road. This entire road was designed as a one lane, local access road. It was paved to be two lanes about 15 years back and it has 5-7 miles of dangerous curves, banking in the wrong direction. It is full of wildlife that routinely wander in the road way. This is because it is a beautiful and quaint area. It should remain that way. The noise and pollution will ruin this area and make that narrow, curvy road far more dangerous with tens of thousands of cars on it each day. The infrastructure of this road cannot support this traffic.

This could easily be located by the new school at eco trail where the road will be re constructed for the bus traffic, although I hate to see it there as well. The busses will have to now use Eastwood Fisherville. This road and all of its hills and curves is too dangerous for this type of traffic.

Public Comment: After reviewing the amendment, the concern I have is there is no mention of revising the already F rated intersection at Shelbyville Road and Eastwood Cutoff. I am wondering if this will be included in the proposed new I-64 connector work to be located in the vicinity of Gilliland Road. Given the recent past growth and potential for more growth in this area coupled with the construction of a new JCPS middle school and a new I-64 interchange, this intersection will become disastrous. Will there be a study done to allow for public input? Will this project address this intersection and, if so, in what way?

Public Comment: The idea of adding an exit to Eastwood Fisherville road is among the worst I've ever heard. The road is in no way shape or form the type of road or area that could handle the increase of traffic. This was never a road intended for the traffic it currently handles and this would be an increase that would only put people's lives in danger. In addition, the interchanges at the Cutoff Rd and Shelbyville road are so very narrow and would be a nightmare to expand.

Please consider another spot.

Public Comment: I think an interchange at 64 and Eastwood Fisherville Rd is a terrible idea. Focus should continue to be on 265/64 and widening Taylorsville Rd from 265 to Taylorsville Lake Rd.

2. Project Sponsor: KYTC

Project Name: I-64 Bridge Painting

KIPDA ID: 2596

Project Description: Bridge painting of I-64 Riverside Expressway bridges.

Public Comment: Way over due and needs to be done asap before damage gets beyond repair

3. Project Sponsor: KYTC

Project Name: I-71

KIPDA ID: 2788

Project Description: Widen I-71 from four to six lanes from KY 393 to KY 53

Public Comment: I do not support this project. We should not add more driving lanes because it will encourage more driving (included demand) The assumption that there will be more car traffic will be "self fulfilling" in a way if you add more car traffic lanes. Please do not widen!!!

4. Poject Sponsor: KYTC

Project Name: I-71

KIPDA ID: New (Not Yet Assigned)

Project Description: Improve safety and reduce congestion on I-71 from KY 53 to KY 153 (improvements may include additional travel lanes).

Public Comment: Do not allow the addition of more lanes! If safety is one of true priority, there are ways to reduce traffic crashes without adding lanes. Focus only on those interventions. Do not widen!!!

5. Project Sponsor: KYTC

Project Name: KY155

KIPDA ID: 2371

Project Description: Safety project for reconstruction of Taylorsville Road and South

Pope Lick Road intersection and bridge over Pope Lick Creek.

Public Comment: This is seriously needed. People are dying at this intersection. Traffic is always heavy and backed up at this intersection at morning and 5pm traffic. Please, please fix this desperate issue.

6. Project Sponsor: KYTC

Project Name: KY 44

KIPDA ID: NEW (Not Yet Assigned)

Project Description: Reconstruct KY 44 from Bogard Lane to Armstrong Lane

(2020CCN). Improvements may include additional travel lanes and a continuous

center turn lane.

Public Comment: I look forward to getting past operations and informational stages

and starting actual construction. :)

Public Comment: I look forward to actual construction to begin, rather than just

informational.

7. Project Sponsor: Louisville Sponsor

Project Name: One-Way Street Conversion to Two-Way Phase 1

KIDPA ID: 1809

Project 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 Blvd. (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).

Public Comment: I support funding these one to two way conversions!

Amendment 2 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan (MTP) and FY

2020 - 2025 Transportation Improvement Program (TIP)

Public Comments (Received following the close of the public window)

1. Project Sponsor: KYTC

Project Name: I-64

KIPDA ID: 390

Project Description: Eastwood Fisherville Connector to I-64. Project will consider a new

interchange and connector road from KY 148 to US 60 with a new interchange on the I-64

corridor.

Public Comment: I live in the area that would be greatly affected by a new interchange and it's

not a good idea. The area is too rural, Fisherville road is too dangerous now and an increase in

traffic from new interstate ramps is a tragedy waiting to happen.

Public Comment: Adding a new exit off of I64 is badly needed, the traffic buildup is unsafe,

particularly at the Gene Snyder/I64 interchanges. Eastwood would have to be widened to

accommodate the new traffic or it will not be worth the money and effort.

Public Comment: I do not support a project that will aesthetically affect the rural environment.

Better money spent on making road improvements than making new roads and adding exits.

We do not want a new exit or our taxes to keep going up.

Public Comment: much needed

Public Comment: I do not support this idea. The money it would take could be used to build a

new road through a non-residential area east of here to handle the traffic to US60. Our road

can barely deal with the traffic it has now. Horrible idea!

Public Comment: Please make this happen. Too much traffic at 265 and 64 interchange.

Public Comment: I think the intersection at Eastwood Cutoff and Shelbyville Rd would have to

undergo a substantial redesign with the increased traffic, volume this would bring to the area.

Public Comment: Widening of Eastwood Fisherville Rd would definitely be needed, but an exit

here from 64 would alleviate a lot of traffic at Shelbyville Rd and 265. I'm all for this added

ramp given the new subdivision added recently!

Public Comment: I do not support this new interchange. Fisherville Road from Shelbyville Road

to Taylorsville road is windy and narrow. Added traffic to this area would be a disaster. There

are many developments on Fisherville Road already.

Public Comment: Finally a plan to address our outdated roads in the area to deal with traffic

concerns.

Public Comment: YES!!!!!! This is a much needed project that will ease the traffic in the are by

modernizing the existing roadways and putting in the infrastructure to address the already

overburdened traffic areas. Please fast track.

Public Comment: Bob Federico Chairman Eastwood Village Council (Please see attached letter)

2. Project Sponsor: KYTC

Project Name: KY155

KIPDA ID: 2371

Project Description: Safety project for reconstruction of Taylorsville Road and South

Pope Lick Road intersection and bridge over Pope Lick Creek.

Public Comment: Yes please. This is sooooo over due. Many lives have been lost and you have

the stats. I have seen them to at the last FANA meeting. Please do something about the Direct traffic turning lane turning right to Haymakers rd.



Eastwood Village Council

P.O. Box 92 Eastwood. Ky 40018-0092

To Whom it may Concern.

In response to latest KIDA Road Plan Amendments:

The EVC wanted to formally state its deep concern for what has obviously been completely disregarded by Louisville's Planning community relative to the Eastwood Cutoff US 60 Realignment project we have been discussing for nearly 2 years. This discussion started with the Echo Trail Subdivision and has escalated since the announcement of the new Echo Trail Middle school (ETMS).

In addition, the previously approved 330 lot subdivision on Johnson Rd has broken ground and we are also faced with yet another 850-unit subdivision on Aiken / Johnson Rd. Both subdivisions, being districted to the new school, will clearly drive bus and car traffic into Eastwood and subsequently onto Gilliland through already over utilized intersections.

The EVC and the community are grateful for the turn lanes at Johnson which for now, has solved the eastbound left-hand turn problems from US60 to Johnson Rd. However, the turn lanes as designed, only provide for 2 - 3 car queues from westbound left hand turns onto Johnson Rd south of US60.

We have reached out to Representative Jerry Miller and JCPS (Abby Piper) to understand where funding for the US 60 Realignment project stood and its impact on the Eastwood cutoff intersection. It was brought to our attention that since the school has closed on the property, groundbreaking on the new school is scheduled for Summer 2021 with occupancy expected August 2023. As per Jerry Miller, and according to Matt Bullock, P.E.:

- 5-8952 (US 60 REALLIGNMENT OF GILLILAND ROAD AND EASTWOOD CUTOFF): It will be November –December 2020 before the funds can be authorized (KIPDA Amendment #2 for FY 20-25 TIP). We will start in-house design when funds become available. There are no other funding phases in this biennium.
 - o Internal Design should be completed by September 2021

NOTE: the Louisville Planning Commission, as a Condition of Approval for the Echo Trail development, requires the Developer to provide \$250,000 for the explicit purpose of planning and redesign of the failing Eastwood Cutoff Intersection at US60.

The Real Estate closing on the JCPS property should quality as a triggering event and these funds should be made available for design / planning work as it clearly calls for. Furthermore, according to Representative Miller:

- Assuming Completion of in-house design by September 2021, project estimates for Right of Way (ROW), Utility Relocation and Construction would be available for inclusion in FY2023-24 Road Plan
- ROW acquisition would take a minimum of one year, with no high estimate since it is driven by willingness of sellers to accept KYTC appraisal offer.
- Utility relocation could take one year or more, depending on underground gas and electric relo.
- Assuming above takes only 1-3 years total, construction money could be available in the FY2025-26 Road Plan.
- Construction could be done in 1 year if funds are available, but there is no guarantee.

As we can see, this solution is 2 - 3 years LATE to accommodate the Middle School occupancy. Councilman Anthony Piagentini and I discussed this specifically with Dr. Pollio, Superintendent JCPS in October 2019, who agreed the traffic infrastructure had to be improved in time for occupancy as the current scenarios were UNSAFE to faculty, advisers, the community and above all, students.

In addition, in a letter from Louisville Public Works to Randy Frantz, Director - Transportation for JCPS, dated 2/20/2019, the letter states that:

The Gilliland Rd intersection with Eastwood Cut Off Rd (KY-2841) & Shelbyville Rd (US-60), which is the major arterial roadway to the north of the subject site, already experiences excessive delays and is currently operating at a Level of Service F in both the AM and PM peak hours. Based on a traffic study prepared on 10/22/18, the northbound approach of this intersection with Shelbyville Rd currently experiences a delay of 83.6 seconds and is expected to increase to 671.8 seconds in the year 2030 with a growth factor of 1.5%. The PM peak hour traffic currently experiences 169.7 seconds of delay which is predicted to increase to 1,372.2 seconds in 2030. The growth factor used to project future traffic volumes may not accurately account for the additional traffic that may be generated by a new school.

What is really concerning is what is being discussed as "Alternatives to facilitate opening of ETMS in August 2023. Specifically:

- While doing in-house design of the US 60 Realignment, KY Cabinet will examine alternatives for the existing Gilliland/Eastwood Cutoff/US 60 intersection to make it safer.
- One alternative is to prohibit turns onto Westbound US 60. That w/b traffic would be routed to the Johnson Road intersection. Right-turns onto Eastwood Cutoff and southbound Gilliland would be allowed
- KYTC can consider if a traffic signal can be placed at Johnson Road ix by August 2021 to accommodate the increased ETMS construction related traffic that will travel through Eastwood

While on the surface, these alternatives appear helpful, they:

Fail to address the obvious traffic from US60 westbound in the morning needing to get to the School via the Johnson Rd route. There is currently no queue space on US60 to handle multiple school buses and the anticipated number of cars headed south. This would lead to a huge back log of traffic westbound during AM rush hours. This doesn't even begin to address the school buses returning to their depots after student drop-off.

Another aspect of this solution is a non-stop lane Eastbound from US60 to South bound Gilliland via the Eastwood cutoff stub. The obvious problem is that the traffic which, as per above, would be coming from the Johnson Rd intersection that would now have to make a LEFT turn onto Gilliland south but they would be facing a virtual nonstop flow of traffic from Eastbound US60. The geometry speaks for itself.

The signalization at Johnson Rd, (being considered), in order to handle the afternoon school exiting traffic would have to have significant US60 stop times to again handle the traffic, not only onto US60 but needing to cross US60 to travel back north on Johnson Rd to handle the new subdivisions already identified earlier. This same light would have to address the US60 Westbound needs back towards Middletown as the solution calls for stopping access to US 60 westbound from Eastwood Cutoff / Gilliland.

The extended stop times needed by that signal would without doubt, force eastbound US60 traffic to come to a dead stop in front of the Middletown / Anchorage Fire House at Eastwood cutoff.

While we are addressing the impacts of the ETMS, we cannot forget the traffic from the Echo Trail subdivision phases 1 and 2 which were the catalyst for all this in the first place.

After all this, we had the opportunity to review the KIPDA report and the highest priority project that concerns the Eastwood Village Council; Widening of US 60 to three lanes from Rockcrest Rd on the East and the Cut-off on the west. I have summarized the changes to these projects below.

Widen US 60 to three lanes.

- Moved funding for design phase from 2020 to 2021
- Moved right of way purchase from 2020 to 2023
- Moved utility movement phase from 2020 to 2024
- Moved construction phase from 2020 to beyond 2025
- Moved "open to the public" date from 2024 to 2029

Things to make note of:

- 1. Just because something is "in the budget" doesn't mean it will actually be done.
- 2. Remember that Jerry Miller has previously publicly stated that only the first two years are actually budgeted while the remaining three years are only planned with no funding commitment.
- 3. This amendment removes the construction phase of this project from the five year plan.
- 4. There is only \$1,000,000 allotted to the construction phase of this project. I do not see how the intersection at the Eastwood Cut-off could be part of this project.

In Conclusion,

With the New Middle School opening its doors in 2023 at the latest, it painfully obvious that nothing is being done to address the pending traffic congestion and safety issues at the Eastwood Cutoff Intersection. Virtually ALL school traffic, from School buses to individual cars will flow through Eastwood and the Eastwood Cutoff Intersection. Add to that traffic, the planned and approved Echo Trail Subdivision with 550 new homes, again using the same route and the Johnson Rd subdivision breaking ground along with the obvious known geometry issue of said intersection and we have a dangerous condition being created.

It seems to us that there are some serious faults and deficiencies that need to be addressed and viable solutions identified. The re-structuring and signalization of the Eastwood Cutoff / Gilliland Rd to US60 intersection still seems to make the most sense especially giving its proximity to the Fire house and current geometry.

As the East End grows, it too must be supported by State and Local Government, not simply viewed as a property taxing cash cow with little to no funding going back to the community that generates it. This includes system development fees that are woefully low and outdated, needing adjustments to 2021 needs and again, properly being allocated to handle the infrastructure needs of the communities that come from.

We urge KIPDA, the Louisville Planning Commission, Louisville Metro Council, JCPS, Louisville Public Works, our State Representatives and the Kentucky Transportation Cabinet to take a serious look at this immediate area and address what will become a safety issue within the next 2 - 3 years. We also urge that a separate independent Traffic Study focused on Eastwood / US60 / Johnson Rd / Gilliland and Echo Trail be conducted promptly and that it addresses the ETMS and all new subdivisions identified to date comprehensively.

Sincerely,
Bob Federico
Chairman Eastwood Village Council

Amendment 2 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan (MTP) and FY 2020 - 2025 Transportation Improvement Program (TIP) Public Comments (Received after comments were sent to TPC for review)

1. Project Sponsor: KYTC

Project Name: I-64 KIPDA ID: 390

Project Description: Eastwood Fisherville Connector to I-64. Project will consider a new interchange and

connector road from KY 148 to US 60 with a new interchange on the I-64 corridor.

Public Comment: No!!!! Eastwood Fisherville Road, is too narrow as it is. We need a light at the cut Off

and Eastwood Fisherville Road widened.



Kentucky Division

July 2, 2021

330 West Broadway Frankfort, KY 40601 PH (502) 223-6720 FAX (502) 223 6735 http://www.fhwa.dot.gov/kydiv

> In Reply Refer To: HDA-KY

Mr. Jarrett Haley, Executive Director Louisville Area Metropolitan Planning Organization c/o Kentuckiana Regional Planning and Development Agency 11520 Commonwealth Drive Louisville, KY 40299

Dear Mr. Haley:

The Kentucky Division Office of the Federal Highway Administration (FHWA) and Region 4 of the Federal Transit Administration (FTA), in consultation with the Indiana Division Office of the Federal Highway Administration and Regions 4 and 5 of the United States Environmental Protection Agency (EPA), have reviewed the following documents:

Amendment 3 to the 2020-2025 Transportation Improvement Program (TIP) and Amendment 3 to the 2040 Metropolitan Transportation Plan (MTP) for the Louisville Area Metropolitan Planning Organization (MPO) (MPO approval date May 27, 2021)

The Kentucky Energy and Environment Cabinet's Division for Air Quality, the Kentucky Transportation Cabinet's Division of Planning, the Kentucky Transportation Cabinet's Office of Transportation Delivery, the Louisville Metro Air Pollution Control District, and the Transit Authority of River City also had an opportunity to review and comment on the aforementioned documents.

We found that these documents meet the five primary criteria of the Transportation Conformity Rule (40 CFR Part 93):

- use of the latest planning assumptions,
- use of the latest emissions model,
- use of appropriate consultation procedures,
- consistency with the mobile vehicle emission budgets in the State Implementation Plan (SIP), and
- provisions for timely implementation of transportation control measures in the SIP.

Page 2 Mr. Haley

We found that these documents met the criteria outlined in the July 1, 2004 Transportation Conformity Rule Amendments for New 8-hr Ozone and PM_{2.5} National Ambient Air Quality Standards (NAAQS), Response to March 1999 Court Decision and Additional Rule Changes (69 FR 40004). We therefore find that these amendments conform to the 2015 8-hour Ozone NAAQS.

Sincerely,

TODD A JETER Digitally signed by TODD A JETER Date: 2021.07.01 14:24:13 -04'00'

Todd Jeter Division Administrator

via Email

cc: Aviance Webb, FTA-R4
Erica Tait, FHWA-IN
Sarah LaRocca, USEPA-R4
Melissa Duff, KEEC-DAQ
Rachael Hamilton, Louisville Metro APCD
Carrie Butler, TARC
Ron Rigney, KYTC-Program Management
Mikael Pelfrey, KYTC-Planning
Amanda Spencer, LOU MPO



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

Agenda Item #5

MEMORANDUM

TO: Transportation Policy Committee

FROM: David Burton

DATE: May 13, 2021

SUBJECT: Amendment 3 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan

(MTP) and FY 2020-2025 Transportation Improvement Program (TIP)

Amendment 3 to the MTP and TIP is ready for committee approval. Sponsors submitted new projects, project changes, and removals through February 1st. In addition to the projects that are being proposed, staff is also updating the Federally required safety performance measures and targets. The air quality conformity analysis and the public comment period have been completed. No public comments were received.

Two TPC resolutions will be provided to the TPC Chair for their signature.

Two actions are requested for TPC:

- 1) Approval of Amendment 3 to the Connecting Kentuckiana 2040 MTP, and
- 2) Approval of Amendment 3 to the FY 2020-2025 TIP.

11520 Commonwealth Drive Louisville, KY 40299 Phone: 502.266.6084

Fax: 502.266.5047 TDD: 800.648.6056

A Resolution of the

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #3 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan

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 Metropolitan Planning Area encompassing Clark and Floyd counties and a portion of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and a portion of Shelby County in Kentucky; and,

Whereas, Federal laws require the Transportation Policy Committee periodically review and update its Metropolitan Transportation Plan to reflect progress and changes regarding its implementation using the latest forecasts of regional demographic and socioeconomic data; and,

Whereas, pursuant to 23 CFR Section 450.322, the Metropolitan Transportation Plan is based on the latest available estimates and assumptions with regard to population, land use, travel, employment, congestion, and economic activity developed in conjunction with local jurisdictions; and,

Whereas, consistent with Federal and state mandates, states' environmental requirements, and with the KIPDA Transportation Policy Committee's Memorandum of Agreement, *Participation Plan, Title VI: Environmental Justice 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; has made draft documents available for public review, has held public meetings and other efforts including providing data and information related to the Metropolitan Transportation Plan update on the KIPDA website, to involve citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of persons with disabilities, and other interested parties in order to facilitate their ability to provide input, discussion, and review of *Connecting Kentuckiana 2040*, and has incorporated the work of local governments, and the suggestions of citizens, businesses, and interests throughout the MPA in this document; and,

Be it further resolved, that the KIPDA staff is authorized to transmit Amendment #3 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan for the Louisville/Jefferson County KY-IN Metropolitan Planning Area 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 27th day of May 2021.

Kevin Baity, Chair

Transportation Policy Committee

Amanda Spencer

KIPDA Transportation Division Director

A Resolution of the

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #3 of the FY 2020 – FY 2025 Transportation Improvement Program

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 and a portion of Harrison County in 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, Title VI: Environmental Justice 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, the FY 2020-FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is consistent with Connecting Kentuckiana 2040, 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 FY2020-FY 2025 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 2019 - 2022 Statewide Transportation Improvement Program (STIP), and the Indiana FY 2020 - 2024 STIP, respectively, and will become part of the end of fiscal year "fiscal constraint" recalculations; and,

Now, therefore be it resolved, by the Transportation Policy Committee of KIPDA that this amendment of the *FY 2020-FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area* is adopted by official action at the May 27, 2021 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* 2040 complies with all of 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 2040, 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,

Let it be further resolved that KIPDA staff is authorized to transmit this amendment of the FY 2020-FY 2025 Transportation Improvement Program 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 27th day of May 2021.

Kevin Baity, Chair

Transportation/Policy Committee

Amanda Spencer

KIPDA Transportation Division Director

KIPDA Amendment 3 Schedule

Connecting Kentuckiana (CK) 2040 Metropolitan Transportation Plan (MTP) Fiscal Year (FY) 2020 - 2025 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 and Timing

Project applications (new or modified) are due from sponsors	February 1, 2021
KIPDA staff reviews projects	February 1 - 19, 2021
Air quality conformity activities	February 22 - April 9, 2021
Public comment period	April 16 - 30, 2021
Comments sent to the Transportation Policy Committee (TPC)	May 4, 2021
Transportation Technical Coordinating Committee Recommendation	on May 12, 2021
TPC Action	May 27, 2021
Federal Review	May 28 - June 28, 2021

Additional Information

The MTP & TIP amendment process is NOT an opportunity to request MPO dedicated funds.

All new projects and changes to existing projects must be submitted through the Project Application form found on KIPDA's Transportation Planning Portal. Here is the web address: https://kipda.formstack.com/forms/kipda_epif.



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

Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020-FY2025 Transportation Improvement Plan

The Kentuckiana Regional Planning and Development Agency (KIPDA) is the metropolitan planning organization (MPO) for the five-county region covering Jefferson, Bullitt and Oldham counties in Kentucky and Clark and Floyd counties in Indiana. The MPO's responsibilities include producing a long-range transportation document, Connecting Kentuckiana 2040 Metropolitan Transportation Plan (MTP) as well as a short-range planning document, the Fiscal Year (FY) 2020 – 2025 Transportation Improvement Program (TIP).

Changes have been proposed to the MTP and TIP. The MTP, with the proposed changes, is financially reasonable and the TIP remains fiscally constrained. This packet includes the following documents:

- A listing of all the projects being added, removed, or modified
- Revisions to the MPO's Performance Management Plan
- Air quality conformation documentation
- Meeting minutes from the Interagency Consultation (IAC) conference call

Please review the proposed changes and submit comments in any of the following ways:

- Visit https://kipdatransportation.org/amendment3/ and click on the Amendment 3 Map link to leave comments
- Email your comments to kipda.trans@kipda.org
- Mail your comments to us at:

TIP & MTP Amendment, KIPDA, 11520 Commonwealth Drive, Louisville, KY 40299

 Attend and ask questions or provide comments live during a virtual open house to be held on April 27, 2021 from 5:00 p.m. – 6:00 p.m. A link to the virtual meeting can be found at the bottom of the following webpage https://kipdatransportation.org/amendment3/

If you have questions or additional information is needed, call Greg Burress at 502-266-6144 ext. 123.

11520 Commonwealth Drive Louisville, KY 40299 Phone: 502.266.6084

Fax: 502.266.5047 TDD: 800.648.6056

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Modify TIP funding and reflect changes to project scope				
MTP Action:	Revise MTP project cost and reflect changes to project scope				
Exempt/ Non-Exempt:	Non-Exempt	Model Impact:	I Add project to 2030, 2035, and 2040 scenarios		
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	2899	State ID:	1900162.00
County	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	I-64 Added Travel Lanes		Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date:	\$3 \$4	6,807,800 0,000,000 6,807,800 0,000,000
Funding Source:	Interstate Maintenance (IM) National Highway Performance Program (NHPP) Open to Public Date: 2026				2026
Description:	Added travel lanes project on I-64 from US 150 to Spring Street. Project also includes added lanes on I-265 from I-64 to State Street and improvements to the interchanges of I-64 at US 150 and I-265. Added travel lanes project from US 150 to I-64 and Spring Street interchange.				
Purpose & Need:	The addition of the mainline through and auxiliary lanes on I-64 as well as additional ramp lanes at the US 150 and I-265 interchanges will provide improved densities, levels of service and travel times with significant reduction in driver delay west of I-265.				
FY 20-25 TIP Funding:	FY 2020 Preliminary Engineering phase with the following State funds: \$0 (Federal) + \$1,557,800 (Other) = \$1,557,800 (Total) FY 2022 Preliminary Engineering phase with the following NHPP funds: \$13,500,000 (Federal) + \$1,500,000 (Other) = \$15,000,000 (Total) FY 2023 Right of Way phase with the following IM funds: \$225,000 (Federal) + \$25,000 (Other) = \$250,000 (Total) *FY 2024 Construction phase with the following NHPP funds: \$27,000,000 (Federal) + \$3,000,000 (Other) = \$30,000,000 (Total)				

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	Add project to 2025, 2030,	2035, and 2040) scenarios.
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	NEW	State ID:	2000288
County	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	I-64 and Spring Street Interchange Mo	odification	Total Estimated Cost in MTP (i.e. CK 2040):	\$2	2,823,856
Project Name.	1-04 and 3pring Street interchange wid	diffication	Total Cost Programmed in TIP to Date:	\$	350,000
Funding Source:	National Highway Performance Program (NHPP) Open to Public Date: 2025				2025
Description	Interchange modification at ramp junctions with Spring Street, including Spring Street from 5th Street to State Street and Spring Street from 5th Street to Washington Place.				
Purpose & Need: a	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 2022 Preliminary Engineering phase with the following NHPP funds: \$280,000 (Federal) + \$70,000 (Other) = \$350,000 (Total)				

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	NEW	State ID:	5-20061.00
County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	1-65		Total Estimated Cost in MTP (i.e. CK 2040):	\$5	6,000,000
Project Name.	1-65		Total Cost Programmed in TIP to Date:	\$56,000,000	
Funding Source:	National Highway Performance Program (NHPP) Open to Public Date:				2025
Description:	Address Pavement needs on I-65 between MP 131.24 and MP 135.672 and to replace bridge over Hill Street at MP 133.873; replace bridge over Brook Street at MP 134.753, and to replace bridge over Jacob and Broadway at MP 135.273				
Purpose & Need:	To address existing infrastructure deficiencies.				
FY 20-25 TIP	FY 2021 Design phase with the following NHPP funds: \$1,800,000 (Federal) + \$200,000 (Other) = \$2,000,000 (Total) FY 2023 Construction phase with the following NHPP funds: \$48,600,000 (Federal) + \$5,400,000 (Other) = \$54,000,000 (Total)				
Funding:	·	_			

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Transit Authority of River City (TARC)	KIPDA ID:	NEW	State ID:	N/A
County	Jefferson	Parent ID:	585	Group ID:	N/A
Project Name:	Construct Maintenance Facilit	ty .	Total Estimated Cost in MTP (i.e. CK 2040):	\$1	.,250,000
			Total Cost Programmed in TIP to Date:	\$1	,250,000
Funding Source:	Grants for Buses and Bus Facilities Form (Section 5339)	ula Program	Open to Public Date:		2022
Description:	TARC will expand its maintenance runnii	ng repair bay	s to provide storage and two offices.		
Purpose & Need:	TARC repairs buses 24/7 in six bays at its no location or space set aside for tool ar Maintenance Asset Manager currently u	nd equipment	t storage. Additionally, TARC's Assist	ant Director of	Maintenance and
FY 20-25 TIP Funding:	FY 2020 Transit Capital phase with the fo \$1,000,000 (Federal) + \$250,000 (Other)	_			
	T				
	Add project				
	Add project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Transit Authority of River City (TARC)	KIPDA ID:	NEW	State ID:	N/A
County	Jefferson	Parent ID:	585	Group ID:	N/A
Project Name:	Purchase Fifteen (15) 40' Buse	5 5	Total Estimated Cost in MTP (i.e. CK 2040):	\$7	,500,000
	Turenase Titleen (15) To Bush		Total Cost Programmed in TIP to Date:	\$7,500,000	
Funding Source:	Urbanized Area Formula Grants (Section 5307) Open to Public Date: 2022			2022	
Description:	Purchase fifteen (15) 40' low-floor, clear	n-diesel buses	s using FY 2021 apportionment funds		
Purpose & Need:	TARC will purchase fifteen (15) 40' low-f useful life.	loor, clean-di	esel buses to replace existing buses t	hat have excee	eded their expected

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Remove from TIP				
MTP Action:	N/A				
Exempt/Non-	Exempt	Model	No change	to model	
Exempt:	2	Impact:			
Project Sponsor:	Transit Authority of River City (TARC)	KIPDA ID:	2458	State ID:	N/A
County	Jefferson	Parent ID:	585	Group ID:	N/A
Project Name:	Purchase Shop Equipment		Total Estimated Cost in MTP (i.e. CK 2040):		N/A
rioject Name.	r drenase shop Equipment		Total Cost Programmed in TIP to Date:	\$4	94,399
Funding Source:	Grants for Buses and Bus Facilities Form (Section 5339)	ula Program	Open to Public Date:		2021
Description:	Purchase maintenance shop equipment	to maintain t	ransit fleet and support vehicles.		
Purpose & Need:	TARC will apply these funds to purchasir support vehicles.	ng shop equip	ment to maintain state of good repa	ir for its fixed ro	ute fleet and
FY 20-25 TIP	FY 2021 Transit Capital phase with the following Section 5339 funds:				
Funding:	\$395,519 (Federal) + \$98,880 (Other) = \$	5494,399 (Tot	al)		
TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Transit Authority of River City (TARC)	KIPDA ID:	NEW	State ID:	N/A
County	Jefferson	Parent ID:	585	Group ID:	N/A
Project Name:	Rehab Administration Building / Mair	ntenance	Total Estimated Cost in MTP (i.e. CK 2040):	\$3,	500,000
Project Name:	Facility		Total Cost Programmed in TIP to Date:	\$3,500,000	
Funding Source:	Urbanized Area Formula Grants (Sect	ion 5307)	Open to Public Date:	2022	
Description:	Rehabilitate an administrative facility and/or maintenance facility with the goal of reducing operating costs by maintaining a state of good repair.				
Purpose & Need:	TARC will apply these funds to a rehabili maintenance facility.	tation projec	t for an existing administrative buildi	ng and/or for an	existing
FY 20-25 TIP Funding:	FY 2021 Transit Capital phase with the fo \$2,800,000 (Federal) + \$700,000 (Other)	_			

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Remove project				
MTP Action:	N/A				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Transit Authority of River City (TARC)	KIPDA ID:	2453	State ID:	N/A
County	Jefferson	Parent ID:	585	Group ID:	N/A
Project Name:	Purchase Two (2) 40' Buses		Total Estimated Cost in MTP (i.e. CK 2040):		N/A
rroject Name.	Turchase Two (2) 40 Buses		Total Cost Programmed in TIP to Date:	\$1	,012,740
Funding Source:	Grants for Buses and Bus Facilities Form (Section 5339)	ula Program	Open to Public Date:		2022
Description:	Purchase two (2) forty-foot, low-floor di	esel buses.			
Purpose & Need:	TARC will purchase two (2) diesel buses	to replace ex	isting buses that have far exceeded t	heir expected r	ninimum useful life.
FY 20-25 TIP Funding:	FY 2020 Transit Capital phase with the fo \$810,192 (Federal) + \$202,548 (Other) =	•			
	\$810,192 (Federal) + \$202,548 (Other) =	•			
Funding: TIP Action: MTP Action:	\$810,192 (Federal) + \$202,548 (Other) =	\$1,012,740 (
Funding: TIP Action:	\$810,192 (Federal) + \$202,548 (Other) =	•		to model	
TIP Action: MTP Action: Exempt/Non-	\$810,192 (Federal) + \$202,548 (Other) = Remove project N/A	\$1,012,740 (Total)	to model State ID:	N/A
TIP Action: MTP Action: Exempt/Non- Exempt:	\$810,192 (Federal) + \$202,548 (Other) = Remove project N/A Exempt	\$1,012,740 (Model Impact:	T otal) No change		N/A N/A
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County	\$810,192 (Federal) + \$202,548 (Other) = Remove project N/A Exempt Transit Authority of River City (TARC) Jefferson	Model Impact: KIPDA ID: Parent ID:	Total) No change	State ID:	
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor:	\$810,192 (Federal) + \$202,548 (Other) = Remove project N/A Exempt Transit Authority of River City (TARC)	Model Impact: KIPDA ID: Parent ID:	No change 2462 585 Total Estimated Cost in MTP	State ID: Group ID:	N/A
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County	\$810,192 (Federal) + \$202,548 (Other) = Remove project N/A Exempt Transit Authority of River City (TARC) Jefferson	Model Impact: KIPDA ID: Parent ID:	No change 2462 585 Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed	State ID: Group ID:	N/A N/A
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name:	Remove project N/A Exempt Transit Authority of River City (TARC) Jefferson Rehab Administrative Buildin Grants for Buses and Bus Facilities Form	Model Impact: KIPDA ID: Parent ID:	No change 2462 585 Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date:	State ID: Group ID:	N/A N/A 500,000 2021
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name: Funding Source:	Remove project N/A Exempt Transit Authority of River City (TARC) Jefferson Rehab Administrative Buildin Grants for Buses and Bus Facilities Form (Section 5339)	Model Impact: KIPDA ID: Parent ID: g	No change 2462 585 Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date: f reducing operating costs by maintain	State ID: Group ID: \$ ning a state of	N/A N/A 500,000 2021

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add project	dd project				
MTP Action:	None					
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model		
Project Sponsor:	Transit Authority of River City (TARC)	KIPDA ID:	NEW	State ID:	N/A	
County	Jefferson	Parent ID:	585	Group ID:	N/A	
Project Name:	Rehab Training and Storage Faci	Total Estimated Cost in MTP (i.e. CK 2040):	N/A			
		Total Cost Programmed in TIP to Date:			1,354,200	
Funding Source:	Grants for Buses and Bus Facilities Formula Program (Section 5339) Open to Public Date: 2021			2021		
Description:	TARC will utilize these funds to renovate an operator training facility and the ventilation and heating system in its bus storage facility.					
Purpose & Need:	TARC will apply these funds to a rehabilitation project for an existing administrative building.					
FY 20-25 TIP Funding:	FY 2021 Transit Capital phase with the fo \$1,083,360 (Federal) + \$270,840 (Other)	J				

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

PERFORMANCE MANAGEMENT PLAN

UPDATED APRIL 2021



PERFORMANCE MANAGEMENT PLAN

for the Louisville/Jefferson County (KY-IN) Metropolitan Planning Organization

UPDATED APRIL 2021

502-266-6084 www.KIPDA.org

SUMMARY

Performance-based planning is a strategic approach that uses data to support investment decisions that help to achieve performance goals. Performance-based programming refers to the application of performance management within the project selection process. Aging infrastructure combined with limited funding resources make it challenging to address all of the needs of the transportation system simultaneously, and performance-based planning can prioritize improvements for the most effective and efficient use of those limited resources.

KIPDA's transportation planning process utilizes the performance-based planning and programming approach. This document specifically details both the federally-required and MPO-developed performance measures that will impact project selection within the MTP and TIP. The MTP uses data and performance trends to identify Focus Areas where investments will be prioritized. The KIPDA Project Management Process takes performance measures into consideration when programming projects in the TIP. Any future project that helps achieve performance targets will have a better opportunity to receive funding through the TIP than projects that do not directly address performance targets.

The Louisville/Jefferson County, KY-IN Metropolitan Planning Organization (MPO), Kentuckiana Regional Planning and Development Agency (KIPDA), has developed this *Performance Management Plan* (PMP) to utilize the framework established by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) by incorporating the National Performance Measures and Planning Factors as defined by MAP-21, the *Moving Ahead for Progress in the 21st Century Act* and continued with the FAST Act, *Fixing America's Surface Transportation Act*. MAP-21 provided a strong emphasis on performance-based transportation planning and required states and MPOs to incorporate performance measures, objectives, and targets into their planning and programming processes. The FAST Act, implemented in 2015 and which replaced MAP-21, sustained these requirements.

Per MAP-21 and the FAST Act, MPOs must transition to a performance-driven, outcome-based program that focuses on national transportation goals, increases accountability and transparency of the Federal-Aid Highway Program, and improves project decision-making. The FHWA-required and FTA-required performance measures were implemented on staggered timelines; therefore, the first deadlines by which MPOs must have established their first performance measure targets are staggered as well.

This PMP outlines all of the federally-required measures, both FHWA-required and FTA-required. KIPDA has also developed additional performance measures outlined in this plan and referred to as "MPO-developed performance measures." These were developed to support KIPDA's long-range, regional goals as identified in the Metropolitan Transportation Plan (MTP).

The Kentucky Transportation Cabinet (KYTC) and the Indiana Department of Transportation (INDOT) were allowed one year after the effective date of each federal Final Rule to develop statewide measures and targets consistent with federal guidelines. Within 180 days of the state DOTs' deadlines, KIPDA must finalize their federal performance measures and targets for the MPO region. Targets for all of the federal measures were established for the first time in 2018. Once targets were established, State DOTs and MPOs began tracking progress towards achieving those targets and will report to the appropriate federal agency. This process will repeat itself every four years.

Coordination and data-sharing among agencies at all levels is crucial in the performance-based planning process to ensure progress is made towards achieving state DOT and MPO targets.

TABLE 2: PERFORMANCE MEASURES, BASELINES, AND TARGETS

	SAFETY					
REQUIRED BY:	P	ERFORMANCE MEASURE		Baseline		Target
FHWA	<u>\$1</u>	Number of Fatalities	<mark>130.6</mark>	Fatalities (<mark>2015-2019 5-year rolling average</mark>)	<mark>148.4</mark>	Fatalities (<mark>2017-2021 5-year rolling average</mark>)
FHWA	<u>S2</u>	Fatality Rate	<mark>1.15</mark>	Fatalities per 100 million VMT (2015-2019 5-year rolling average)	1.40	Fatalities per 100 million VMT (2017-2021 5-year rolling average)
FHWA	<u>S3</u>	Number of Serious Injuries	<mark>761.3</mark>	Serious Injuries (2015-2019 5-year rolling average)	<mark>652.8</mark>	Serious Injuries (<mark>2017-2021 5-year rolling average</mark>)
FHWA	<u>\$4</u>	Serious Injury Rate	<mark>6.69</mark>	Serious Injuries per 100 million VMT (2015-2019 5-year rolling average)	<mark>6.08</mark>	Serious Injuries per 100 million VMT (2017-2021 5-year rolling average)
FHWA	<u>\$5</u>	Number of Non- Motorized Fatalities and Serious Injuries	<mark>116.2</mark>	Non-Motorized Fatalities and Serious Injuries (2015-2019 5-year rolling average)	119.1	Non-Motorized Fatalities and Serious Injuries (2017-2021 5-year rolling average)
МРО	<u>\$6</u>	Crash Rate	399.0	Crashes per 100 million VMT (2012-2016 5-year rolling average)	3:	Reduce by 20% by 2040 to 19 crashes per 100 million VMT

State Targets

- o Kentucky
 - o KYTC set the following statewide targets in 2018:

Kentucky Statewide Targets (2018)					
PM 2: Asset Management Target					
Pavement Performance	2-Year (2020)	4-Year (2022)			
% Good Interstate	50.0%	50.0%			
% Poor Interstate	2.0%	4.0% ¹			
% Good Non-Interstate NHS	35.0%	35.0%			
% Poor Non-Interstate NHS	4.0%	4.0%			

¹In 2020, KYTC adjusted the % Poor Interstate four-year statewide target to 4.0%.

- o Indiana
 - o INDOT set the following statewide targets in 2018:

Indiana Statewide Targets (2018)					
PM 2: Asset Management	Tar	get			
Pavement Performance	2-Year (2020)	4-Year (2022)			
% Good Interstate	84.2%	50.0% ²			
% Poor Interstate	0.8%	0.8%			
% Good Non-Interstate NHS	78.7%	40.0% ³			
% Poor Non-Interstate NHS	3.1%	3.1%			

²In 2020, INDOT adjusted the % Good Interstate four-year statewide target to 50.0%.

³In 2020, INDOT adjusted the % Good Non-Interstate NHS to 40.0%.

Targets (as required by FHWA)

Per federal regulation, the targets that KIPDA will report in its 2018 Baseline Performance Period Report are 2022 targets. The targets are detailed in the following table. The KIPDA Transportation Policy committee adopted these targets on October 25, 2018.

KIPDA MPO Targets (2018)		
PM 2: Asset Management	Target	
Pavement Performance	4-Year (2022)	
% Good Interstate	50.0%	
% Poor Interstate	1.0%	
% Good Non-Interstate NHS	27.0%	
% Poor Non-Interstate NHS	3.5%	

Target-Setting Methodology

Statewide baselines and targets from each state were reviewed to examine each state's approach to target setting. Due to the difference in each state's approach and in the baseline conditions of each state's pavements, the 4-Year Targets established by each state DOT are significantly different. INDOT has chosen to set their statewide targets for pavement condition at the baseline percentages. KYTC has

State Targets

- o Kentucky
 - o KYTC set the following statewide targets in 2018:

Kentucky Statewide Targets (2018)		
PM 2: Asset Management	Target	
NHS Bridge Performance	2-Year (2020)	4-Year (2022)
% Good Condition by Deck Area	35.0%	27.0% ¹
% Poor Condition by Deck Area	3.7%	3.6% ²

¹In 2020, KYTC adjusted the % Good Condition by Deck Area four-year statewide target to 27.0%. ²In 2020, KYTC adjusted the % Poor Condition by Deck Area four-year statewide target to 3.6%.

- o Indiana
 - o INDOT set the following statewide targets in 2018:

Indiana Statewide Targets (2018)		
PM 2: Asset Management	Target	
NHS Bridge Performance	2-Year (2020)	4-Year (2022)
% Good Condition by Deck Area	48.3%	47.2% ³
% Poor Condition by Deck Area	2.6%	3.1% ⁴

³In 2020, KYTC adjusted the % Good Condition by Deck Area four-year statewide target to 47.2%. ⁴In 2020, KYTC adjusted the % Poor Condition by Deck Area four-year statewide target to 3.1%.

Targets (as required by FHWA)

Per federal regulation, the targets that KIPDA will report in its 2018 Baseline Performance Period Report are 2022 targets. The targets are detailed in the following table. The KIPDA Transportation Policy committee adopted this target on October 25, 2018.

KIPDA MPO Targets (2018)		
PM 2: Asset Management Target		
NHS Bridge Performance	4-Year (2022)	
% Good Condition by Deck Area	30.5%	
% Poor Condition by Deck Area	7.1%	

Target-Setting Methodology

Statewide baselines and targets from each state were reviewed to examine each state's approach to target setting. Due to the difference in each state's approach and in the baseline conditions of each state's bridges, the 4-Year Targets established by each state DOT are significantly different. INDOT has chosen to set their statewide targets for bridge condition at the baseline percentages. KYTC has chosen to set their targets at levels that are relatively worse than (i.e. less percentage of deck area in Good condition, and more percentage of deck area in Poor condition) the baseline conditions in Kentucky. INDOT's bridges, both statewide and in the KIPDA Region, are reported as being significantly better than

F3 - Truck Travel Time Reliability on the Interstate - 490.607

Detailed Description

This performance measure seeks to increase the percent of person-miles traveled on the Interstate that are reliable. Please see the <u>Detailed Description section under "V1 – Level of Travel Time Reliability</u> (LOTTR) on the Interstate - 490.507(a)(1)" for further description of travel time reliability.

This performance measure is included in KIPDA's Congestion Mitigation Process (CMP) because it relates to reducing congestion; therefore, the strategies discussed in the CMP might have an impact on meeting this measure's target.

Data Sources and Review Frequency

- Travel Time Data: National Performance Management Research Data Set (NPMRDS)
 - o This data is available on an ongoing basis, thus it will be updated yearly.

Historical Data

There is very little historical data since travel time data has only been collected and made available to state DOTs and MPOs in response to the PM 3 Final Rule being published in 2017.

Baseline Data

A unified baseline condition for the entire KIPDA MPO region is currently unavailable. The following table details the separate baselines for the three Kentucky MPO counties and the two Indiana MPO counties in the KIPDA region during 2017:

PM 3: System Performance		KENTUCKY MPO	Indiana MPO	KIPDA MPO
Truck Travel Time	% of the Interstate system			
Reliability (TTTR) on	mileage providing for	1.35	1.20	TBD
Interstates	reliable truck travel time			

State Targets

- Kentucky
 - KYTC set the following two-year statewide target in 2018, and adjusted the four-year statewide target in 2020:

PM 3: System Performance		KENTUCKY STATEWIDE	
		2-YEAR	4-YEAR
		TARGET	TARGET
Truck Travel Time	% of the Interstate system		
Reliability (TTTR) on	mileage providing for	1.19	<mark>1.30</mark>
Interstates	reliable truck travel time		

o Indiana

o INDOT set the following two-year statewide target in 2018, and adjusted the four-year statewide target in 2020:

PM 3: System Performance		Indiana Statewide	
		2-YEAR	4-YEAR
		TARGET	TARGET
Truck Travel Time	% of the Interstate system		
Reliability (TTTR) on	mileage providing for	1.27	<mark>1.30</mark>
Interstates	reliable truck travel time		

Target (as required by FHWA)

KIPDA is not establishing quantifiable targets at this time. KIPDA is committed to support the statewide targets set forth by KYTC and INDOT by planning and programming projects that contribute to the accomplishment of each state's Truck Travel Time Reliability (TTTR) targets.

Target-Setting Methodology

KIPDA was not able to analyze the enormous amount of data required to calculate travel time reliability using NPMRDS and meet the federal deadline to report targets. The separate Kentucky MPO and Indiana MPO baselines were provided to KIPDA by their respective state DOTs. A unified MPO-wide baseline has not be calculated, and therefore a quantifiable target has not be set. In compliance with federal regulation, KIPDA has elected to support each state's targets. However, it continues to be a priority to identify unified MPO-wide baselines and establish targets on Truck Travel Time Reliability (TTTR).

AIR QUALITY CONFORMITY

The Louisville, KY-IN transportation planning study area consists of Clark and Floyd counties and 0.1 square miles of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and approximately 4 square miles of Shelby County in Kentucky. Much of this area coincides with the local ozone nonattainment area. In the past, a portion of the planning study area also coincided with a local 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 nonattainment 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. One of the requirements of this designation as a nonattainment area is that it will once again be necessary to determine conformity for the local area.

KIPDA is amending *Connecting Kentuckiana 2040*, the metropolitan transportation plan (MTP) and the FY 2021 – FY 2025 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 both 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.

Subsequent to being designated as nonattainment of the 1997 8-hour ozone standard and prior to being redesignated as attainment of the standard, the Louisville area

relied on the use of interim tests to demonstrate conformity. These tests had been established during a 2004 update to the federal conformity rule. When the Louisville area was designated as nonattainment of the 2015 8-hour ozone standard, there were no MVEBs for that standard. However, there were MVEBs for the 1997 8-hour ozone standard, and they were used in the process of determining conformity to both the 1997 and 2015 standards.

When the local area was designated as nonattainment of the 1997 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 the actions to reduce precursor emissions were to be incorporated into the Indiana and Kentucky SIPs. It was during this process that MVEBs were established. Originally, the SIPs were to include sets of actions to bring the local area into attainment of the ozone standard. This type of SIP is known as an attainment demonstration. However, while these SIPs were being developed, the data from the air quality monitors in the area indicated that the 1997 8hour ozone standard had been met. With this data in hand, the air quality agencies were able to submit a SIP known as a redesignation request instead. 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.

CONSULTATION FOR CONNECTING KENTUCKIANA 2040

The first step in determining conformity of *Connecting Kentuckiana 2040* was to consult with the interagency consultation (IAC) group concerning matters not explicitly determined by the conformity rule. Conformity under the 1997 8-hour ozone standard had been previously determined. Therefore, many of the issues normally arising in conformity had undergone consultation previously. Since these issues were not raised during consultation this time, the portions of the analysis involving those issues were accomplished consistent with established practice.

A consultation zoom meeting was held on March 4 to discuss issues relative to amendment 3 of the MTP. It involved a review and discussion of the following items:

(a) important dates in the schedule for the amendment;

April 9 -- Regional Emissions (Air Quality) Analysis completed

April 16 -- Public Review begins

May 12 -- Action by the Transportation Technical Coordinating

Committee

May 27 -- Action by the Transportation Policy Committee

- May 28 -- Documentation sent to review agencies for the federal conformity determination;
- (b) a draft list of projects—sent to the IAC with consultation notice—included in accompanying documentation;
- (c) the horizon year of the transportation plan 2040;
- (d) the proposed conformity test methodology/ies and analysis years—see the discussion of issues and ESTABLISHED PRACTICE sections below;
- (e) the pollutant(s)/precursor(s) of concern and the motor vehicle emissions budget(s), if applicable—see table 2 at the end of the report;
- (f) information concerning the inputs for the travel demand model and the approved emissions model—see the issues section below, the list of projects included in accompanying documentation, and the items concerning the travel demand model and emissions model under Other Planning Issues; and
- (g) a listing of any transportation control measures (TCMs) in SIPs, if applicable—there are none.

Issues

Discussion of Projects

KIPDA staff had provided the IAC with a list of 10 projects that will be amended in *Connecting Kentuckiana 2040.* The projects are a mix of new projects and projects already in the MTP that were being amended. Key details about the projects were presented in the list, including recommendations on whether each project was exempt or non-exempt and how the projects were included in or excluded from the regional travel demand model.

Points of discussion of the projects included:

Additional Lanes on I-64 in Floyd County, KIPDA ID 2889: KIPDA staff had received recent information from INDOT, the project sponsor, that the project description had changed. The changes included additional travel lanes on I-64 from Spring St in New Albany to the US 150 interchange, additional travel lanes on I-265 from I-64 to the State St interchange, and additional lanes on the ramps connecting I-64 and I-265. During the discussion of this project, it was mentioned that these changes will necessitate recognizing a change in the scope of the project and that these project changes will need to be reflected in the travel model.

Conclusion: The IAC members, after discussing the details of the project listed above, accepted the recommendations concerning the incorporation of this project and the other projects described in the documentation into the regional emissions analysis.

Discussion of the Conformity Analysis

The following items of the conformity analysis were discussed.

- (1) KIPDA staff discussed the key components of the conformity analysis that are expected to be presented to the KIPDA TPC in May. The analysis years will be the ones that were used when the existing MTP was previously amended, except for 2020. Since 2020 is now in the past, it will no longer be an analysis year. The analysis years will be 2025, 2030, 2035, and 2040.
- (2) The Budget Test utilizing the Year 2020 Motor Vehicle Emissions Budgets created for the 1997 8-Hour Ozone Standard will continue to be used until a new set of budgets are established. By not exceeding these budgets in the year 2025, 2030, 2035, and 2040 travel model scenarios, *Connecting Kentuckiana 2040* will demonstrate conformity to both the 1997 and 2015 8-Hour Ozone Standards.
- (3) The pollutants of concern for the analysis are the precursors of Ozone, volatile organic compounds (VOCs) and oxides of Nitrogen (NOx). The emission budgets for these pollutants are 20,793 kg/day and 26,726 kg/day, respectively.
- (4) The newest version of the MOVES emissions model, MOVES 3.0, will be used for the analysis.

NOTE: (See also the "Analysis Years and Conformity Tests" portion of the "ESTABLISHED PRACTICE" section below for more information on these issues.)

Discussion of Schedule

KIPDA staff discussed the schedule for amendment 3 as shown above. There were no questions concerning the amendment schedule.

Other items for discussion

KIPDA staff offered the opportunity for any other business or questions to be brought to the IAC. There was no other business discussed.

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 consultation zoom meeting of March 4, 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.

<u>Issues related to the KIPDA travel demand forecasting model</u>

During recent changes to the MTP, there were two changes of note to the KIPDA travel demand forecasting model.

- (1) First, the proposed toll structure for the Louisville Southern Indiana Ohio River Bridges project changed in the last few years. Changes were made to the KIPDA travel demand forecasting model to reflect the changes in the toll structure.
- (2) During 2017 and 2018, KIPDA staff have updated and calibrated the travel demand forecasting model. This activity involved updating the inputs to the model and developing new values for the parameters of the model. The resulting model was considered calibrated when the model outputs matched observed data (e.g. HPMS VMT), within reason, for the baseyear. This update established 2015 as the baseyear (the year on which calibration was based) for the model.

Conclusion: The IAC members have been informed that the KIPDA travel demand forecasting model has been updated and calibrated and that 2015 is now the baseyear for the model.

Analysis Years and Conformity Tests

Motor Vehicle Emissions Budgets (MVEBs) for the 1997 8-hour ozone standard were approved by EPA in July, 2007. The MVEBs were for the precursors of ozone, volatile organic compounds (VOCs) and oxides of Nitrogen (NOx), The Federal Register notice can be found at 72 FR 36601. The budgets are shown in Table 2 at the end of this document. Since there are MVEBs for the ozone precursors, the conformity rule requires that ozone analyses be done for the attainment year and the last year of the transportation plan. In addition, other intermittent year(s) are required such that no two analysis years are more than ten years apart. The maintenance plan established when the local area was redesignated established MVEBs for VOCs and NOx for 2003 (the attainment year) and 2020 (the last year of the maintenance plan). Since the attainment year and the last year of the

maintenance plan are now in the past, those years are no longer included in the analysis.

In order to have the required analysis years, several changes were made in recent years. Years have been added to the list of analysis years, and later, when those years were passed, they were removed. When the MTP was updated in 2020, the horizon year of the plan was being changed to 2040, and that year had to be added to the analysis years. At the same time, in order to allow for more orderly transition as time progressed, 2025 and 2035 have been added as analysis years, allowing for analysis years every five years. By having the analysis years five years apart throughout the life of the MTP, it was noted that there would always be an analysis year within five years of the time of the analysis. Further, when the horizon year of the MTP is extended, that year will be added as an analysis year. Otherwise, the analysis years can remain constant except for the removal of an analysis year when it moves to the past. This year 2020 moved to the past, and it was removed from the list of analysis years. This left the years 2025, 2030, 2035, and 2040 as analysis years.

Conclusion: The established practice is that the analysis years and conformity tests for the regional emissions analysis are as shown in the table below. Years prior to the present year have been removed from the list.

1997 8-hour Ozone Standard	
Analysis Year	Conformity Test(s)
2025	Budget test using the 2020 MVEBs for the 1997 8-hour standard
2030	Budget test using the 2020 MVEBs for the 1997 8-hour standard
2035	Budget test using the 2020 MVEBs for the 1997 8-hour standard
2040	Budget test using the 2020 MVEBs for the 1997 8-hour standard

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 2017, and the data being used for the Kentucky counties is for 2018. These data represent the most recent information available for this issue.

Conclusion: Based on a consensus of the IAC members, vehicle registration data for 2017 for the Indiana counties and for 2018 for the Kentucky counties is now being used in developing emission estimates.

CONFORMITY OF CONNECTING KENTUCKIANA 2040

The MTP, *Connecting Kentuckiana 2040*, 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:

- 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 2040* 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 2040* 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 the 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 the amendment of *Connecting Kentuckiana 2040*, a group of projects had been proposed for 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 being exempt, non-exempt, etc. 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 2040*." (please see above.) Those projects in *Connecting Kentuckiana 2040* which were not changed were analyzed as they had been previously. The projects which were newly added to the MTP or had been changed in *Connecting Kentuckiana 2040* were analyzed as indicated on the list provided to IAC.

In addition, there were several projects which could not be analyzed using the travel model. In the past, most of these projects had been evaluated using spreadsheet methods factors. 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.

Also, there was one project affecting Bullitt County that could not be included in the travel model. Unlike the projects described in the paragraph above, this project could have the potential to increase emissions. Therefore, a special effort was made to include its impacts in the analysis of travel behavior impacts and, consequently, in the regional emissions analysis. This project is the relocated (southern) section of US 31E. This project, which had been discussed during consultation in the past, involves 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 were developed using a spreadsheet approach. The VMT estimates were the product of the estimated traffic volumes for each of the analysis years and the length of the relocated section in Bullitt County. The VMT estimates for this project were then added to other Bullitt County VMT estimates of the same functional class. Consequently, the VMT estimates from this project were included with the other Bullitt County VMT, and the emissions in Bullitt County associated with this project were included in the overall emission estimates for Bullitt County.

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 consists of Clark and Floyd counties, and 0.1 square miles in Harrison County 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 recently. This update established 2015 as the new base year for the model. The model update utilized the information incorporated into the travel model during previous updates. In particular, information from the 2000 KIPDA Household Travel Survey had been previously incorporated. Information from 2010 Census, the 2012-2016 American Community Survey, the 1990 and 1995 National Personal Transportation Surveys, and the 2001 and 2009 National Household Travel Surveys was incorporated to update the previous source data, particularly the 2000 KIPDA Household Travel Survey. During the update, the model parameters were adjusted such that the model output matched—within reason—three 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; (2) the distribution of trip lengths (duration in time) for each of the main trip purposes used in the model; and (3) 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 2015. 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. 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 and utilizes different trip rates for each. Internal-internal trips are those which have both ends inside the modeling domain. The three purposes are homebased work, home-based other, and non home-based.

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. The friction factors used in the gravity model were developed as part of the calibration effort performed during the model update. In addition, information from a study which investigated the behavior of travelers crossing the Ohio River and traffic count information from years near 2015 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.

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 2040* utilizes transit information from the previous travel demand model. 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 2040* 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 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 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 MTP update, the time penalties used in the KIPDA travel model were likewise changed to reflect the effect of the new toll structure.

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 2015. 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 2015 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 2015 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).

The HERS equations were used to estimate speeds on 6239 sections for five functional classifications of urban roadways and 2278 sections 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.

There were not many HPMS minor collector and local roadway sections with data that allowed for the calculation of adjustment factors. Since the model contained the minor collector roadways in the area and these roadways were similar to the major collector roadways in the area, the adjustment factor for the rural major collectors was used for the rural minor collector roadways, and the adjustment factor for the urban major collectors was used for the urban minor collector roadways.

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 provided adjusted travel model

output data in the form of vehicle-miles-traveled (VMT), VMT by speed bin, and VMT fractions by speed bin by county and by MOBILE 6 facility type to the staff of the Louisville Metro Air Pollution Control District (LMAPCD). LMAPCD 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). They then provided these estimates to KIPDA staff. This analysis is explained below in further detail in the section below.

MOVES Emissions Model

As previously mentioned, the Louisville region is a nonattainment 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 3.0 emissions model. The staff of the Louisville Metro Air Pollution Control District (LMAPCD) produced the emissions for all of the counties in the nonattainment 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 that were used in developing the ozone budget update (for VOCs and NOx) in 2003 with a few exceptions where newer data was incorporated. 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 2017) for Clark and Floyd counties (provided by INDOT),
- (3) the development and use of newer vehicle registration data (for 2018) for Jefferson County (KY), 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 LMAPCD. Most of the inputs to the MOVES model were defaults and/or data used that was consistent with previous SIPs. 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 or had only been designated under the 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 was modeled the same as for Jefferson County.

The assumptions used for Bullitt and Oldham counties were consistent with those for the 2003 ozone budget update with the following exceptions:

- (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) new 2018 vehicle registration data for Bullitt and Oldham counties, and

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

LMAPCD developed emission estimates of VOCs and NOx using the MOVES model. To review, the following steps were undertaken.

- (1) LMAPCD staff received (from KIPDA staff) the adjusted travel model output in the form of VMT, VMT by speed bin, and VMT fractions by speed bin, all by county and by MOBILE facility type by analysis year.
- (2) LMAPCD reformatted the data from KIPDA to prepare it as input to the MOVES model. Other necessary data was also prepared.
- (3) The MOVES model was run in inventory mode to determine emission estimates of each precursor for each county for each analysis year.
- (4) LMAPCD staff provided the emission estimates to KIPDA staff.

RESULTS OF THE ANALYSIS

The transportation plan, *Connecting Kentuckiana 2040*, 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 maintenance 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 and 2. Table 1 shows the summer weekday vehicle-miles-traveled from the analysis. Table 2 shows that for 2025, 2030, 2035 and 2040, the summer weekday VOC and NOx emission levels for the 2015 8-hour nonattainment area are less than the emission budgets established in the 1997 8-hour ozone maintenance SIP.

Conclusions - 8-hour Ozone

The regional emissions analysis of *Connecting Kentuckiana 2040* 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 Table 2 indicates that *Connecting Kentuckiana 2040* has met the requirements of conformity under the 1997 and 2015 8-hour ozone standards. In summary, it can be concluded that *Connecting Kentuckiana 2040* conforms to the SIPs and meets the requirements of the federal conformity rule.

TABLE 1

SUMMER		IILES-TRAVELED (VMT IE NONATTAINMENT A O's of vmt/day)	•
YEAR	INDIANA	KENTUCKY	TOTAL
2025	7894	27298	35192
2030	8426	28717	37143
2035	8959	30052	39011
2040	9446	31184	40630

TABLE 2

			SIONS FOR THE 8 T AREA (kg/day)	-HOUR
	EMISS	ION LEVELS FO	R VARIOUS YEARS	
YEAR	Area	VOCs	NOx	PASS
2025		6968	18523	YES
2030	Regional	4942	14492	YES
2035		4343	13556	YES
2040		4174	13825	YES

NOTE: The criteria for conformity are as follows:

2025, 2030, 2035, and 2040 Regional emission levels for VOCs must be below the maintenance plan emission budget of 22.92 tons/day or 20,793 kg/day.

2025, 2030, 2035, and 2040 Regional emission levels for NOx must be below the maintenance plan emission budget of 29.46 tons/day or 26,726 kg/day.



Connecting Kentuckiana 2040 Metropolitan Transportation Plan Amendment 3 FY 2020-2025 Transportation Improvement Program Amendment 3 Interagency Consultation Group Conference Call Meeting Minutes March 4, 2021 1:00 PM EDT

Participants:

EPA – Sarah LaRocca, Dianna Myers, Anthony Maietta, & Richard Wong

FHWA – Bernadette Dupont & Erica Tait

LMAPCD - Michelle King & Byron Gary

KYDAQ – Anna Bowman & Ashlee Smither

KYTC – Tonya Higdon & Jahan Khan

IDEM - Shawn Seals

TARC – Aida Copic

KIPDA – Amanda Spencer, Andy Rush, Randy Simon, David Burton, Nick Vail, & Dane Hoskins

Welcome/Roll Call:

A total of 20 participants, representing eight local, state, regional, and federal agencies participated in the IAC Conference Call for Amendment 3 of KIPDA's *Connecting Kentuckiana 2040* Metropolitan Transportation Plan and the FY 2020-2025 Transportation Improvement Program. The meeting began shortly after 1:00 PM EDT on March 4, 2021.

Project Discussion:

KIPDA Staff presented the list of ten (10) projects that are included in Amendment 3. A change to KIPDA ID 2899 was noted. After discussion earlier in the week with INDOT, the project sponsor, the project

description was changed. Erica Tait, FHWA-IN, pointed out that the change meant that there would now be an impact to the travel model representation of this projects. Bernadette Dupont, FHWA-KY, indicates the change in description indicated a change in the scope of the project. The project (with the new description) will now be added to the 2030, 2035, and 2040 scenarios for the upcoming regional emissions analysis. KIPDA Staff asked if there were any questions about the other nine projects on the list. There were no questions.

Conformity Analysis Discussion:

KIPDA Staff discussed the key components of the conformity analysis that is expected to be presented to the KIPDA TPC in May. Since it is now 2021, KIPDA will no longer be using 2020 as an analysis year. Therefore, only the 2025, 2030, 2035, and 2040 scenarios will be used as analysis years in the upcoming analysis. The regional emissions estimates for all scenarios will be compared to Year 2020 Budgets established for ozone precursors.

KIPDA staff reminded the IAC of two other elements concerning the regional emissions analysis. The horizon year of the MTP is 2040. Further, there are no TCMs in a SIP for the local area.

Schedule Discussion:

KIPDA staff discussed key dates of the anticipated schedule for the amendment, which had been included the notice of the Zoom meeting. The regional emissions analysis (including the travel demand and MOVES modeling will be completed by April 9. The public review period for amendment 3 is the latter half of April with a virtual public meeting on April 27. The KIPDA committees are scheduled to review and take action on the amendment in May. The Federal final review and conformity determination is expected by the end of June.

SIP Status Discussion:

KIPDA Staff sought input on the status of an updated Ozone State Implementation Plan (SIP) for the 2015 Ozone Standard. Michelle King, LMAPCD, noted that LMAPCD is working with KYDAQ on SIP issues at this time, but the work would probably continue through summer.

MOVES 3 Status Discussion:

In the course of other discussions, it was noted that there is a new version of MOVES (MOVES 3), which has been released. The question arose as to whether MOVES 3 would be required for Amendment 3. Tony Maietta, EPA indicated that MOVES 3 would not be required until January of 2023. Byron Gary, LMAPCD, indicated that Craig Butler of the LMAPCD staff had been working to change the version of MOVES which would be used in the future, but will not be used at this time for this analysis.

Note: After the IAC Meeting on March 4th and the distribution of draft Meeting Minutes on March 11th, LMAPCD Staff contacted KIPDA Staff to state that LMAPCD is prepared to use MOVES 3.0 for Amendment 3 and will proceed with its use for the regional emissions analysis.

Other Discussion:

KIPDA staff offered the opportunity for any other business or questions to be brought before the IAC. There was no other business discussed. The conference call adjourned at approximately 1:30 PM EDT.



Kentucky Division

December 1, 2021

330 West Broadway Frankfort, KY 40601 PH (502) 223-6720 FAX (502) 223 6735 http://www.fhwa.dot.gov/kydiv

In Reply Refer To: HDA-KY

Mr. Jarrett Haley, Executive Director Louisville Area Metropolitan Planning Organization c/o Kentuckiana Regional Planning and Development Agency 11520 Commonwealth Drive Louisville, KY 40299

Dear Mr. Haley:

The Kentucky Division Office of the Federal Highway Administration (FHWA) and Region 4 of the Federal Transit Administration (FTA), in consultation with the Indiana Division Office of the Federal Highway Administration and Regions 4 and 5 of the United States Environmental Protection Agency (EPA), have reviewed the following documents:

Amendment 4 to the 2020-2025 Transportation Improvement Program (TIP) and Amendment 4 to the 2040 Metropolitan Transportation Plan (MTP) for the Louisville Area Metropolitan Planning Organization (MPO)

(MPO approval date October 28, 2021)

The Kentucky Energy and Environment Cabinet's Division for Air Quality, the Kentucky Transportation Cabinet's Division of Planning, the Kentucky Transportation Cabinet's Office of Transportation Delivery, the Louisville Metro Air Pollution Control District, and the Transit Authority of River City also had an opportunity to review and comment on the aforementioned documents.

We found that these documents meet the five primary criteria of the Transportation Conformity Rule (40 CFR Part 93):

- use of the latest planning assumptions,
- use of the latest emissions model.
- use of appropriate consultation procedures,
- consistency with the mobile vehicle emission budgets in the State Implementation Plan (SIP), and
- provisions for timely implementation of transportation control measures in the SIP.

Page 2 Mr. Haley

We found that these documents met the criteria outlined in the July 1, 2004 Transportation Conformity Rule Amendments for New 8-hr Ozone and PM_{2.5} National Ambient Air Quality Standards (NAAQS), Response to March 1999 Court Decision and Additional Rule Changes (69 FR 40004). We therefore find that these amendments conform to the 2015 8-hour Ozone NAAQS.

Sincerely,

Boday Borres Deputy Division Administrator

via Email

cc: Aviance Webb, FTA-R4
Erica Tait, FHWA-IN
Sarah LaRocca, USEPA-R4
Melissa Duff, KEEC-DAQ
Rachael Hamilton, Louisville Metro APCD
Carrie Butler, TARC
Ron Rigney, KYTC-Program Management
Mikael Pelfrey, KYTC-Planning
Andy Rush, LOU MPO



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

Agenda Item #5

MEMORANDUM

TO: Transportation Policy Committee

FROM: Nick Vail

DATE: October 21, 2021

SUBJECT: Amendment 4 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan

(MTP) and FY 2020-2025 Transportation Improvement Program (TIP)

KIPDA staff is ready to present Amendment 4 to the committees for consideration. Sponsors were given until June 28th to submit project changes. The air quality conformity analysis and the public comment period have been completed. Greg Burress sent all public comments to the Transportation Policy Committee (TPC) members as part of their 15-day review.

Two actions are requested for TPC:

1) Approval of Amendment 4 to the Connecting Kentuckiana 2040 MTP, and

2) Approval of Amendment 4 to the FY 2020-2025 TIP.

11520 Commonwealth Drive Louisville, KY 40299 Phone: 502.266.6084

Fax: 502.266.5047 TDD: 800.648.6056



A Resolution of the

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #4 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan

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 Metropolitan Planning Area encompassing Clark and Floyd counties and a portion of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and a portion of Shelby County in Kentucky; and,

Whereas, Federal laws require the Transportation Policy Committee periodically review and update its Metropolitan Transportation Plan to reflect progress and changes regarding its implementation using the latest forecasts of regional demographic and socioeconomic data; and,

Whereas, pursuant to 23 CFR Section 450.322, the Metropolitan Transportation Plan is based on the latest available estimates and assumptions with regard to population, land use, travel, employment, congestion, and economic activity developed in conjunction with local jurisdictions; and,

Whereas, consistent with Federal and state mandates, states' environmental requirements, and with the KIPDA Transportation Policy Committee's Memorandum of Agreement, *Participation Plan, Title VI: Environmental Justice 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; has made draft documents available for public review, has held public meetings and other efforts including providing data and information related to the Metropolitan Transportation Plan update on the KIPDA website, to involve citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of persons with disabilities, and other interested parties in order to facilitate their ability to provide input, discussion, and review of *Connecting Kentuckiana 2040*, and has incorporated the work of local governments, and the suggestions of citizens, businesses, and interests throughout the MPA in this document; and,

Be it further resolved, that the KIPDA staff is authorized to transmit Amendment #4 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan for the Louisville/Jefferson County KY-IN Metropolitan Planning Area 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 28th day of October 2021.

Kevin Baity, Chair

Transportation Policy Committee

Andy Rush

KIPDA Transportation Division Director

A Resolution of the

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #4 of the FY 2020 - FY 2025 Transportation Improvement Program

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 and a portion of Harrison County in 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, Title VI: Environmental Justice 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, the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is a subset of Connecting Kentuckiana 2040, 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 FY2020 -FY 2025 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 2019 - 2022 Statewide Transportation Improvement Program (STIP), and the Indiana FY 2020 - 2024 STIP, respectively, and will become part of the end of fiscal year "fiscal constraint" recalculations; and,

Now, therefore be it resolved, by the Transportation Policy Committee of KIPDA that this amendment of the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is adopted by official action at the October 28, 2021 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* 2040 complies with all of 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 2040, 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 #4 of the *Connecting Kentuckiana 2040 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 this amendment of the *Connecting Kentuckiana 2040* 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 28th day of October 2021.

Kevin Baity, Chair

Transportation Policy Committee

Andy Rush

KIPDA Transportation Division Director



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

Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020-2025 Transportation Improvement Plan

The Kentuckiana Regional Planning and Development Agency (KIPDA) is the Metropolitan Planning Organization (MPO) for the five-county region covering Jefferson, Bullitt and Oldham Counties in Kentucky and Clark and Floyd Counties in Indiana. The MPO's responsibilities include producing a long-range transportation document, Connecting Kentuckiana 2040 Metropolitan Transportation Plan (MTP) and a short-range planning document, the Fiscal Year (FY) 2020-2025 Transportation Improvement Program (TIP)

Changes have been proposed to the MTP and TIP. The MTP, with the proposed changes, is fiscally reasonable and the TIP remains fiscally constrained. This packet includes the following documents:

- A listing of all projects being added, removed and/or modified
- Air Quality conformation documentation
- Meeting minutes from the Interagency Consultation (IAC) conference call

Providing comments for the proposed changes can be submitted by any of the following methods:

- Visiting https://kipdatransportation.org/amendment4/ and click on the Amendment 4 Map link
- Emailing <u>kipda.trans@kipda.org</u>
- Mail to the following address

TIP and MTP Amendment, KIPDA 11520 Commonwealth Drive, Louisville, KY 40299

Attend the virtual open house on September 30th from 5:00-6:00 pm via Zoom. Members of the
public are encouraged to aske questions and leave comments. A link to the virtual public meeting
can be found at https://kipdatransportation.org/amendment4/

Please contact Community and Committee Engagement Specialist Greg Burress at 502-562-6144 ext. 123 or via email at greg.burress@kipda.org for additional questions or information.

11520 Commonwealth Drive Louisville, KY 40299 Phone: 502.266.6084

Fax: 502.266.5047 TDD: 800.648.6056

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

MTP Action:	Revise Project Description and Update O	pen to Public	Date		
Exempt/ Non-Exempt:	Non-exempt	Model Impact:	Remove from 2025 scenario. Ac existence of KYTC ID 5-80101.00 ir		
Project Sponsor:	Bullitt County	KIPDA ID:	2758	State ID:	TBD
County	Bullitt	Parent ID:	N/A	Group ID:	N/A
Project Name:	KY 1450 Blue Lick Road Wideni	ing	Total Estimated Cost in MTP (i.e. CK 2040):	\$8	3,000,000
		J	Total Cost Programmed in TIP to Date:		N/A
Funding Source:	N/A		Open to Public Date:		2027 2024
Description:	Widen KY 1450 (Blue Lick Road) from 2 t Harper Way.	o 4 lanes fron	m Bullitt/Jefferson County line to CR 1	1512A (Jeffie La	ne) KY 1526 John
Purpose & Need:	Congestion, visibility, intersection realign for this project.	nment, and sa	afety are all issues needing to be add	ressed that hav	e created the need
	Tor tino projecti				
FY 20-25 TIP Funding:	N/A				
Funding:	N/A				
Funding: TIP Action:	N/A Remove Project	Model Impact:	No change	e to model	
Funding: TIP Action: MTP Action: Exempt/Non-	N/A Remove Project N/A - not in MTP		No change 2489	e to model State ID:	1701215
TIP Action: MTP Action: Exempt/Non- Exempt:	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation	Impact:			1701215 2676
Funding: TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd	Impact: KIPDA ID:	2489	State ID:	
Funding: TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor:	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation (INDOT)	Impact: KIPDA ID:	2489 N/A Total Estimated Cost in MTP	State ID: Group ID:	2676
Funding: TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd	Impact: KIPDA ID: Parent ID:	N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed	State ID: Group ID:	2676 N/A
Funding: TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name:	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd IN 111	Impact: KIPDA ID: Parent ID:	N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date:	State ID: Group ID:	2676 N/A 180,420
Funding: TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name: Funding Source:	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd IN 111 National Highway Performance Progra	Impact: KIPDA ID: Parent ID:	N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date:	State ID: Group ID:	2676 N/A 180,420

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Remove Project				
MTP Action:	Remove Project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	2279	State ID:	1592187
County	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	I-64		Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed		3,500,000
			in TIP to Date:	ÇZ.	3,300,000
Funding Source:	National Highway Performance Progra	m (NHPP)	Open to Public Date:		2021
Description:	Bridge painting of the Sherman Minton E	Bridge over th	ne Ohio River.	•	
Purpose & Need:	Bridge painting of the Sherman Minton E	Bridge over th	ne Ohio River to maintain the integrity	of the bridge.	
FY 20-25 TIP Funding:	FY 2021 Construction phase with the foll \$20,700,000 (Federal) + \$2,300,000 (Oth	_			
TID Actions	Domesto Drainet				
TIP Action:	Remove Project N/A - not in MTP				
MTP Action: Exempt/Non-	Exempt	Model	No change	to model	
Exempt:	'	Impact:		1	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	2649	State ID:	1702260
County	Jefferson	Parent ID:	N/A	Group ID:	2676
Project Name:	I-64 Bridge Deck Replacement on Shern	nan Minton	Total Estimated Cost in MTP (i.e. CK 2040):		N/A
	1/\/ \(\Lambda \) = = = = = = = = = = = = = = = = = =		Total Cost Programmed		
, 	KY Approach		in TIP to Date:	\$13	2,095,501
Funding Source:	National Highway Performance Progra	m (NHPP)	_	\$1.	2,095,501
		,	in TIP to Date: Open to Public Date:		2021
Funding Source:	National Highway Performance Progra	tucky approa	in TIP to Date: Open to Public Date: ach to the Sherman Minton Bridge over		2021

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Remove Project				
MTP Action:	N/A - not in MTP				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	2647	State ID:	1702258
County	Floyd	Parent ID:	N/A	Group ID:	2676
Project Name:	I-64 Sherman Minton Bridge EB Indiana (1) Deck Overlay	a Approach	Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed		N/A
	(1) Deck Overlay		in TIP to Date:	\$	226,084
Funding Source:	National Highway Performance Progra	am (NHPP)	Open to Public Date:		2021
Description:	Bridge deck overlay on the I-64 Indiana I	EB approach ((1 of 2) to the Sherman Minton Bridge	e over the Ohio	River.
Purpose & Need:	Bridge deck overlay on I-64 at the Indian	a EB approac	ch (1 of 2) to the Sherman Minton Bri	dge.	
FY 20-25 TIP Funding:	FY 2021 Construction phase with the foll \$203,476 (Federal) + \$22,608 (Other) = \$	_			
TIP Action:	Remove Project				
TIP Action:	Remove Project N/A - not in MTP				
		Model Impact:	No change	to model	
MTP Action: Exempt/Non-	N/A - not in MTP		No change 2648	to model State ID:	1702259
MTP Action: Exempt/Non- Exempt:	N/A - not in MTP Exempt Indiana Department of Transportation	Impact:			1702259 2676
MTP Action: Exempt/Non- Exempt: Project Sponsor: County	N/A - not in MTP Exempt Indiana Department of Transportation (INDOT)	Impact: KIPDA ID: Parent ID:	2648	State ID:	
MTP Action: Exempt/Non- Exempt: Project Sponsor:	N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd	Impact: KIPDA ID: Parent ID:	2648 N/A Total Estimated Cost in MTP	State ID: Group ID:	2676
MTP Action: Exempt/Non- Exempt: Project Sponsor: County	N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd I-64 Sherman Minton Bridge EB Indiana	Impact: KIPDA ID: Parent ID: Approach	2648 N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed	State ID: Group ID:	2676 N/A
MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name:	N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd I-64 Sherman Minton Bridge EB Indiana (2) Deck Overlay	Impact: KIPDA ID: Parent ID: Approach am (NHPP)	2648 N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date:	State ID: Group ID:	2676 N/A 339,126 2021
MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name: Funding Source:	N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd I-64 Sherman Minton Bridge EB Indiana (2) Deck Overlay National Highway Performance Progra	Impact: KIPDA ID: Parent ID: Approach Impact: Approach Im	2648 N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date: (2 of 2) to the Sherman Minton Bridge	State ID: Group ID: \$ e over the Ohio	2676 N/A 339,126 2021

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

	Remove Project				
MTP Action:	N/A - not in MTP				_
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	2645	State ID:	1702254
County	Floyd	Parent ID:	N/A	Group ID:	2676
Project Name:	I-64 Sherman Minton Bridge Pair	nting	Total Estimated Cost in MTP (i.e. CK 2040):		N/A
r roject Name.	1 04 Sherman Winton Bhage Fan	111116	Total Cost Programmed in TIP to Date:	\$11	1,270,214
Funding Source:	National Highway Performance Progra	m (NHPP)	Open to Public Date:		2021
Description:	I-64 bridge painting on the Kentucky app	oroach to the	Sherman Minton Bridge over the Oh	io River.	
Purpose & Need:	Sherman Minton bridge painting				
FY 20-25 TIP	FY 2021 Construction phase with the foll \$10,143,193 (Federal) + \$1,127,021 (Oth	•			
Funding:	310,143,193 (rederal) + \$1,127,021 (Oth	er) = \$11,270),214 (Total)		
TIP Action:	Remove Project	er) = \$11,270),214 (Total)		
		er) = \$11,270),214 (Total)		
TIP Action:	Remove Project	Model	No change	to model	
TIP Action: MTP Action: Exempt/Non-	Remove Project N/A - not in MTP	Model		to model State ID:	1702257
TIP Action: MTP Action: Exempt/Non- Exempt:	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation	Model Impact:	No change		1702257 2676
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation (INDOT)	Model Impact: KIPDA ID: Parent ID:	No change	State ID:	
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor:	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd	Model Impact: KIPDA ID: Parent ID:	No change 2646 N/A Total Estimated Cost in MTP	State ID: Group ID:	2676
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd I-64 Sherman Minton Bridge WB Indian	Model Impact: KIPDA ID: Parent ID:	No change 2646 N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed	State ID: Group ID:	2676 N/A
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name:	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd I-64 Sherman Minton Bridge WB Indian Deck Overlay	Model Impact: KIPDA ID: Parent ID: a Approach	No change 2646 N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date:	State ID: Group ID:	2676 N/A 678,252 2021
TIP Action: MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name: Funding Source:	Remove Project N/A - not in MTP Exempt Indiana Department of Transportation (INDOT) Floyd I-64 Sherman Minton Bridge WB Indian Deck Overlay National Highway Performance Progra	Model Impact: KIPDA ID: Parent ID: a Approach m (NHPP)	No change 2646 N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date:	State ID: Group ID: \$ the Ohio River.	2676 N/A 678,252 2021

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Modify TIP Funding and Project Descript	ion			
MTP Action:	Modify TIP Funding and Project Descript	ion			
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	2533	State ID:	1702255
County	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	I-64 Sherman Minton Corridor Main	tenance	Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed	\$48	5,895,844 8,675,000 2,106,247
			in TIP to Date:		0,382,079
Funding Source:	Bridge National Highway Performance Progra	ı m (NHPP)	Open to Public Date:		2024
Description:	Bridge Rehabilitation Or Repair: I 64 She Interchanges and Pavement NBI 034520, 65 NBI 034520, HMA Overlay, Preventive (KY)-IN, Bridge Painting: I 64 Kentucky Ap 034523, Bridge Deck Overlay: I 64 Indian 65NBI 034515, Bridge Deck Overlay: I 64 65 NBI 034510, Bridge Deck Overlay: I 64 65 NBI 034513, Bridge Deck Replacemen W of I-65 NBI 034523, Bridge Painting: I 64 Maintenance of the I 64 Sherman Minto	Bridge Paint Maintenand Oproach to Sh a WB Approa Indiana EB A Indiana EB A t: I 64 Kentud 64 00.11 mile	cing: I 64 Sherman Minton Bridge over the: SR 111 Old SR-62 (Elm Street) from the street of the Ohio Forman Minton Bridge over the Ohio Forman Minton Bridge over the Sherman Minton	the Ohio River I-64 Off Ramp River 3.6 miles er Ohio River 3. dge over Ohio I dge over Ohio Bridge over Ohio 034490.	to State Street NBI W of I-65 NBI 93 miles W of I- River 4 miles W of I- River 4 miles W of I- nio River 3.61 miles
Purpose & Need:	Rehabilitate the bridge decks, perform n These maintenance efforts are required				nton Corridor.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TPC Approval Scheduled for October 28, 2021

FY 2020 Preliminary Engineering phase with the following NHPP funds: \$3,467,430 (Federal) + \$385,270 (Other) = \$3,852,700 (Total) FY 2020 Utilities Construction phase with the following NHPP funds: \$18,000 (Federal) + \$2,000 (Other) = \$20,000 (Total) \$1,431,000 (Federal) + \$159,000 (Other) = \$1,590,000 (Total) FY 2021 Preliminary Engineering phase with the following NHPP Bridge funds: \$3,806,496 (Federal) + \$422,944 (Other) = \$4,229,439 (Total) \$2,250,000 (Federal) + \$250,000 (Other) = \$2,500,000 (Total) **FY 20-25 TIP** FY 2022 Utilities phase with the following Bridge funds: **Funding:** \$1,098,000 (Federal) + \$122,000 (Other) = \$1,220,000 (Total) FY 2021 Construction phase with the following NHPP Bridge funds: \$5,625,000 (Federal) + \$625,000 (Other) = \$6,250,000 (Total) \$23,795,441 (Federal) + \$2,643,938 (Other) = \$26,439,379 (Total) FY 2022 Construction phase with the following Bridge funds: \$18,688,802 (Federal) + \$2,076,534 (Other) = \$20,765,336 (Total) FY 2023 Construction phase with the following Bridge funds: \$18,889,894 (Federal) + \$2,098,877 (Other) = \$20,988,771 (Total)

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add Project				
MTP Action:	Add Project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	NEW	State ID:	2100048
County	Clark	Parent ID:	N/A	Group ID:	N/A
Project Name:	SR 60 Intersection Improvement, Rou	undabout	Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date:		925,000
Funding Source:	National Highway Performance Progra	am (NHPP)	Open to Public Date:		2026
Description:	Intersection improvement going to a rou	ındabout at S	SR 60 and CR 311.		
Purpose & Need:	The purpose of this project is to reduce to end, left turn, and right-angle crashes. U value. The crash frequency value (Icf) is to intersection which will provide sufficient to allow this intersection to operate at a	sing HAT 3 as 6.68. The nee capacity and	s the analysis tool the 129 crashes res ed for this project is to provide a geom I reduce these rear end, left turn and	ulted in a 4.01 netric improver right angle cras	lcc crash severity nent to the
FY 20-25 TIP Funding:	FY 2023 Preliminary Engineering phase v \$382,500 (Federal) + \$42,500 (Other) = \$		=		
TIP Action:	Add Project				
MTP Action:	Add Project				
Exempt/Non- Exempt:	Non-Exempt	Model Impact:	Add an additional travel lane in the	2030, 2035, a	nd 2040 scenarios.
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	NEW	State ID:	2100036
County	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	SR 64 Added Travel Lane		Total Estimated Cost in MTP (i.e. CK 2040):	\$1	3,735,051
			Total Cost Programmed in TIP to Date:	\$2	2,270,000
Funding Source:	Surface Transportation Block Grant (ST	BG) - State	Open to Public Date:		2026
Description:	Added travel lane on SR 64 from 2,150' v County.	west of the ex	kisting Oakes Road intersection to Edv	vardsville-Gale	na Road in Floyd
Purpose & Need:	The purpose of this project is to improve will reduce driver delay for the side road multi-lane cross section further west tow	ls and mainlir	ne SR 64 in the design year. The added	d lanes to SR 64	-
FY 20-25 TIP Funding:	FY 2022 Preliminary Engineering phase v \$1,040,000 (Federal) + \$260,000 (Other) FY 2023 Right of Way phase with the foll	= \$1,300,000	O (Total)		
	\$776,000 (Federal) + \$194,000 (Other) =	_			

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Remove Project		-		
MTP Action:	Remove Project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	2902	State ID:	2000220
County	Clark, Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	Traffic Signal Mods		Total Estimated Cost in MTP (i.e. CK 2040):	\$1	.,450,000
	Transcognamical		Total Cost Programmed in TIP to Date:	\$1	,450,000
Funding Source:	National Highway Performance Progra	ım (NHPP)	Open to Public Date:		2021
Description:	Traffic signal modernization in various lo KIPDA MPO area are: SR 60 @ Old 311 (S SR 60 @ I-65 SB (Sellersburg); and US 15	Sellersburg); \$	SR 60 @ Payne Kohler Road (Sellersbu		
Purpose & Need:	To modernize the signals in order to med span/tether/catenary/overhead signage need upgraded signal cabinet and new for	, conduit, and		-	
FY 20-25 TIP Funding:	FY 2021 Construction phase with the foll \$1,305,000 (Federal) + \$145,000 (Other)	_			
TIP Action:	Add Project				
MTP Action:	Add Project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	NEW	State ID:	2100047
County	Floyd	Parent ID:	N/A	Group ID:	N/A
Droinet Name	US 150 Intersection Improvement of Old	d Vincennes	Total Estimated Cost in MTP (i.e. CK 2040):	\$5	,226,000
Project Name:	Road / Lawrence Banet Road	I	Total Cost Programmed in TIP to Date:	\$1	.,334,000
Funding Source:	Surface Transportation Block Grant (ST	BG) - MPO	Open to Public Date:		2026
Description:	Intersection improvement at the interse	ction of Old \	/incennes Road/Lawrence Banet Roac	d.	
Purpose & Need:	An intersection improvement project is r IN. This location has experienced higher reconfigure US 150 and Lawrence Banet installing U-turn access points on US 150	than anticipa Road as a me	ited crash frequency and cost. The red	commended alt	ernative would
FY 20-25 TIP Funding:	FY 2023 Preliminary Engineering phase v \$667,200 (Federal) + \$166,800 (Other) =		_		

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add Project				
MTP Action:	Add Project				
Exempt/Non-	Fromat	Model	Reflect a 3-lane section in 2030, 2035	, and 2040 sce	narios. (Changes are
Exempt:	Exempt	Impact:	related to KIP	DA ID 2758)	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	NEW	State ID:	05-80101.00
County	Bullitt	Parent ID:	N/A	Group ID:	N/A
Project Name:	KY 1450		Total Estimated Cost in MTP (i.e. CK 2040):	\$8	,630,000
rioject Name.	KT 1430		Total Cost Programmed in TIP to Date:	\$8	,630,000
Funding Source:	State		Open to Public Date:		2027
Description:	Improve safety and reduce congestion of and CR 1512A (Jeffie Lane). (2020CCN) P				(John Harper Way)
Purpose & Need:	The following needs have been identified residential growth in the area: 1) To imp standards, 3) To enhance network connections.	rove capacity	y, 2) To provide an improved highway	that meets cur	rent safety design
FY 20-25 TIP Funding:	FY 2022 Design phase with the following \$0 (Federal) + \$1,045,000 (Other) = \$1,04 FY 2023 Right of Way phase with the foll \$0 (Federal) + \$1,125,000 (Other) = \$1,12 *FY 2024 Utility phase with the following \$0 (Federal) + \$2,300,000 (Other) = \$2,30	45,000 (Tota owing State 25,000 (Tota g State funds	l) funds: l)		

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Modify TIP funding to add a project phase	e in the first f	our years of the TIP		
MTP Action:	None				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Louisville Metro	KIPDA ID:	2624	State ID:	05-03709.00
County	Jefferson	Parent ID:	1273	Group ID:	N/A
Project Name:	Olmsted Parkways Multi-Use Path Systen	n Section 3	Total Estimated Cost in MTP (i.e. CK 2040):		N/A
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Total Cost Programmed in TIP to Date:		,550,494 ,427,994
Funding Source:	Surface Transportation Block Grant (STE	BG) - MPO	Open to Public Date:		2025
Description:	Construction of a 0.30 mile shared use pa	th system ald	ong Algonquin Parkway between Be	ech Street and (Cypress Street.
Purpose & Need:	To improve and enhance bicycle and pede proposed Louisville Loop.	estrian acces	s opportunities along parkways that	extend and link	to existing and
	FY 2022 Design phase with the following \$\$100,000 (Federal) + \$22,500 (Other) = \$1 *FY 2025 Right of Way phase with the following \$	122,500 (Tota			

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

NATD Varians	Modify TIP funding to add a project pha	oc in the mot	Tour years or the Th		
MTP Action:	None	1			
Exempt/Non-	Exempt	Model	No changes to model. Project chan	_	to funding changes
Exempt:	·	Impact:	on		
Project Sponsor:	Louisville Metro	KIPDA ID:	2630	State ID:	TBD
County	Jefferson	Parent ID:	1273	Group ID:	N/A
Project Name:	Olmsted Parkways Multi-Use Path Syste	em Section 9	Total Estimated Cost in MTP (i.e. CK 2040):		N/A
- roject ramer	Omistea rankii ays maiar ose raan oysee	Section 5	Total Cost Programmed in TIP to Date:		,812,814 , 690,314
Funding Source:	Surface Transportation Block Grant (ST	ГВG) - МРО	Open to Public Date:		2025
Description:	Construction of a 3.55 mile road diet sys	stem along Al	gonquin Parkway between 41st Stree	et and Winkler A	venue.
Purpose & Need:	To improve and enhance bicycle and per proposed Louisville Loop.	destrian acces	ss opportunities along parkways that	extend and link	to existing and
FY 20-25 TIP Funding:	FY 2022 Design phase with the following \$100,000 (Federal) + \$22,500 (Other) = \$ *FY 2025 Design phase with the following \$152,251 (Federal) + \$38,063 (Other) = \$	\$122,500 (Tot	funds:		
	*FY 2025 Construction phase with the fo \$2,000,000 (Federal) + \$500,000 (Other)	_			
TIP Action:	\$2,000,000 (Federal) + \$500,000 (Other) Remove Project	_			
MTP Action:	\$2,000,000 (Federal) + \$500,000 (Other)	= \$2,500,000			
	\$2,000,000 (Federal) + \$500,000 (Other) Remove Project	_	O (Total)	e to model	
MTP Action: Exempt/Non-	\$2,000,000 (Federal) + \$500,000 (Other) Remove Project N/A - not in MTP	Model Impact: KIPDA ID:	O (Total)	e to model State ID:	N/A
MTP Action: Exempt/Non- Exempt:	\$2,000,000 (Federal) + \$500,000 (Other) Remove Project	= \$2,500,000 Model Impact:	(Total) No change 2454 585		N/A N/A
MTP Action: Exempt/Non- Exempt: Project Sponsor: County	\$2,000,000 (Federal) + \$500,000 (Other) Remove Project N/A - not in MTP Exempt Transit Authority of River City (TARC) Jefferson	Model Impact: KIPDA ID: Parent ID:	No change	State ID:	
MTP Action: Exempt/Non- Exempt: Project Sponsor:	\$2,000,000 (Federal) + \$500,000 (Other) Remove Project N/A - not in MTP Exempt Transit Authority of River City (TARC)	Model Impact: KIPDA ID: Parent ID:	No change 2454 585 Total Estimated Cost in MTP	State ID: Group ID:	N/A
MTP Action: Exempt/Non- Exempt: Project Sponsor: County	\$2,000,000 (Federal) + \$500,000 (Other) Remove Project N/A - not in MTP Exempt Transit Authority of River City (TARC) Jefferson	Model Impact: KIPDA ID: Parent ID:	No change 2454 585 Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed	State ID: Group ID:	N/A N/A
MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name:	\$2,000,000 (Federal) + \$500,000 (Other) Remove Project N/A - not in MTP Exempt Transit Authority of River City (TARC) Jefferson TARC Purchase Two (2) 40' Buses and Bus Facilities Form	Model Impact: KIPDA ID: Parent ID: ses	No change 2454 585 Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date:	State ID: Group ID:	N/A N/A 994,399
MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name: Funding Source:	\$2,000,000 (Federal) + \$500,000 (Other) Remove Project N/A - not in MTP Exempt Transit Authority of River City (TARC) Jefferson TARC Purchase Two (2) 40' Buses and Bus Facilities Form (Section 5339)	Model Impact: KIPDA ID: Parent ID: ses	No change 2454 585 Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date:	State ID: Group ID: \$	N/A N/A 994,399 2021

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Remove Project				
MTP Action:	N/A - not in MTP				
Exempt/Non- Exempt:	Exempt Model No change to model Impact:				
Project Sponsor:	Transit Authority of River City (TARC)	KIPDA ID:	2462	State ID:	N/A
County	Jefferson	Parent ID:	585	Group ID:	N/A
Project Name:	TARC Rehab Administrative Building		Total Estimated Cost in MTP (i.e. CK 2040):	N/A	
			Total Cost Programmed in TIP to Date:	\$500,000	
Funding Source:	Grants for Buses and Bus Facilities Formula Program		Open to Public Date:	2021	
Description:	Rehabilitate an administrative facility with the goal of reducing operating costs by maintaining a state of good repair.				
Purpose & Need:	TARC will apply these funds to a rehabilitation project for an existing administrative building.				
FY 20-25 TIP Funding:	FY 2021 Transit Capital phase with the following Section 5339 funds: \$400,000 (Federal) + \$100,000 (Other) = \$500,000 (Total)				

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

AIR QUALITY CONFORMITY

The Louisville, KY-IN transportation planning study area consists of Clark and Floyd counties and 0.1 square miles of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and approximately 4 square miles of Shelby County in Kentucky. Much of this area coincides with the local ozone nonattainment area. In the past, a portion of the planning study area also coincided with a local 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 nonattainment 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. One of the requirements of this designation as a nonattainment area is that it will once again be necessary to determine conformity for the local area.

KIPDA is amending *Connecting Kentuckiana 2040*, the metropolitan transportation plan (MTP) and the FY 2021 – FY 2025 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 both 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.

Subsequent to being designated as nonattainment of the 1997 8-hour ozone standard and prior to being redesignated as attainment of the standard, the Louisville area

relied on the use of interim tests to demonstrate conformity. These tests had been established during a 2004 update to the federal conformity rule. When the Louisville area was designated as nonattainment of the 2015 8-hour ozone standard, there were no MVEBs for that standard. However, there were MVEBs for the 1997 8-hour ozone standard, and they were used in the process of determining conformity to both the 1997 and 2015 standards.

When the local area was designated as nonattainment of the 1997 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 the actions to reduce precursor emissions were to be incorporated into the Indiana and Kentucky SIPs. It was during this process that MVEBs were established. Originally, the SIPs were to include sets of actions to bring the local area into attainment of the ozone standard. This type of SIP is known as an attainment demonstration. However, while these SIPs were being developed, the data from the air quality monitors in the area indicated that the 1997 8hour ozone standard had been met. With this data in hand, the air quality agencies were able to submit a SIP known as a redesignation request instead. 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.

CONSULTATION FOR CONNECTING KENTUCKIANA 2040

The first step in determining conformity of *Connecting Kentuckiana 2040* was to consult with the interagency consultation (IAC) group concerning matters not explicitly determined by the conformity rule. Conformity under the 1997 8-hour ozone standard had been previously determined. Therefore, many of the issues normally arising in conformity had undergone consultation previously. Since these issues were not raised during consultation this time, the portions of the analysis involving those issues were accomplished consistent with established practice.

A consultation zoom meeting was held on July 27 to discuss issues relative to amendment 4 of the MTP. It involved a review and discussion of the following items:

(a) important dates in the schedule for the amendment;

September 17 -- Regional Emissions (Air Quality) Analysis completed

September 20 -- Public Review begins

October 13 -- Action by the Transportation Technical Coordinating

Committee

October 28 -- Action by the Transportation Policy Committee

- October 29 -- Documentation sent to review agencies for the federal conformity determination;
- (b) a draft list of projects—sent to the IAC with consultation notice—included in accompanying documentation;
- (c) the horizon year of the transportation plan—2040;
- (d) the proposed conformity test methodology/ies and analysis years—see the discussion of issues and ESTABLISHED PRACTICE sections below;
- (e) the pollutant(s)/precursor(s) of concern and the motor vehicle emissions budget(s), if applicable—see table 2 at the end of the report;
- (f) information concerning the inputs for the travel demand model and the approved emissions model—see the issues section below, the list of projects included in accompanying documentation, and the items concerning the travel demand model and emissions model under Other Planning Issues; and
- (g) a listing of any transportation control measures (TCMs) in SIPs, if applicable—there are none.

Issues

Discussion of Projects

KIPDA staff had provided the IAC with a list of 17 projects that will be amended in *Connecting Kentuckiana 2040.* The projects are a mix of new projects and projects already in the MTP that were being amended. Key details about the projects were presented in the list, including recommendations on whether each project was exempt or non-exempt and how the projects were included in or excluded from the regional travel demand model.

Points of discussion of the projects included:

• KY 1450 projects in Bullitt County, KIPDA ID 2758 and KYTC 80101.00 projects: These projects were created by the division of an older project on KY 1450 from the Bullitt County/Jefferson County line to John Harper Highway. It was noted that KIPDA ID 2758 (sponsored by Bullitt County) covers the northern portion of the older project (from the Bullitt/Jefferson County line to Jeffie Lane) and will remain a 4-lane project. The KYTC project (from Jeffie Lane to John Harper Highway) will be a 3-lane project.

- INDOT I-64 Sherman Minton bridge projects, KIPDA IDs 2489, 2279, 2649, 2647, 2648, 2645, and 2646: The second topic of discussion concerned a series of INDOT projects involving the I-64 Sherman Minton bridge and its approaches. There are a number of projects which represented parts of the overall project. Those projects are being removed and will be consolidated into a single overall project to replace them. FHWA-IN staff made the comment that KIPDA staff should consult with INDOT staff to be sure that the overall project includes information about the various improvements that were to be included in the projects being removed. In addition, information concerning funding for FY2024 was to be removed since it was not part of this TIP.
- INDOT intersection projects, INDOT DES 2000220 and 2100048: The next pair of projects to be discussed were INDOT DES 2000220, which is being removed, and INDOT DES 2100048, which is being added. The first project was to improve the traffic signals at a series of intersections. The latter is to construct a roundabout at the intersection of SR 60 and CR 311, one of the intersections which was to have its traffic signal improved under the first project. There were no questions or comments.
- INDOT SR 64 project, INDOT DES 2100036: The next project is to add travel lanes to SR 64 near the Georgetown community. This is considered to be a very straightforward project from the standpoint of modeling. There were no questions or comments.
- INDOT US 150 and Lawrence Banet Rd intersection project, DES 2100047:
 The next project is to improve the intersection of US 150 with Old Vincennes Road and Lawrence Banet Road. It was noted that there was no way to reflect this project in the modeling of Amendment 4. There were no questions or comments.
- Louisville Metro Olmstead Parkways projects, KIPDA IDs 2624 and 2630: The
 next two projects concern the Olmstead Parkways: Multi-use Path System.
 The projects are to modify the TIP funding to add a project phase in the first
 four years of the TIP. There were no questions or comments.
- TARC Bus and Administration Building projects, KIPDA IDs 2454 and 2462:
 The final two projects are sponsored by the Transit Authority of River City (TARC), the local transit provider. Both of these projects are being removed from the TIP. One of the projects involved the purchase of two full-size buses, and the other involved rehabilitation of TARC's administration building.

Conclusion: The IAC members, after discussing the details of the projects listed above, accepted the recommendations concerning the incorporation of these project as described in the documentation into the regional emissions analysis.

Discussion of the Conformity Analysis

The following items of the conformity analysis were discussed.

- (1) KIPDA staff discussed the key components of the conformity analysis that are expected to be presented to the KIPDA TPC in May. The analysis years will be the ones that were used when the existing MTP was previously amended. The analysis years will be 2025, 2030, 2035, and 2040.
- (2) The Budget Test utilizing the Year 2020 Motor Vehicle Emissions Budgets created for the 1997 8-Hour Ozone Standard will continue to be used until a new set of budgets are established. By not exceeding these budgets in the year 2025, 2030, 2035, and 2040 travel model scenarios, *Connecting Kentuckiana 2040* will demonstrate conformity to both the 1997 and 2015 8-Hour Ozone Standards.
- (3) The pollutants of concern for the analysis are the precursors of Ozone, volatile organic compounds (VOCs) and oxides of Nitrogen (NOx). The emission budgets for these pollutants are 20,793 kg/day and 26,726 kg/day, respectively.
- (4) The newest version of the MOVES emissions model, MOVES 3.0, will be used for the analysis.

NOTE: (See also the "Analysis Years and Conformity Tests" portion of the "ESTABLISHED PRACTICE" section below for more information on these issues.)

SIP Status Discussion

A topic which had been raised during consultation for Amendment 3 was the status the two new State Implementation Plans (SIPs). These SIPs are being or about to be developed to address the need for a new maintenance plan for the 1997 Ozone standard and for the 2015 Ozone standard. The consultation meeting for Amendment 4 was an opportunity to hear an update concerning the status for the two new SIPs.

LMAPCD staff provided a presentation concerning the two SIPs which are presently under development. One of these SIPs is the second maintenance SIP for the 1997 Ozone standard. (The first maintenance SIP was developed years ago when the 1997 Ozone standard was first achieved.) The second maintenance SIP was originally scheduled to be completed some years ago but was not because EPA rescinded the 1997 ozone standard, and at that time that happened, it seemed that it would not be necessary to develop the second maintenance SIP. However, the courts overturned some of EPA's actions concerning the 1997 Ozone standard (the case known as South Coast II). So, the second maintenance SIP is now under development and should be finished soon.

The other SIP is being developed to meet the requirements relative to the 2015 Ozone standard. At this time, air monitoring data has indicated that the 2015 standard has not been met. The steps that need to be undertaken in the future may depend partially on whether the monitoring data for the remainder of the "ozone season" for this year is sufficiently "clean" to justify a clean air finding. Regardless of that situation, the local area is likely to have its nonattainment status changed from marginal to moderate. This change, along with the results of the monitoring data, will affect the steps to be taken to address the needs for the 2015 ozone standard SIP.

Other items for discussion

KIPDA staff offered the opportunity for any other business or questions to be brought to the IAC. There was no other business discussed.

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 consultation zoom meeting of March 4, 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.

Issues related to the KIPDA travel demand forecasting model

During recent changes to the MTP, there were two changes of note to the KIPDA travel demand forecasting model.

- (1) First, the proposed toll structure for the Louisville Southern Indiana Ohio River Bridges project changed in the last few years. Changes were made to the KIPDA travel demand forecasting model to reflect the changes in the toll structure.
- (2) During 2017 and 2018, KIPDA staff have updated and calibrated the travel demand forecasting model. This activity involved updating the inputs to the model and developing new values for the parameters of the model. The resulting model

was considered calibrated when the model outputs matched observed data (e.g., HPMS VMT), within reason, for the baseyear. This update established 2015 as the baseyear (the year on which calibration was based) for the model.

Conclusion: The IAC members have been informed that the KIPDA travel demand forecasting model has been updated and calibrated and that 2015 is now the baseyear for the model.

Analysis Years and Conformity Tests

Motor Vehicle Emissions Budgets (MVEBs) for the 1997 8-hour ozone standard were approved by EPA in July, 2007. The MVEBs were for the precursors of ozone, volatile organic compounds (VOCs) and oxides of Nitrogen (NOx), The Federal Register notice can be found at 72 FR 36601. The budgets are shown in Table 2 at the end of this document. Since there are MVEBs for the ozone precursors, the conformity rule requires that ozone analyses be done for the attainment year and the last year of the transportation plan. In addition, other intermittent year(s) are required such that no two analysis years are more than ten years apart. The maintenance plan established when the local area was redesignated established MVEBs for VOCs and NOx for 2003 (the attainment year) and 2020 (the last year of the maintenance plan). Since the attainment year and the last year of the maintenance plan are now in the past, those years are no longer included in the analysis.

In order to have the required analysis years, several changes were made in recent years. Years have been added to the list of analysis years, and later, when those years were passed, they were removed. When the MTP was updated in 2020, the horizon year of the plan was changed to 2040, and that year had to be added to the analysis years. At the same time, in order to allow for more orderly transition as time progressed, 2025 and 2035 have been added as analysis years, allowing for analysis years every five years. By having the analysis years five years apart throughout the life of the MTP, it was noted that there would always be an analysis year within five years of the time of the analysis. Further, when the horizon year of the MTP is extended, that year will be added as an analysis year. Otherwise, the analysis years can remain constant except for the removal of an analysis year when it moves to the past. This year 2020 moved to the past, and it was removed from the list of analysis years. This left the years 2025, 2030, 2035, and 2040 as analysis years.

Conclusion: The established practice is that the analysis years and conformity tests for the regional emissions analysis are as shown in the table below. Years prior to the present year have been removed from the list.

1997 8-hour Ozone Standard			
Analysis Year	Conformity Test(s)		
2025	Budget test using the 2020 MVEBs for the 1997 8-hour standard		
2030	Budget test using the 2020 MVEBs for the 1997 8-hour standard		
2035	Budget test using the 2020 MVEBs for the 1997 8-hour standard		
2040	Budget test using the 2020 MVEBs for the 1997 8-hour standard		

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 2017, and the data being used for the Kentucky counties is for 2018. These data represent the most recent information available for this issue.

Conclusion: Based on a consensus of the IAC members, vehicle registration data for 2017 for the Indiana counties and for 2018 for the Kentucky counties is now being used in developing emission estimates.

CONFORMITY OF CONNECTING KENTUCKIANA 2040

The MTP, *Connecting Kentuckiana 2040*, 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 2040* 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 2040* 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 the 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 the amendment of *Connecting Kentuckiana 2040*, a group of projects had been proposed for 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 being exempt, non-exempt, etc. 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 2040*." (please see above.) Those projects in *Connecting Kentuckiana 2040* which were not changed were analyzed as they had been previously. The projects which were newly added to the MTP or had been changed in *Connecting Kentuckiana 2040* were analyzed as indicated on the list provided to IAC.

In addition, there were several projects which could not be analyzed using the travel model. In the past, most of these projects had been evaluated using spreadsheet methods factors. 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.

Also, there was one project affecting Bullitt County that could not be included in the travel model. Unlike the projects described in the paragraph above, this project could have the potential to increase emissions. Therefore, a special effort was made to

include its impacts in the analysis of travel behavior impacts and, consequently, in the regional emissions analysis. This project is the relocated (southern) section of US 31E. This project, which had been discussed during consultation in the past, involves 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 were developed using a spreadsheet approach. The VMT estimates were the product of the estimated traffic volumes for each of the analysis years and the length of the relocated section in Bullitt County. The VMT estimates for this project were then added to other Bullitt County VMT estimates of the same functional class. Consequently, the VMT estimates from this project were included with the other Bullitt County VMT, and the emissions in Bullitt County associated with this project were included in the overall emission estimates for Bullitt County.

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 consists of Clark and Floyd counties, and 0.1 square miles in Harrison County 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 recently. This update established 2015 as the new base year for the model. The model update utilized the information incorporated into the travel model during previous updates. In particular, information from the 2000 KIPDA Household Travel Survey had been previously incorporated. Information from 2010 Census, the 2012-2016 American Community Survey, the 1990 and 1995 National Personal Transportation Surveys, and the 2001 and 2009 National Household Travel Surveys was incorporated to update the previous source data, particularly the 2000

KIPDA Household Travel Survey. During the update, the model parameters were adjusted such that the model output matched—within reason—three 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; (2) the distribution of trip lengths (duration in time) for each of the main trip purposes used in the model; and (3) 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 2015. 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. 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 and utilizes different trip rates for each. 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.

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. The friction factors used in the gravity model were developed as part of the calibration effort performed during the model update. In addition, information from a study which investigated the behavior of travelers crossing the Ohio River and traffic count information from years near 2015 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.

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 2040* utilizes transit information from the previous travel demand model. 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 2040* 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 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 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 MTP update, the time penalties used in the KIPDA travel model were likewise changed to reflect the effect of the new toll structure.

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 2015. 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 2015 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 2015 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).

The HERS equations were used to estimate speeds on 6239 sections for five functional classifications of urban roadways and 2278 sections 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.

There were not many HPMS minor collector and local roadway sections with data that allowed for the calculation of adjustment factors. Since the model contained the minor collector roadways in the area and these roadways were similar to the major collector roadways in the area, the adjustment factor for the rural major collectors was used for the rural minor collector roadways, and the adjustment factor for the urban major collectors was used for the urban minor collector roadways.

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 provided adjusted travel model output data in the form of vehicle-miles-traveled (VMT), VMT by speed bin, and VMT fractions by speed bin by county and by MOBILE 6 facility type to the staff of the Louisville Metro Air Pollution Control District (LMAPCD). LMAPCD 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). They then provided these estimates to KIPDA staff. This analysis is explained below in further detail in the section below.

MOVES Emissions Model

As previously mentioned, the Louisville region is a nonattainment 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 3.0 emissions model. The staff of the Louisville Metro Air Pollution Control District (LMAPCD) produced the emissions for all of the counties in the nonattainment 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 that were used in developing the ozone budget update (for VOCs and NOx) in 2003 with a few exceptions where newer data was incorporated. 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 2017) for Clark and Floyd counties (provided by INDOT),
- (3) the development and use of newer vehicle registration data (for 2018) for Jefferson County (KY), 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 LMAPCD. Most of the inputs to the MOVES model were defaults and/or data used that was consistent with previous SIPs. 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 or had only been designated under the 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 was modeled the same as for Jefferson County.

The assumptions used for Bullitt and Oldham counties were consistent with those for the 2003 ozone budget update with the following exceptions:

- (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) new 2018 vehicle registration data for Bullitt and Oldham counties, and
- (4) improvements in internal model calculations to account for emission controls, driving profiles and engine characteristics.

LMAPCD developed emission estimates of VOCs and NOx using the MOVES model. To review, the following steps were undertaken.

- (1) LMAPCD staff received (from KIPDA staff) the adjusted travel model output in the form of VMT, VMT by speed bin, and VMT fractions by speed bin, all by county and by MOBILE facility type by analysis year.
- (2) LMAPCD reformatted the data from KIPDA to prepare it as input to the MOVES model. Other necessary data was also prepared.
- (3) The MOVES model was run in inventory mode to determine emission estimates of each precursor for each county for each analysis year.
- (4) LMAPCD staff provided the emission estimates to KIPDA staff.

RESULTS OF THE ANALYSIS

The transportation plan, *Connecting Kentuckiana 2040*, 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 maintenance 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 and 2. Table 1 shows the summer weekday vehicle-miles-traveled from the analysis. Table 2 shows that for 2025, 2030, 2035 and 2040, the summer weekday VOC and NOx emission levels for the 2015 8-hour nonattainment area are less than the emission budgets established in the 1997 8-hour ozone maintenance SIP.

Conclusions – 8-hour Ozone

The regional emissions analysis of *Connecting Kentuckiana 2040* 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 Table 2 indicates that *Connecting Kentuckiana 2040* has met the requirements of conformity under the 1997 and 2015 8-hour ozone standards. In summary, it can be concluded that *Connecting Kentuckiana 2040* conforms to the SIPs and meets the requirements of the federal conformity rule.

TABLE 1

SUMMER	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	7894	27297	35191			
2030	8425	28719	37144			
2035	8953	30053	39006			
2040	9440	31183	40623			

TABLE 2

	SUMMER WEEKDAY EMISSIONS FOR THE 8-HOUR NONATTAINMENT AREA (kg/day)					
	EMISSION LEVELS FOR VARIOUS YEARS					
YEAR	Area	VOCs	NOx	PASS		
2025		6968	18524	YES		
2030	Regional	4942	14492	YES		
2035		4342	13553	YES		
2040		4174	13821	YES		

NOTE: The criteria for conformity are as follows:

2025, 2030, 2035, and 2040 Regional emission levels for VOCs must be below the maintenance plan emission budget of 22.92 tons/day or 20,793 kg/day.

2025, 2030, 2035, and 2040 Regional emission levels for NOx must be below the maintenance plan emission budget of 29.46 tons/day or 26,726 kg/day.



Connecting Kentuckiana 2040 Metropolitan Transportation Plan Amendment 4 FY 2020-2025 Transportation Improvement Program Amendment 4 Interagency Consultation Group Conference Call Meeting Minutes July 27, 2021 10:00 AM EDT

Participants:

EPA – Dianna Myers, Richard Wong, Will Carpenter, & Anthony Maietta

FHWA – Bernadette Dupont & Erica Tait

INDOT - Jay Mitchell

IDEM - Shawn Seals

KYTC – Tom Hall, Larry Chaney, & Grant Williams

LMAPCD – Michelle King, Byron Gary, & Craig Butler

TARC - Aida Copic

KIPDA - Andy Rush, Greg Burress, Randy Simon, & Nick Vail

Welcome/Roll Call:

A total of 19 participants, representing eight local, state, regional, and federal agencies participated in the IAC Conference Call for Amendment 4 of KIPDA's *Connecting Kentuckiana 2040* Metropolitan Transportation Plan and the FY 2020-2025 Transportation Improvement Program. The meeting began shortly after 10:00 AM EDT on July 27, 2021.

Schedule Discussion:

KIPDA staff discussed key dates (shown below) of the anticipated schedule for the amendment. It was mentioned that there will be multiple activities (including the travel demand modeling and MOVES

modeling) as part of the conformity analysis. Also, there will be a public meeting (in-person or zoom) during the public review period.

Key Dates for the schedule for Amendment 4

Project applications due from sponsors	June 28
KIPDA staff reviews projects	June 29 – July 16
Air Quality conformity activities	July 19 – Sept. 17
Public Comment period	Sept. 20 – Oct. 4
Comments sent to the Transportation Policy Committee	Oct. 7
Transportation Technical Coordinating Committee recommendation	Oct. 13
Transportation Policy Committee action	Oct. 28
Federal review	Oct. 29 – Nov. 29

Project Discussion:

KIPDA Staff presented the list of seventeen (17) projects that are included in Amendment 4. The following projects were highlighted.

The discussion started with the KIPDA ID 2758 and KYTC ID 80101.00 projects. These projects were created by the division of an older project on KY 1450 from the Bullitt/Jefferson County line to John Harper Highway. It was noted that KIPDA ID 2758 (sponsored by Bullitt County) covers the northern portion of the older project (from the Bullitt/Jefferson County line to Jeffie Lane) and will remain a 4-lane project. The KYTC project (from Jeffie Lane to John Harper Highway) will be a 3-lane project.

The second topic of discussion concerned a series of INDOT projects involving the I-64 Sherman Minton bridge and its approaches. There are a number of projects which represented parts of the overall project. Those projects are being removed and will be consolidated into a single overall project to replace them. Erica Tait (FHWA-IN) made the comment that KIPDA staff should consult with INDOT staff to be sure that the overall project includes information about the various improvements that were to be included in the projects being removed. In addition, information concerning funding for FY2024 was to be removed since it was not part of this TIP.

The next pair of projects to be discussed were INDOT DES 2000220, which is being removed, and INDOT DES 2100048, which is being added. The first project was to improve the traffic signals at a series of intersections. The latter is to construct a roundabout at the intersection of SR 60 and CR 311, one of the intersections which was to have its traffic signal improved under the first project. There were no questions or comments.

The next project is to add travel lanes to SR 64 near the Georgetown community. This is considered to be a very straightforward project from the standpoint of modeling. There were no questions or comments.

The next project is to improve the intersection of US 150 with Old Vincennes Road and Lawrence Banet Road. It was noted that there was no way to reflect this project in the modeling of Amendment 4. There were no questions or comments.

The next two projects concern the Olmstead Parkways: Multi-use Path System. The projects are to modify the TIP funding to add a project phase in the first four years of the TIP. There were no questions or comments.

The final two projects are sponsored by the Transit Authority of River City (TARC), the local transit provider. Both of these projects are being removed from the TIP. One of the projects involved the purchase of two full-size buses, and the other involved rehabilitation of TARC's administration building.

Conformity Analysis Discussion:

KIPDA Staff discussed the key components of the conformity analysis that is expected to be presented to the KIPDA TPC in October. The analysis years for the regional emissions analysis will be 2025, 2030, 2035, and 2040 (the horizon year of the MTP). The regional emissions estimates for all scenarios will be compared to Year 2020 Budgets established for the ozone precursors. Further, there are no TCMs in a SIP for the local area.

It was noted that MOVES 3 was used for the previous MTP/TIP amendment. It will also be used for this amendment.

SIP Status Discussion:

LMAPCD staff provided a presentation concerning the two SIPs which are presently under development. One of these SIPs is the second maintenance SIP for the 1997 Ozone standard. (The first maintenance SIP was developed years ago when the 1997 Ozone standard was first achieved.) The second maintenance SIP was originally scheduled to be completed some years ago but was not because EPA rescinded the 1997 ozone standard, and at that time that happened, it seemed that it would not be necessary to develop the second maintenance SIP. However, the courts overturned some of EPA's actions concerning the 1997 Ozone standard (the case known as South Coast II). So, the second maintenance SIP is now under development and should be finished soon.

The other SIP is being developed to meet the requirements relative to the 2015 Ozone standard. At this time, air monitoring data has indicated that the 2015 standard has not been met. The steps that need to be undertaken in the future may depend partially on whether the monitoring data for the remainder of the "ozone season" for this year is sufficiently "clean" to justify a clean air finding. Regardless of that situation, the local area is likely to have its nonattainment status changed from marginal to moderate. This change, along the results of the monitoring data, will affect the steps to be taken to address the needs for the 2015 ozone standard SIP.

Other Discussion:

KIPDA staff offered the opportunity for any other business or questions to be brought before the IAC.

There was no other business discussed. The conference call adjourned at approximately 10:30 AM EDT.

Amendment 4 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan; FY 2020-2025 Transportation Improvement Program Public Comments

Project Name: SR 60 Intersection Improvement, Roundabout

KIPDA ID: 2964
Project Sponsor: INDOT

Comments: "Generally I approve of roundabouts – but the devil is in the details, so please

make sure this design accommodates walkers and bikers."

Project Name: SR 64 Added Travel Lane

KIPDA ID: 2967 **Project Sponsor:** INDOT

Comments: "13 million for a road expansion project here is a waste. Instead it should be to

build safe ways to allow better walking and e-bike access for nearby

neighborhoods to get where they need to without adding to the car traffic."

"I strongly disapprove of this project – it is fiscally irresponsible and environmentally irresponsible. It will induce more car traffic and encourage development to spread to undeveloped land – instead of encouraging infill of

existing developed land."

Project Name: KY 1450 KIPDA ID: 2966 Project Sponsor: KYTC

Comments: "Disapprove of this. This is a waste of millions of dollars that could instead go to

making this road slower, more reliable, and safer for those nearby. Improving sidewalks and making a multi-use path would be much better for residents.

"I do not support this project. It will simply induce MORE demand for travel and bring more cars and development here and further out. Do not waste our money to erode development in the core city and further develop green space, which we

need to conserve."

Project Name: TARC Rehab Administration Building

KIPDA ID: 2462 Project Sponsor: TARC

Comments: "Cannot comment on this until we know the reason for the removal, which is not

visible in this map nor the amendment 4 information packet. Is it because TARC does not need this funding, or has found another solution? Or because KYTC has

shifted goals?

Project Name: TARC Purchase Two (2) 40' Buses

KIPDA ID: 2454 Project Sponsor: TARC

Comments: "Cannot comment on this until we know the reason for the removal, which is not

visible in this map nor the amendment 4 information packet. Is it because TARC does not need this funding, or has found another solution? Or because KYTC has

shifted goals?

Project Name: KY 1450 Blue Lick Road

KIPDA ID: 2758

Project Sponsor: Bullitt County

Comments: "Disapprove. This is a lot of money to be spent on a road widening for cars that is not

needed and negatively impact low income and minorities and others living nearby."

"Please do not widen this road. Widening this road will cause further development to spread outward – and will discourage investment in the city that already has infrastructure. We need to save green space and save undeveloped parcels from

development."

Project Name: I-64 Sherman Minton Corridor Maintenance

KIPDA ID: 2533 **Project Sponsor:** INDOT

Comments: "Can this huge amount of funding include 1-2% on other modes (bikes, ebikes,

scooters, walking) of getting across this vital west end bridge for those in west Louisville who can't afford cars? Would help with job and retail access for low

income residents.

"This project should be revised to include multi modes – this is a LOT of money to be

spending only on car travel. Do not approve of this project unless there is

accommodation in the design for bikes and walking."

Project Name: Olmstead Parkways Multi-Use Path System

KIPDA ID: 2630

Project Sponsor: Louisville Metro

Comments: "Strongly support this idea to make this parkway, instead of the expressway it is!

This multi-use path will improve job, retail, and recreation access for low-income

residents all along the parkway who can't afford a car."

"Wonderful! Let's bump this one up to the top of the list."

"Strongly support this project – as long as there is a SEPERATED lane and space for

cyclists and bicyclists."

Project Name: Olmstead Parkways Multi-Use Path System Section 3

KIPDA ID: 2624

Project Sponsor: Louisville Metro

Comments: "Strongly support this idea to make this parkway, instead of the expressway it is!

This multi-use path will improve job, retail, and recreation access for low-income

residents all along the parkway who can't afford a car."

A Resolution of the

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #5 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan

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 Metropolitan Planning Area encompassing Clark and Floyd counties and a portion of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and a portion of Shelby County in Kentucky; and,

Whereas, Federal laws require the Transportation Policy Committee periodically review and update its Metropolitan Transportation Plan to reflect progress and changes regarding its implementation using the latest forecasts of regional demographic and socioeconomic data; and,

Whereas, pursuant to 23 CFR Section 450.322, the Metropolitan Transportation Plan is based on the latest available estimates and assumptions with regard to population, land use, travel, employment, congestion, and economic activity developed in conjunction with local jurisdictions; and,

Whereas, consistent with Federal and state mandates, states' environmental requirements, and with the KIPDA Transportation Policy Committee's Memorandum of Agreement, Participation Plan, Title VI: Environmental Justice 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; has made draft documents available for public review, has held public meetings and other efforts including providing data and information related to the Metropolitan Transportation Plan update on the KIPDA website, to involve citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of persons with disabilities, and other interested parties in order to facilitate their ability to provide input, discussion, and review of Connecting Kentuckiana 2040, and has incorporated the work of local governments, and the suggestions of citizens, businesses, and interests throughout the MPA in this document; and,

Be it further resolved, that the KIPDA staff is authorized to transmit Amendment #5 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan for the Louisville/Jefferson County KY-IN Metropolitan Planning Area 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 23rd day of November 2021.

Kevin Baity, Chair

Transportation Policy Committee

Andy Rush

KIPDA Transportation Division Director

A Resolution of the

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #5 of the FY 2020 - FY 2025 Transportation Improvement Program

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 and a portion of Harrison County in 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, Title VI: Environmental Justice 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, the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is a subset of Connecting Kentuckiana 2040, 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 FY2020 -FY 2025 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 2019 - 2022 Statewide Transportation Improvement Program (STIP), and the Indiana FY 2020 - 2024 STIP, respectively, and will become part of the end of fiscal year "fiscal constraint" recalculations; and,

Now, therefore be it resolved, by the Transportation Policy Committee of KIPDA that this amendment of the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is adopted by official action at the November 23, 2021, 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 2040 complies with all of 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 2040, 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 #5 of the *Connecting Kentuckiana 2040 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 this amendment of the Connecting Kentuckiana 2040 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 23rd day of November 2021.

Kevin Baity, Chair

Transportation Policy Committee

Andy Rush

KIPDA Transportation Division Director



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

Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020-2025 Transportation Improvement Program

The Kentuckiana Regional Planning and Development Agency (KIPDA) is the Metropolitan Planning Organization (MPO) for the five-county region covering Jefferson, Bullitt and Oldham Counties in Kentucky and Clark and Floyd Counties in Indiana. The MPO's responsibilities include producing a long-range transportation document, known as *Connecting Kentuckiana 2040* Metropolitan Transportation Plan (MTP) and a short-range planning document, the Fiscal Year (FY) 2020-2025 Transportation Improvement Program (TIP)

Changes have been proposed to the MTP and TIP. The MTP, with the proposed changes, is fiscally reasonable and the TIP remains fiscally constrained. All proposed changes and projects were determined to be and confirmed by the IAC to be exempt-only for air quality. This packet includes the following document:

- A listing of all projects being added, removed and/or modified
- Schedule for Amendment 5

Providing comments for the proposed changes can be submitted by any of the following methods:

- Visiting https://kipdatransportation.org/amendment-5/ and click on the Amendment 5 Map link
- Emailing <u>kipda.trans@kipda.org</u>
- Mail to the following address

TIP and MTP Amendment, KIPDA 11520 Commonwealth Drive, Louisville, KY 40299

Attend the virtual open house on November 1st from 5:00-6:00 pm via Zoom. Members of the
public are encouraged to ask questions and leave comments. A link to the virtual public meeting
can be found at https://kipdatransportation.org/amendment-5/

Please contact Community and Committee Engagement Specialist Greg Burress at 502-562-6144 ext. 123 or via email at greg.burress@kipda.org for additional questions or information.

11520 Commonwealth Drive Louisville, KY 40299 Phone: 502.266.6084

Fax: 502.266.5047 TDD: 800.648.6056

TIP Action:	Remove project					
MTP Action:	N/A - Not in MTP					
Exempt/ Non-Exempt:	Exempt Model No change to model Impact:					
Project Sponsor:	Indiana Department of Transportation	KIPDA ID:	2518	State ID:	1800736	
County	Clark	Parent ID:	N/A	Group ID:	2676	
Droinet Name	IN 160 Bridge Deck Overlay		Total Estimated Cost in MTP (i.e. CK 2040):	N/A		
Project Name:			Total Cost Programmed in TIP to Date:	\$953,502		
Funding Source:	Surface Transportation Block Grant (STBG-ST)		Open to Public Date:	2024		
Description:	Bridge rehabilitation project consisting of 65.	f a bridge thi	n deck overlay located on IN 160 loca	ated 0.54 miles	west of US 31 over	
Purpose & Need:	Bridge thin deck overlay					
FY 20-25 TIP Funding:	FY 2020 Preliminary Engineering phase with the following STBG-ST funds: \$64,000 (Federal) + \$16,000 (Other) = \$80,000 (Total) FY 2021 Construction phase with the following STBG-ST funds: \$786,152 (Federal) + \$87,350 (Other) = \$873,502 (Total)					

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

TIP Action:	Remove project					
MTP Action:	No change					
Exempt/Non- Exempt:	Exempt Model No change to model Impact:					
Project Sponsor:	Louisville Metro	KIPDA ID:	1423	State ID:	05-499.00	
County	Jefferson	Parent ID:	N/A	Group ID:	N/A	
Project Name:	Divor Pond Picycle & Dodostrian Impr	ovoments	Total Estimated Cost in MTP (i.e. CK 2040):	\$1	7,000,000	
Project Name.	me: River Road Bicycle & Pedestrian Improvement		Total Cost Programmed in TIP to Date:	\$1,250,000		
Funding Source:	Surface Transportation Block Grant (STBG-MPO) Open to Public Date: 2035				2035	
Description:	Design and construct an accessible shared-use path system connecting the Riverwalk section of the Louisville Loop from Big Four Bridge in Waterfront Park to the Northeast section of the Louisville Loop in Prospect at River Road and US 42. This corridor is approximately 8.5 miles of the 100+ mile Louisville Loop.					
	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.					
Purpose & Need:	off-road facilities. It will provide safe alto and families who prefer not to ride on the accommodate more experienced riders	ernative trans ne road. On-s	to parks, schools, workplaces, and oth sportation routes for pedestrians and treet bike facilities will also be incorpo	er community bicyclists such orated where p	facilities on mostly as younger children ossible to	

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

TIP Action:	Add child project					
MTP Action:	N/A					
Exempt/Non- Exempt:	Exempt	Model Impact:	No change to model			
Project Sponsor:	Louisville Metro	KIPDA ID:	NEW	State ID:	05-3036.00	
County	Jefferson	Parent ID:	1423	Group ID:	N/A	
Project Name:	Ohio River Valley NE Bike/Ped Improver		N/A			
,	I (Louisville Loop)		Total Cost Programmed in TIP to Date:	\$1,250,000		
Funding Source:	Surface Transportation Block Grant (STBG-MPO) Open to Public Date: 2025				2025	
Description:	Design and construct an accessible shared-use path system, including amenities, that connects the Lewis & Clark Bridge to US 42 in Prospect. Design and construct an accessible shared-use path system connecting This corridor is approximately 2.5 miles of the 100+ mile Louisville Loop.					
Purpose & Need:	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 20-25 TIP Funding:	FY 2023 Construction phase with the following STBG-MPO funds: \$1,000,000 (Federal) + \$250,000 (Other) = \$1,250,000 (Total)					

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

TIP Action:	Add child project					
MTP Action:	N/A					
Exempt/Non- Exempt:	Exempt	Model Impact:	No change to model			
Project Sponsor:	Louisville Metro	KIPDA ID:	NEW	State ID:	TBD	
County	Jefferson	Parent ID:	1423	Group ID:	N/A	
Project Name:	Ohio River Valley NE Bike/Ped Improven	nents Phase	Total Estimated Cost in MTP (i.e. CK 2040):		N/A	
Project Name.	II (Louisville Loop)		Total Cost Programmed in TIP to Date:	\$1,250,000		
Funding Source:	Surface Transportation Block Grant (STBG-MPO) Open to Public Date: 2026				2026	
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.					
Purpose & Need:	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 20-25 TIP Funding:	bicyclists. FY 2022 Design phase with the following STBG-MPO funds: \$300,000 (Federal) + \$75,000 (Other) = \$375,000 (Total) FY 2025 Construction phase with the following STBG-MPO funds: \$1,150,000 (Federal) + \$287,500 (Other) = \$1,437,500 (Total)					

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

TIP Action:	Remove project						
MTP Action:	Update MTP project cost and Open to Pu	Update MTP project cost and Open to Public Date					
Exempt/Non-	Exempt	Fromnt Model		No change to model			
Exempt:	Exempt	Impact:	No change to model				
Project Sponsor:	Oldham County	KIPDA ID:	327	State ID:	05-410.00		
County	Oldham	Parent ID:	N/A	Group ID:	N/A		
			Total Estimated Cost in MTP	\$20	0,000,000		
Project Name:	Oldham County Bicycle & Pedestria	n Trail	(i.e. CK 2040):	\$1	,225,000		
Project Name.	Project Name: Oldham County Bicycle & Pedestria		Total Cost Programmed in TIP to Date:	\$1,000,000			
Funding Source:	Surface Transportation Block Grant (STBG-MPO)		Open to Public Date:	2035 2026			
Description:	Construct a non-motorized corridor from alignment to Wendell Moore Park and/o	_			the new 393		
Purpose & Need:	The project will allow alternative transportation, calm traffic, build transit oriented development, improve the environment, encourage healthy lifestyles through safer bike and pedestrian access, and link parks, schools, neighborhoods, and commercial areas throughout the County.						
FY 20-25 TIP Funding:	FY 2021 Design phase with the following STBG-MPO funds: \$500,000 (Federal) + \$125,000 (Other) = \$625,000 (Total) FY 2023 Construction phase with the following STBG-MPO funds: \$500,000 (Federal) + \$112,500 (Other) = \$612,500 (Total)						

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Amendment 5

Connecting Kentuckiana 2040 Metropolitan Transportation Plan FY 2020 - FY 2025 Transportation Improvement Program

TIP Action:	Add child project					
MTP Action:	N/A					
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model		
Project Sponsor:	Oldham County	KIPDA ID:	NEW	State ID:	TBD	
County	Oldham	Parent ID:	327	Group ID:	N/A	
Project Name:	KY 393 Trail		Total Estimated Cost in MTP (i.e. CK 2040):		N/A	
Project Name.	KY 393 Trail		Total Cost Programmed in TIP to Date:	\$1,000,000		
Funding Source:	Surface Transportation Block Grant (S	STBG-MPO)	Open to Public Date:		2026	
Description:	Construct a section of the Oldham County Greenways Trail. This section will be a 10" shared use path along the KY 393 realignment to the entrance of Wendell Moore Park.					
Purpose & Need:	The KY 393 Trail is a child project of the LaGrange to Jefferson County. It will contoptions to Oldham County residents.					
	FY 2022 Design phase with the following STBG-MPO funds: \$222,000 (Federal) + \$55,500 (Other) = \$277,500 (Total)					
FY 20-25 TIP	FY 2023 Right of Way phase with the following STBG-MPO funds: \$139,000 (Federal) + \$34,750 (Other) = \$173,750 (Total) *FY 2024 Utilities phase with the following STBG-MPO funds: \$139,000 (Federal) + \$34,750 (Other) = \$173,750 (Total)					
Funding:						
	*FY 2025 Construction phase with the for \$500,000 (Federal) + \$125,000 (Other)	-				

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

TIP Action:	Remove project					
MTP Action:	Remove project					
Exempt/Non- Exempt:	Exempt	Model Impact:	No change to model			
Project Sponsor:	University of Louisville	KIPDA ID:	2150 State ID: TB		TBD	
County	Jefferson	Parent ID:	N/A	Group ID:	N/A	
Project Name:	Campus Improvements		Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date:	\$27,037,500		
Funding Source:	State funds Surface Transportation Block Grant (S	STBG-MPO)	Open to Public Date:	2	023	
Description:	Roundabout at the Floyd Street and East Brandeis Avenue, intersection and other Belknap Campus improvements to include multimodal improvements at the South 3rd Street and West Brandeis Avenue intersection and along West Brandeis Avenue between South 3rd Street and South 4th Street. Project would provide better connectivity between new university facilities with the main Belknap campus by the creation a multi-modal corridor along West Brandeis Avenue between South 3rd Street and South 4th Street. The proposed multi-modal corridor would improve pedestrian and bicycle safety with the creation of a designated street crossing location and also include geometric improvements to South 3rd Street with the straightening of the turn lane and thru lanes southbound at the West Brandeis Avenue intersection.					
Purpose & Need:	The following needs have been identified Capacity for all vehicle types.	ed for this proj	ect: 1) Improve Roadway Safety, 2) I	mprove Access an	d Increase	
FY 20-25 TIP Funding:	FY 2022 Design phase with the following STBG-MPO funds: \$190,800 (Federal) + \$41,489 (Other) = \$232,289 (Total) FY 2022 Design phase with the following CRRSAA-MPO funds: \$82,475 (Federal) + \$0 (Other) = \$82,475 (Total) FY 2022 Utilities phase with the following STBG-MPO funds: \$750,000 (Federal) + \$187,500 (Other) = \$937,500 (Total) FY 2022 Construction phase with the following STBG-MPO funds: \$1,500,000 (Federal) + \$375,000 (Other) = \$1,875,000 (Total)					

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

TIP Action:	Add project					
MTP Action:	Add project					
Exempt/Non- Exempt:	Exempt	Model Impact:	No change to model.			
Project Sponsor:	University of Louisville	KIPDA ID:	NEW	State ID:	TBD	
County	Jefferson	Parent ID:	N/A	Group ID:	N/A	
Project Name:	2nd Street / 3rd Street / Museum Drive I	l-	Total Estimated Cost in MTP (i.e. CK 2040):	\$3	,763,100	
	and Brandeis Avenue Pedestrian Improvements		Total Cost Programmed in TIP to Date:	\$3,763,100		
Funding Source:	Surface Transportation Block Grant (ST	BG-MPO)	Open to Public Date:		2022	
Description:	Improve vehicular safety and traffic flow along 2nd (KY-1020 NB) and 3rd Streets (KY 1020 SB) at the Museum Drive intersection and improve pedestrian connectivity and safety at the intersection and along W. Brandeis Avenue (CS 2377F) between 3rd and 4th streets.					
Purpose & Need:	Relieve congestion and improve pedestri	an safety and	d connectivity.			
	FY 2022 Design phase with the following STBG-MPO funds: \$189,220 (Federal) + \$47,305 (Other) = \$236,525 (Total)					
FY 20-25 TIP	FY 2022 Design phase with the following CRRSAA-MPO funds: \$82,475 (Federal) + \$0 (Other) = \$82,475 (Total) FY 2022 Utilities phase with the following STBG-MPO funds: \$1,105,280 (Federal) + \$276,320 (Other) = \$1,381,600 (Total)					
Funding:						
_	FY 2022 Construction phase with the follo \$1,650,000 (Federal) + \$412,500 (Other)	•				

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

Amendment 5 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan; FY 2020-2025 Transportation Improvement Program Public Comments

Project Name: 2nd Street/3rd Street Museum Drive Intersection & Brandeis Avenue Pedestrian

Improvements

KIPDA ID: 2982

Project Sponsor: University of Louisville

Comments: "Improving pedestrian safety and connectivity is always good. I'm not sure that

improved motor vehicle traffic flow is needed at this location."

"Vehicular safety and traffic flow are the wrong priorities here. Pedestrians, bikes,

and transit should be focus."

"Please do not remove multimodal work in this area in favor of moving cars faster.

That's dangerous and irresponsible next to a walkable college campus."

Project Name: Ohio River Valley NE Bike/Ped Improvements Phase 1 (Louisville Loop)

KIPDA ID: 2979

Project Sponsor: Louisville Metro

Comments: "This is a great start but needs to connect to other infrastructure not just be part

of a giant circle around Louisville."

"Good start and would love to see protected bike/ped facilities on adjacent route 42 from the Jefferson County line to Lime Kiln. There are 4-8 lanes just for cars the

entire way."

"Wow this is great to start connecting some homes to the businesses in 'downtown' prospect. Would be better to add bike/ped facilities to River Rd to allow commuting from Prospect to Louisville and connect to more homes."

"The Louisville Loop is fine and will be "nice" to have, but Louisville NEEDS to have bike paths/protected bike lanes that allow for commuting to/from work and

essential services without being confined to side roads."

Project Name: Ohio River Valley NE Bike/Ped Improvements Phase II (Louisville Loop)

KIPDA ID: 2980

Project Sponsor: Louisville Metro

Comments: "Yes, please. This has been needed for years and cannot be completed soon

enough."

"This is amazing and will be so useful for commuting and reducing car traffic on River Rd."

Project Name: Campus Improvements

KIPDA ID: 2150

Project Sponsor: University of Louisville

Comments: "Do not remove the roundabout. Drivers can figure it out, it's not that hard and it

slows traffic while increasing flow, win win. Please do not remove it because some

drivers can't figure out how it works."

"Please do not remove multimodal work in this area in favor of moving cars faster.

That's dangerous and irresponsible next to a walkable college campus."

Project Name: River Road Bicycle & Pedestrian Improvements

KIPDA ID: 1423

Project Sponsor: Louisville Metro

Comments: "Amazing! Would love to see more designs on how this would be accomplished.

Very much support this!"

"Again, yes please. Protected bike infrastructure along river road corridor is long

overdue. Would love to see more details."

"Ok this is awesome! Amazing solution and placement of the route. Could we see

more details and plans?"



Amendment 6

Connecting Kentuckiana 2040 Metropolitan Transportation Plan (MTP)

&

Fiscal Year 2020 - 2025 Transportation Improvement Program (TIP)

TPC Approval on February 24, 2022

A Resolution of the

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #6 of the FY 2020 - FY 2025 Transportation Improvement Program

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 and a portion of Harrison County in 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, Title VI: Environmental Justice 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, the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is a subset of Connecting Kentuckiana 2040, 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 FY2020 -FY 2025 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 2021 - 2024 Statewide Transportation Improvement Program (STIP), and the Indiana FY 2020 - 2024 STIP, respectively, and will become part of the end of fiscal year fiscal constraint recalculations; and,

Now, therefore be it resolved, by the Transportation Policy Committee of KIPDA that this amendment of the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is adopted by official action at the February 24, 2022, 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 2040* complies with all of 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 2040, 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 #5 of the Connecting Kentuckiana 2040 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 this amendment of the *Connecting Kentuckiana 2040* 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 24th day of February 2022.

ludge David Voegele, Chair

Transportation Policy Committee

Andy Rush

KIPDA Transportation Division Director

A Resolution of the

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #6 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan

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 Metropolitan Planning Area encompassing Clark and Floyd counties and a portion of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and a portion of Shelby County in Kentucky; and,

Whereas, Federal laws require the Transportation Policy Committee periodically review and update its Metropolitan Transportation Plan to reflect progress and changes regarding its implementation using the latest forecasts of regional demographic and socioeconomic data; and,

Whereas, pursuant to 23 CFR Section 450.322, the Metropolitan Transportation Plan is based on the latest available estimates and assumptions with regard to population, land use, travel, employment, congestion, and economic activity developed in conjunction with local jurisdictions; and,

Whereas, consistent with Federal and state mandates, states' environmental requirements, and with the KIPDA Transportation Policy Committee's Memorandum of Agreement, *Participation Plan, Title VI: Environmental Justice 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; has made draft documents available for public review, has held public meetings and other efforts including providing data and information related to the Metropolitan Transportation Plan update on the KIPDA website, to involve citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of persons with disabilities, and other interested parties in order to facilitate their ability to provide input, discussion, and review of *Connecting Kentuckiana 2040*, and has incorporated the work of local governments, and the suggestions of citizens, businesses, and interests throughout the MPA in this document: and.

Be it further resolved, that the KIPDA staff is authorized to transmit Amendment #6 of the *Connecting Kentuckiana 2040 Metropolitan Transportation Plan for the Louisville/Jefferson County KY-IN Metropolitan Planning Area* 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 24th day of February 2022.

Judge David Voegele, Chair

Transportation Policy Committee

Andy Rush

KIPDA Transportation Division Director



Connecting Kentuckiana (CK) 2040 Metropolitan Transportation Plan (MTP) Fiscal Year (FY) 2020 - 2025 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	January 4, 2022
KIPDA staff reviews projects	January 7, 2022
Public comment period	Jan. 24 - Feb. 7, 2022
Comments sent to the Transportation Policy Committee (TPC)	February 8, 2022
Transportation Technical Coordinating Committee (TTCC) Recommendation	February 9, 2022
TPC Action	February 24, 2022

ADDITIONAL INFORMATION

The MTP & TIP amendment process is NOT an opportunity to request MPO dedicated funds.

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://kipda.formstack.com/forms/kipda_epif



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



Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020-2025 Transportation Improvement Program

The Kentuckiana Regional Planning and Development Agency (KIPDA) is the Metropolitan Planning Organization (MPO) for the five-county region covering Jefferson, Bullitt and Oldham Counties in Kentucky and Clark and Floyd Counties in Indiana. The MPO's responsibilities include producing a long-range transportation document, known as *Connecting Kentuckiana 2040* Metropolitan Transportation Plan (MTP) and a short-range planning document, the Fiscal Year (FY) 2020-2025 Transportation Improvement Program (TIP)

Changes have been proposed to the MTP and TIP. The MTP, with the proposed changes, is fiscally reasonable and the TIP remains fiscally constrained. All proposed changes and projects were determined to be and confirmed by the IAC to be exempt-only for air quality. This packet includes the following document:

- A listing of all projects being added, removed and/or modified
- Schedule for Amendment 6

Providing comments for the proposed changes can be submitted by any of the following methods:

- Visiting https://kipdatransportation.org/amendment6/ and click on the Amendment 6 Map link
- Emailing kipda.trans@kipda.org
- Mail to the following address

TIP and MTP Amendment, KIPDA 11520 Commonwealth Drive, Louisville, KY 40299

Attend the virtual open house on February 1st from 5:00-6:00 pm via Zoom. Members of the public
are encouraged to ask questions and leave comments. A link to the virtual public meeting can be found
at: https://kipdatransportation.org/amendment6/

Phone: 502.266.6084

Fax: 502.266.5074

TDD: 800.648.6056

Please contact Community and Committee Engagement Specialist Greg Burress at 502-562-6144 ext. 123 or via email at greg.burress@kipda.org for additional questions or information.



TIP Action:	N/A				
MTP Action:	Update Open to Public Date				
Exempt/	opdate open to rubile bate	Model			
Non-Exempt:	Exempt	Impact:	No change	to model	
		KIPDA			
Project Sponsor:	Jeffersontown	ID:	2081	State ID:	TBD
County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	Watterson Trail Bicycle & Pedestrial Tr	rail Phase II	Total Estimated Cost in MTP (i.e. CK 2040):	\$1	,320,000
	Total Co		Total Cost Programmed in TIP to Date:		N/A
Funding Source:	N/A		Open to Public Date:		2023 2021
Description:	The project will construct a 10 foot wide Drive to Mulberry Row Way.	e concrete m	nulti-use trail along one side of Watter	son Trail from	Mansfield Estates
Purpose & Need:	The city conducted a bicycle/pedestrian to both bicycle and pedestrian facilities that neighborhoods and no sidewalks existing connect with the central business district	are safe along along this se	ng this section of Watterson Trail. Givection of roadway it was determined t	ven the high de to construct a i	nsity of multi-use trail to
FY 20-25 TIP Funding:	N/A				
TIP Action:	Add project				
MTP Action:	N/A				
Exempt/Non-		Model	I		
Exempt:	Exempt	Impact:	No change to model		
Project Sponsor:	Transit Authority of River City (TARC)	KIPDA	NEW	State ID:	N/A
		ID: Parent	585		
County	Jefferson	ID:	585	Group ID:	N/A
Project Name:	Purchase twelve (12) 40-ft. Bus	ses	Total Estimated Cost in MTP (i.e. CK 2040):		N/A
	(,		Total Cost Programmed in TIP to Date:	\$7,750,000	
Funding Source:	Urbanized Area Formula Grants (Sect	ion 5307)	Open to Public Date:	2023	
Description:	Purchase eight (8) 40-ft. low-floor, cleanusing FY 2022 apportionment funds.	-diesel and fo	our (4) 40-ft. low-floor, extended rang	e full battery-e	lectric transit buses
Purpose & Need:	TARC will purchase twelve (12) 40' low- While timely bus replacement is critical i zero-emission buses is key to the agency	in order to n	nanage maintenance costs, TARC also		
FY 20-25 TIP	FY 2022 Transit Capital phase with the formula (Section 1988) 1 (Section 1	_			

TIP Action:	Add project				
MTP Action:	N/A				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change	to model	
Project Sponsor:	Transit Authority of River City (TARC)	KIPDA ID:	NEW	State ID:	N/A
County	Jefferson	Parent ID:	585	Group ID:	N/A
Project Name:	Purchase Six (6) Extended Range Elec	tric Buses	Total Estimated Cost in MTP (i.e. CK 2040):		N/A
	.,		Total Cost Programmed in TIP to Date:	\$4,026,658	
Funding Source:	Grants for Buses and Bus Facilities Formula Program (Section 5339) Open to Public Date: 2023				2023
Description:	Purchase six (6) extended range full batt	ery-electric l	ouses, and two (2) depot chargers.		
Purpose & Need:	TARC will replace six (6) diesel buses th replacement of high emission buses. TA making the agency more sustainable. A place for electric buses. The charging equipment	RC believes portion of th	that zero-emission buses are the key t e funds provided will be used to estab	to reducing ma lish infrastruct	intenance costs and
FY 20-25 TIP Funding:	FY 2022 Transit Capital phase with the f \$3,422,659 (Federal) + \$603,999 (Other)				

TID Astism	N/A				
TIP Action:		Durposo 9. N	lood Statement		
MTP Action: Exempt/Non-	Update Open to Public Date and Revise	Model	veed Statement		
Exempt:	Exempt	Impact:	No change to model		
Project Sponsor:	Transit Authority of River City (TARC)	KIPDA ID:	1987	State ID:	05-562.00
County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	TARC-Comprehensive Operations A	nalysis &	Total Estimated Cost in MTP (i.e. CK 2040):		N/A
	Strategic Plan		Total Cost Programmed in TIP to Date:	\$4	1,026,658
Funding Source:	N/A		Open to Public Date:		2022 2021
Description:	Perform a Comprehensive Operations A and services, in comparison with the confuture needs for public transportation sy to address a long-term strategy for trans sources of funding. The overall project with develop a long range plan for major investigations.	nmunity grov stem improv it system im vill improve	wth, economic trends, land use develo rements. Phase II of the project is de- provements, level of investment and e the performance of the existing service	pment pattern veloping a TAR explore options	s, and current and C Long Range Plan for sustainable
Purpose & Need:	The purpose of the project is to develop goal to plan for transportation services to performance of the existing services, addinvestments as funding becomes available components: 1. Comprehensive Operational Analysis 2. Maximizing Service, Communications is 3. Major Investments Plan 4. TARC Long Range Plan Update Comprehensive Operational Analysis she current services improvements and long implement efficiency improvements and funding. One of the potential outcomes evaluation and community preferences for according to the specific community nee and provide convenient and affordable tralong major transportation corridors coulong term could transform to mini statio services. An improved public transportation and resider	hat address of lress current of the COA or public trar ds, will great avel options ald become a or transit tion system.	current and future needs of all users. coperational concerns, maximize service project can be developed in phases a hips cidership survey/ passengers' preference planning. Based on the outcome of the services based on the routes' pois to initiate the TARC's Long Range insportation. A transportation system the improve mobility, reduce traffic confor residents across the region. Designate economic development opportunity oriented developments with a mixtur will provide easy and affordable travel	The project is ice efficiency at and should included and should included as the customers' erformance and Plan update bath is planned regestion on the prated Park and for local competions for all	intended to improve and plan for major ade four major. ssessment for survey, TARC will defend the system and implemented existing roadways, ITARC locations munities and in anesses and public
FY 20-25 TIP Funding:	N/A				

Amendment 6 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan; FY 2020-2025 Transportation Improvement Program Public Comments

Project Name: Purchase Six (6) Extended Range Electric Buses

KIPDA ID: NEW

Project Sponsor: Transit Authority of River City (TARC)

Comments: "Bus transportation upkeep is sorely needed. I would like to add that good bus

infrastructure is needed in addition to more busses. If a bus gets stuck in traffic,

the bus infrastructure is lacking. Bus-only/Bus priority lanes would help"

"Yes please, this is great. More busses are needed."

"Yes. More buses."

"So glad there is investment in sustainable transportation!"

"I'd like to voice my support for TARC's proposed purchase of all-electric busses,

which I see included in Amendment 6."

Project Name: Purchase Twelve (12) 40 Foot Buses

KIPDA ID: NEW **Project Sponsor:** TARC

Comments: "Bus transportation upkeep is sorely needed. I would like to add that good bus

infrastructure is needed in addition to more busses. If a bus gets stuck in traffic,

the bus infrastructure is lacking. Bus-only/Bus priority lanes would help"

"Agree these buses are a good purchase, thank you for buying more busses."

"More and more buses are needed in order to replace aging fleet and to provide

more options to folks."

Project Name: Watterson Trail Bicycle & Pedestrian Trail Phase 2

KIPDA ID: 2081

Project Sponsor: Louisville Metro

Comments: "Addition of dedicated bicycle and pedestrian infrastructure is a desperately

needed and very welcome improvement to our city. I hope this project and

others like it continue to be implemented."

"I fully support building out a network of bike and pedestrian pathways for those

wishing to get around town without a motor vehicle."

"I am in favor any multi-use paths that provide options for those who cannot or reluctantly rely on car transportation. More projects like this must be pursued in the dense urban corridors of Louisville in addition to this project. A good start."

"Great project, please extend the length of Watterson Trail and surrounding roads to make a good network."

"This is a confusing form. What is a Case Identifier? This Is a good project. I would like to see more bike and ped. Jeffersontown and the Bluegrass Industrial Park are critical economic engines. More options are needed. Thanks for this project!"



Amendment 7

Connecting Kentuckiana 2040
Metropolitan Transportation Plan (MTP) &
Fiscal Year 2020 - 2025 Transportation
Improvement Program (TIP)

Scheduled for TPC Approval on June 23, 2022

Kentuckiana Regional Planning and Development Agency
Transportation Policy Committee adopting Amendment #7 of
the Connecting Kentuckiana 2040 Metropolitan Transportation Plan

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 Metropolitan Planning Area encompassing Clark and Floyd counties and a portion of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and a portion of Shelby County in Kentucky; and,

Whereas, Federal laws require the Transportation Policy Committee periodically review and update its Metropolitan Transportation Plan to reflect progress and changes regarding its implementation using the latest forecasts of regional demographic and socioeconomic data; and,

Whereas, pursuant to 23 CFR Section 450.322, the Metropolitan Transportation Plan is based on the latest available estimates and assumptions with regard to population, land use, travel, employment, congestion, and economic activity developed in conjunction with local jurisdictions; and.

Whereas, consistent with Federal and state mandates, states' environmental requirements, and with the KIPDA Transportation Policy Committee's Memorandum of Agreement, Participation Plan, Title VI: Environmental Justice 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; has made draft documents available for public review, has held public meetings and other efforts including providing data and information related to the Metropolitan Transportation Plan update on the KIPDA website, to involve citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of persons with disabilities, and other interested parties in order to facilitate their ability to provide input, discussion, and review of Connecting Kentuckiana 2040, and has incorporated the work of local governments, and the suggestions of citizens, businesses, and interests throughout the MPA in this document; and,

Be it further resolved, that the KIPDA staff is authorized to transmit Amendment #7 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan for the Louisville/Jefferson County KY-IN Metropolitan Planning Area 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 23rd day of June 2022.

Judge David Voegele, Chair

Transportation Policy Committee

Andy Rush

KIPDA Transportation Division Director

Kentuckiana Regional Planning and Development Agency
Transportation Policy Committee adopting Amendment #7 of
the FY 2020 - FY 2025 Transportation Improvement Program

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 and a portion of Harrison County in 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, Title VI: Environmental Justice 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, the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is a subset of Connecting Kentuckiana 2040, 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 FY2020 -FY 2025 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 2021 - 2024 Statewide Transportation Improvement Program (STIP), and the Indiana FY 2020 - 2024 STIP, respectively, and will become part of the end of fiscal year fiscal constraint recalculations; and,

Now, therefore be it resolved, by the Transportation Policy Committee of KIPDA that this amendment of the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is adopted by official action at the June 23, 2022, 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 2040* complies with all of 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 2040, 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 #7 of the Connecting Kentuckiana 2040 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 this amendment of the Connecting Kentuckiana 2040 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 23rd day of June 2022.

Judge David Voegele Chair

Transportation Policy Committee

Andy Rush

KIPDA Transportation Division Director



Connecting Kentuckiana (CK) 2040 Metropolitan Transportation Plan (MTP) Fiscal Year (FY) 2020 - 2025 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	April 18, 2022
KIPDA staff completes project review	April 22, 2022
Public comment period	May 9 - 23, 2022
Comments sent to the Transportation Policy Committee (TPC)	May 25, 2022
Transportation Technical Coordinating Committee (TTCC) Recommendation	June 8, 2022
TPC Action	June 23, 2022

ADDITIONAL INFORMATION

The MTP & TIP amendment process is NOT an opportunity to request MPO dedicated funds.

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://kipda.formstack.com/forms/kipda_epif



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



Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020-2025 Transportation Improvement Program

The Kentuckiana Regional Planning and Development Agency (KIPDA) is the Metropolitan Planning Organization (MPO) for the five-county region covering Jefferson, Bullitt and Oldham Counties in Kentucky and Clark and Floyd Counties in Indiana. The MPO's responsibilities include producing a long-range transportation document, known as *Connecting Kentuckiana 2040* Metropolitan Transportation Plan (MTP) and a short-range planning document, the Fiscal Year (FY) 2020-2025 Transportation Improvement Program (TIP)

Changes have been proposed to the MTP and TIP. The MTP, with the proposed changes, is fiscally reasonable and the TIP remains fiscally constrained. All proposed changes and projects were determined to be and confirmed by the IAC to be exempt-only for air quality. This packet includes the following document:

- A listing of all projects being added, removed and/or modified
- Schedule for Amendment 6

Providing comments for the proposed changes can be submitted by any of the following methods:

- Visiting https://kipdatransportation.org/amendment6/ and click on the Amendment 6 Map link
- Emailing kipda.trans@kipda.org
- Mail to the following address

TIP and MTP Amendment, KIPDA 11520 Commonwealth Drive, Louisville, KY 40299

Attend the virtual open house on February 1st from 5:00-6:00 pm via Zoom. Members of the public
are encouraged to ask questions and leave comments. A link to the virtual public meeting can be found
at: https://kipdatransportation.org/amendment6/

Phone: 502.266.6084

Fax: 502.266.5074

TDD: 800.648.6056

Please contact Community and Committee Engagement Specialist Greg Burress at 502-562-6144 ext. 123 or via email at greg.burress@kipda.org for additional questions or information.



MTP Action: Add project Exempt Model Impact: No impact to model	TID Actions	N/A				
Exempt Non-Exempt Exempt Model Impact: No impact to model						
Non-Exempt: Exempt Impact: No impact to model		Add project	Model			
Project Sponsor: Clarkswille KIPDA ID: NEW State ID: TBD	•	Exempt		No impact	to model	
Project Sponsor: Clarksville ID: NEW State ID: TBD	14011-Exempt.		-			
Project Name: Progress Way Roadway Improvements Total Estimated Cost in MTP (i.e. CK 2040): S3.500,000	Project Sponsor:	Clarksville		NEW	State ID:	TBD
Project Name: Progress Way Roadway Improvements (i.e. CK 2040): Total Cost Programmed in TIP to Date: Pudling Source: N/A Description: The project will install new curb and gutter, sidewalks, and drainage along Progress Way from I-65 to Broadway. The working of the lanes will not change, instead they will be shifted south slightly to allow for drainage improvements. There will all a reworking of the intersection with Addmore and Progress Way. The Town is seeing significant growth along Progress Way. This includes the addition of Cunningham Campers and a la apartment complex, both near the Addmore Lane Intersection. The area is already well traveled as a bypass around Ve Parkway and the additional apartments will increase the traffic on the roadway. There is not a need for capacity, but in need to increase safety along the entire corridor. The area west of Sam Gwin is highly traveled by individuals living in the Senion Housing along Greentree North. They often travel in and cross the roadway. In their motorized scooters. This very un and the proposed improvements will give them a place to safely cross and travel. Project Sponsor: TIP Action: N/A MTP Action: N/A MTP Action: Exempt: N/A MTP Action: Exempt: N/A MTP Action: Clarksville ID: N/A NeW State ID: TBD County Clark Parent ID: N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Project is a complete overhaul of Stansifer Avenue from Akers Avenue to South Clark Blvd. The roadway will have	County	Clark	Parent	N/A	Group ID:	N/A
Funding Source: Ni/A Open to Public Date: 2026	Project Name:	Progress Way Roadway Improver	ments	(i.e. CK 2040):	\$3	3,500,000
The project will install new curb and gutter, sidewalks, and drainage along Progress Way from I-65 to Broadway. The wof the lanes will not change, instead they will be shifted south slightly to allow for drainage improvements. There will all a reworking of the intersection with Addmore and Progress Way. The Town is seeing significant growth along Progress Way. This includes the addition of Cunningham Campers and a la apartment complex, both near the Addmore Lane Intersection. The area is already well traveled as a bypass around Ve Parkway and the additional apartments will increase the traffic on the roadway. There is not a need for capacity, but inneed to increase safety along the roadway. The road lacks drainage, curbs, gutters and a walking path. These are needed increase safety along the entire corridor. The area west of Sam Gwin is highly traveled by individuals living in the Senion Housing along Greentree North. They often travel in and cross the roadway in their motorized scooters. This very un and the proposed improvements will give them a place to safely cross and travel. TIP Action: N/A MTP Action: Exemptinon- Exempt: Clark wille Model Impact: No impact to model Exemptinon- Exempt: No impact to model N/A Tepoject Sponsor: Clarksville ID: N/A NEW State ID: TBD County Clark Parent ID: Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Total Cost Programmed in TIP to Date: Total Cost Programmed In TIP to Date: Total Cost Programmed In TIP to Date: Total Cost Programmed In TIP to Date: Total Cost Programmed In TIP to Date: Total Cost Programmed In TIP to Date: Total Cost Programmed In TIP to Date: The project is a complete overhaul of Stansifer Avenue from Akers Avenue to South Clark Blvd. The roadway will have				_		N/A
Description: of the lanes will not change, instead they will be shifted south slightly to allow for drainage improvements. There will all a reworking of the intersection with Addmore and Progress Way. The Town is seeing significant growth along Progress Way. This includes the addition of Cunningham Campers and a la apartment complex, both near the Addmore Lane Intersection. The area is already well traveled as a bypass around Ve Parkway and the additional apartments will increase the traffic on the roadway. There is not a need for capacity, but increase safety along the roadway. The road lacks drainage, curbs, gutters and a walking path. These are needed increase safety along the entire corridor. The area west of Sam Gwin is highly traveled by individuals living in the Senior Housing along Greentree North. They often travel in and cross the roadway in their motorized scooters. This very uneand the proposed improvements will give them a place to safely cross and travel. FY 20-25 TIP Funding:	Funding Source:	N/A		Open to Public Date:		2026
apartment complex, both near the Addmore Lane Intersection. The area is already well traveled as a bypass around Ve Parkway and the additional apartments will increase the traffic on the roadway. There is not a need for capacity, but increase safety along the roadway. The road lacks drainage, curbs, gutters and a walking path. These are neede increase safety along the entire corridor. The area west of Sam Gwin is highly traveled by individuals living in the Senior Housing along Greentree North. They often travel in and cross the roadway in their motorized scooters. This very un and the proposed improvements will give them a place to safely cross and travel. FY 20-25 TIP Funding:	-	of the lanes will not change, instead they	will be shift	ed south slightly to allow for drainage		•
Funding: N/A N/	Purpose & Need:	apartment complex, both near the Addn Parkway and the additional apartments v need to increase safety along the roadwa increase safety along the entire corridor. Housing along Greentree North. They of	nore Lane Invill increase to ay. The road . The area woften travel in	tersection. The area is already well tr the traffic on the roadway. There is n lacks drainage, curbs, gutters and a w yest of Sam Gwin is highly traveled by n and cross the roadway in their moto	raveled as a bypot a need for covalking path. Tindividuals livir	ass around Veteran's apacity, but instead a nese are needed to g in the Senior
MTP Action: Add project Exempt/Non-Exempt: Exempt Model Impact: No impact to model Project Sponsor: Clarksville KIPDA ID: NEW State ID: TBD County Clark Parent ID: N/A Group ID: N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: N/A Funding Source: N/A Open to Public Date: 2026 The project is a complete overhaul of Stansifer Avenue from Akers Avenue to South Clark Blvd. The roadway will have		N/A				
MTP Action: Add project Exempt/Non-Exempt: Exempt Model Impact: No impact to model Project Sponsor: Clarksville KIPDA ID: NEW State ID: TBD County Clark Parent ID: N/A Group ID: N/A Forject Name: Stansifer Avenue Streetscape Improvements Total Estimated Cost in MTP (i.e. CK 2040): \$5,000,000 Total Cost Programmed in TIP to Date: N/A Funding Source: N/A Open to Public Date: 2026 The project is a complete overhaul of Stansifer Avenue from Akers Avenue to South Clark Blvd. The roadway will have	TIP Action:	N/A				
Project Sponsor: Clarksville Impact: NEW State ID: TBD		Add project				
Project Sponsor: Clarksville KIPDA ID: NEW State ID: TBD	Exempt/Non-	- · ·	Model	NIs tons on	6 d - l	
Project Sponsor: Clarksville ID: NEW State ID: TBD County Clark Parent ID: N/A Group ID: N/A Project Name: Stansifer Avenue Streetscape Improvements Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Funding Source: N/A Open to Public Date: 2026 The project is a complete overhaul of Stansifer Avenue from Akers Avenue to South Clark Blvd. The roadway will have	Exempt:	Exempt	Impact:	No impact	to model	
County Clark ID: N/A Group ID: N/A Project Name: Stansifer Avenue Streetscape Improvements Total Estimated Cost in MTP (i.e. CK 2040): \$5,000,000 Funding Source: N/A Open to Public Date: 2026 The project is a complete overhaul of Stansifer Avenue from Akers Avenue to South Clark Blvd. The roadway will have	Project Sponsor:	Clarksville		NEW	State ID:	TBD
Project Name: Stansifer Avenue Streetscape Improvements (i.e. CK 2040): Total Cost Programmed in TIP to Date: Funding Source: N/A Open to Public Date: The project is a complete overhaul of Stansifer Avenue from Akers Avenue to South Clark Blvd. The roadway will have	County	Clark		N/A	Group ID:	N/A
Funding Source: N/A Open to Public Date: 2026 The project is a complete overhaul of Stansifer Avenue from Akers Avenue to South Clark Blvd. The roadway will have	Project Name:	Stansifer Avenue Streetscape Impro	vements		\$!	5,000,000
The project is a complete overhaul of Stansifer Avenue from Akers Avenue to South Clark Blvd. The roadway will have				_		N/A
	Funding Source:	N/A		Open to Public Date:		2026
improvements.	=	landscaped medians, curb and gutter, the				-
Purpose & Need: Stansifer Avenue is directly off of I-65 and is a key exit for the Town's South End Redevelopment, as well as Orgin park. Town recently built a new Fire Station on Stansifer Avenue and is working to redevelop the area. Stansifer Avenue is so one of the Gateway's to the Town. It will provide main access to two large development ares in Town. However it is to the lanes are almost 20 feet wide in some areas, which lead drivers to think that there are two lanes, when there is only This causes confusion and can lead to unnecessary accidents. The roadway also lacks parking and drainage. It needs improvement access the board.	Purpose & Need:	Town recently built a new Fire Station o one of the Gateway's to the Town. It w The lanes are almost 20 feet wide in son This causes confusion and can lead to un	on Stansifer A vill provide m ne areas, whi	wenue and is working to redevelop th ain access to two large development a ch lead drivers to think that there are	ne area. Stansif ares in Town. e two lanes, wh	er Avenue is seen as However it is unsafe. en there is only one.
FY 20-25 TIP N/A						
Funding:		N/A				

MTP Action: / Exempt/Non- Exempt:	Add project Add project Exempt				
Exempt/Non- Exempt:	1 /				
Exempt:	Exempt	Model			
	-/	Impact:	No impact	No impact to model	
i i ojece opolisoi i	Indiana Department of Transportation	KIPDA	NEW	State ID:	2101319
<u> </u>	(INDOT)	ID:			2101017
County	Clark	Parent ID:	N/A	Group ID:	N/A
Project Name:	SR-265 Sign Conversion		Total Estimated Cost in MTP (i.e. CK 2040):	\$6,100,000	
			Total Cost Programmed in TIP to Date:	\$5	,600,000
Funding Source:	Surface Transportation Block Grant (STBG) - State		Open to Public Date:		2023
Description:	Updating signs to I-265 along various rou	tes in Clark	County.		
Purpose & Need:	SR 265 is being converted to I-265 and th	ne signs in th	e area will be updated to show I-265.		
	FY 2022 Construction phase with the fol \$4,480,000 (Federal) + \$1,120,000 (Othe	•			
TIP Action:	N/A				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No impact to model		
Project Sponsor:	Louisville Metro	KIPDA ID:	867	State ID:	TBD
County	Floyd, Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	K&I Railroad Bridge		Total Estimated Cost in MTP (i.e. CK 2040):	\$30,000,000	
			Total Cost Programmed in TIP to Date:	\$312,500	
Funding Source:	N/A		Open to Public Date:	2040	
Description:	Conversion of the K&I Railroad Bridge in	to a new sha	red-use path across the Ohio River.		
Purpose & Need:	This project will provide connectivity for the Kentucky side and the Ohio River Gr use path on both sides of the river, the e	eenway on t	he Indiana side. This will close the we		
FY 20-25 TIP Funding:	N/A				

TIP Action:	Modify project name, description and TI	P funding			
MTP Action:	Modify project name, description and M		est		
Exempt/Non-	Evennet	Model	No impact	to model	
Exempt:	Exempt	Impact:	No impact	. to model	
Project Sponsor:	Louisville Metro	KIPDA ID:	384	State ID:	05-479.00
County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	North Hubbards Lane		Total Estimated Cost in MTP (i.e. CK 2040):	\$4	, <mark>799,736</mark> ,403,200
			Total Cost Programmed in TIP to Date:		, <mark>799,736</mark> , 474,736
Funding Source:	Surface Transportation Block Grant (ST	BG) - MPO	Open to Public Date:		2023
Description:	Widen Hubbards Lane from 2 to 3 lanes US 60 (Shelbyville Road) to KY 1447 (W Project length is 1.4 mi.	•		•	
Purpose & Need:	Hubbards Lane is a heavily traveled colle	ctor which p	asses through residential developmen	nt between US 6	60 and US 42.
FY 20-25 TIP Funding:	FY 2020 Design phase with the following \$63,840 (Federal) + \$14,510 (Other) = \$ FY 2020 Right of Way phase with the fo \$250,000 (Federal) + \$62,500 (Other) = FY 2021 Design phase with the following \$47,500 (Federal) + \$11,875 (Other) = \$ FY 2022 Design phase with the following \$40,000 (Federal) + \$10,000 (Other) = \$ FY 2022 Utilities phase with the following \$40,000 (Federal) + \$187,398 (Other) = \$ FY 2022 Construction phase with the fo \$2,400,000 (Federal) + \$600,000 (Other) = \$2,900,000 (Federal) + \$725,000 (Other) = \$2,900,000 (Federal) + \$725,000 (Other)	\$78,350 (Total \$312,500 (Total \$312,500 (Total \$ \$TBG-MPO \$ \$TBG-MPO \$ \$59,375 (Total \$ \$TBG-MPO \$ \$0,000 (Total \$ \$1,036,987 (Total \$ \$1,036,987 (Total \$ \$1,036,987 (Total \$ \$1,036,987 (Total \$ \$1,036,987 (Total	i-MPO funds: otal) funds: il) funds: il) of funds: il) Of funds: Total) (Total) G-MPO funds: 0 (Total)		

TID A stient	NI/A				
TIP Action: MTP Action:	N/A				
Exempt/Non-	Add project	Model			
Exempt:	Exempt	Impact:	No impact	to model	
Project Sponsor:	Louisville Metro	KIPDA ID:	NEW	State ID:	TBD
County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	Oak Street Corridor Streetsc		Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed	(i.e. CK 2040): \$2,475,000	
			in TIP to Date:		N/A
Funding Source:	N/A		Open to Public Date:		2026
Description:	Implement streetscape enhancements a enhancements include curb extensions mix concrete, improving the drainage by and improvements to on-street parking	to improve pe y installing gre	edestrian safety, bringing sidewalks int	o ADA complia	ance using historic
Purpose & Need:	Streetscape improvements will transfor walkable, mixed-use corridor. A variety offices, and restaurants. This project im The first phase of streetscape improver to a preliminary design and construction	of land uses of plements con nents began in	can be found along this corridor, included in varion 2014. Robust community engagemen	ding shops, resi us plans and st	idences, churches, udies since 1982.
FY 20-25 TIP Funding:	N/A				
TIP Action:	Add new project				
TIP Action:	Add new project				
MTP Action:	Add new project	Model			
MTP Action: Exempt/Non-			No impact	to model	
MTP Action:	Add new project	Impact: KIPDA	No impact	to model State ID:	05-279.01
MTP Action: Exempt/Non- Exempt:	Add new project Exempt	Impact:	·		05-279.01 N/A
MTP Action: Exempt/Non- Exempt: Project Sponsor:	Add new project Exempt Louisville Metro	Impact: KIPDA ID: Parent	NEW	State ID: Group ID:	
MTP Action: Exempt/Non- Exempt: Project Sponsor: County	Add new project Exempt Louisville Metro Jefferson	Impact: KIPDA ID: Parent	NEW N/A Total Estimated Cost in MTP	State ID: Group ID:	N/A
MTP Action: Exempt/Non- Exempt: Project Sponsor: County	Add new project Exempt Louisville Metro Jefferson	Impact: KIPDA ID: Parent ID:	NEW N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed	State ID: Group ID:	N/A 675,000
MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name:	Add new project Exempt Louisville Metro Jefferson South Hubbards Lane	Impact: KIPDA ID: Parent ID:	NEW N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date:	State ID: Group ID:	N/A 675,000 675,000 2024
MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name: Funding Source:	Exempt Louisville Metro Jefferson South Hubbards Lane Surface Transportation Block Grant (S' Add bicycle and pedestrian facilities to S' The purpose and need of this project is Hubbards Lane between US 60 (Shelby)	Impact: KIPDA ID: Parent ID: TBG) - MPO South Hubbar to increase siville Rd) to Kr	NEW N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date: ds Lane from Kresge Way to US 60 (Safety and to improve bicycle and pederesge Way/Bowling Boulevard.	State ID: Group ID: \$ Shelbyville Road	N/A 675,000 675,000 2024 d).
MTP Action: Exempt/Non- Exempt: Project Sponsor: County Project Name: Funding Source: Description:	Add new project Exempt Louisville Metro Jefferson South Hubbards Lane Surface Transportation Block Grant (S' Add bicycle and pedestrian facilities to S' The purpose and need of this project is	Impact: KIPDA ID: Parent ID: TBG) - MPO South Hubbar to increase siville Rd) to Krig STBG-MPC \$50,000 (Total	NEW N/A Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed in TIP to Date: Open to Public Date: ds Lane from Kresge Way to US 60 (Safety and to improve bicycle and pederesge Way/Bowling Boulevard. O funds: all) G-MPO funds:	State ID: Group ID: \$ Shelbyville Road	N/A 675,000 675,000 2024 d).

Amendment 6 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan; FY 2020-2025 Transportation Improvement Program Public Comments

Project Name: Purchase Six (6) Extended Range Electric Buses

KIPDA ID: NEW

Project Sponsor: Transit Authority of River City (TARC)

Comments: "Bus transportation upkeep is sorely needed. I would like to add that good bus

infrastructure is needed in addition to more busses. If a bus gets stuck in traffic,

the bus infrastructure is lacking. Bus-only/Bus priority lanes would help"

"Yes please, this is great. More busses are needed."

"Yes. More buses."

"So glad there is investment in sustainable transportation!"

"I'd like to voice my support for TARC's proposed purchase of all-electric busses,

which I see included in Amendment 6."

Project Name: Purchase Twelve (12) 40 Foot Buses

KIPDA ID: NEW **Project Sponsor:** TARC

Comments: "Bus transportation upkeep is sorely needed. I would like to add that good bus

infrastructure is needed in addition to more busses. If a bus gets stuck in traffic,

the bus infrastructure is lacking. Bus-only/Bus priority lanes would help"

"Agree these buses are a good purchase, thank you for buying more busses."

"More and more buses are needed in order to replace aging fleet and to provide

more options to folks."

Project Name: Watterson Trail Bicycle & Pedestrian Trail Phase 2

KIPDA ID: 2081

Project Sponsor: Louisville Metro

Comments: "Addition of dedicated bicycle and pedestrian infrastructure is a desperately

needed and very welcome improvement to our city. I hope this project and

others like it continue to be implemented."

"I fully support building out a network of bike and pedestrian pathways for those

wishing to get around town without a motor vehicle."

"I am in favor any multi-use paths that provide options for those who cannot or reluctantly rely on car transportation. More projects like this must be pursued in the dense urban corridors of Louisville in addition to this project. A good start."

"Great project, please extend the length of Watterson Trail and surrounding roads to make a good network."

"This is a confusing form. What is a Case Identifier? This Is a good project. I would like to see more bike and ped. Jeffersontown and the Bluegrass Industrial Park are critical economic engines. More options are needed. Thanks for this project!"



Amendment 8

Connecting Kentuckiana 2040

Metropolitan Transportation Plan &

Fiscal Year 2020 - 2025 Transportation

Improvement Program (TIP)

TPC Approval on July 28, 2022

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #8 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan

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 Metropolitan Planning Area encompassing Clark and Floyd counties and a portion of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and a portion of Shelby County in Kentucky; and,

Whereas, Federal laws require the Transportation Policy Committee periodically review and update its Metropolitan Transportation Plan to reflect progress and changes regarding its implementation using the latest forecasts of regional demographic and socioeconomic data; and,

Whereas, pursuant to 23 CFR Section 450.322, the Metropolitan Transportation Plan is based on the latest available estimates and assumptions with regard to population, land use, travel, employment, congestion, and economic activity developed in conjunction with local jurisdictions; and,

Whereas, consistent with Federal and state mandates, states' environmental requirements, and with the KIPDA Transportation Policy Committee's Memorandum of Agreement, Participation Plan, Title VI: Environmental Justice 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; has made draft documents available for public review, has held public meetings and other efforts including providing data and information related to the Metropolitan Transportation Plan update on the KIPDA website, to involve citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of persons with disabilities, and other interested parties in order to facilitate their ability to provide input, discussion, and review of Connecting Kentuckiana 2040, and has incorporated the work of local governments, and the suggestions of citizens, businesses, and interests throughout the MPA in this document; and,

Be it further resolved, that the KIPDA staff is authorized to transmit Amendment #8 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan for the Louisville/Jefferson County KY-IN Metropolitan Planning Area 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 Trapsportation Policy Committee on the 28th day of July 2022.

Judge David Voegele, Chair

Transportation Policy Committee

Andy Rush

KIPDA Transportation Division Director

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #8 of the FY 2020 - FY 2025 Transportation Improvement Program

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 and a portion of Harrison County in 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, Title VI: Environmental Justice 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, the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is a subset of Connecting Kentuckiana 2040, 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 FY2020 -FY 2025 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 2021 - 2024 Statewide Transportation Improvement Program (STIP), and the Indiana FY 2022 - 2026 STIP, respectively, and will become part of the end of fiscal year fiscal constraint recalculations; and,

Now, therefore be it resolved, by the Transportation Policy Committee of KIPDA that this amendment of the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is adopted by official action at the July 28, 2022, 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 2040* complies with all of 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 2040, 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 #8 of the Connecting Kentuckiana 2040 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 this amendment of the Connecting Kentuckiana 2040 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 28th day of July 2022.

Judge David Voegele, Chair

Transportation Policy Committee

Andy Rush

KIPDA Transportation Division Director



Connecting Kentuckiana (CK) 2040 Metropolitan Transportation Plan (MTP) Fiscal Year (FY) 2020 - 2025 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	June 14, 2022
KIPDA staff completes project review	June 15, 2022
Interagency Consultation Group (IAC) Coordination	June 10 - 20, 2022
Public comment period	June 24 - July 8, 2022
Comments sent to the Transportation Policy Committee (TPC)	July 11, 2022
Transportation Technical Coordinating Committee (TTCC) Recommendation	July 13, 2022
TPC Action	July 28, 2022

ADDITIONAL INFORMATION

The MTP & TIP amendment process is NOT an opportunity to request MPO dedicated funds.

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://kipda.formstack.com/forms/kipda_epif



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



Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020-2025 Transportation Improvement Program

The Kentuckiana Regional Planning and Development Agency (KIPDA) is the Metropolitan Planning Organization (MPO) for the five-county region covering Jefferson, Bullitt and Oldham Counties in Kentucky and Clark and Floyd Counties in Indiana. The MPO's responsibilities include producing a long-range transportation document, known as *Connecting Kentuckiana 2040* Metropolitan Transportation Plan (MTP) and a short-range planning document, the Fiscal Year (FY) 2020-2025 Transportation Improvement Program (TIP)

Changes have been proposed to the MTP and TIP. The MTP, with the proposed changes, is fiscally reasonable and the TIP remains fiscally constrained. All proposed changes and projects were determined to be and confirmed by the IAC to be exempt-only for air quality. This packet includes the following document:

- A listing of all projects being added, removed and/or modified
- Schedule for Amendment 8

Providing comments for the proposed changes can be submitted by any of the following methods:

- Visiting https://kipdatransportation.org/amendment-8/ and click on the Amendment 8 Map link
- Emailing <u>kipda.trans@kipda.org</u>
- Mail to the following address

TIP and MTP Amendment, KIPDA 11520 Commonwealth Drive, Louisville, KY 40299

Attend the virtual open house on July 6th from 5:00-6:00 pm via Zoom. Members of the
public are encouraged to ask questions and leave comments. A link to the virtual public
meeting can be found at: https://kipdatransportation.org/amendment-8/

Please contact Community and Committee Engagement Specialist Greg Burress at 502-562-6144 ext. 123 or via email at greg.burress@kipda.org for additional questions or information.

Phone: 502.266.6084

Fax: 502.266.5074

TDD: 800.648.6056



TIP Action:	N/A				
MTP Action:	Revise project description and purpose	& need			
Exempt/Non- Exempt:	Exempt	Model Impact:	No impact	to model	
Project Sponsor:	Clarksville	KIPDA ID:	3019	State ID:	TBD
County	Clark	Parent ID:	N/A	Group ID:	N/A
Project Name:	Stansifer Avenue Streetscape Impro	vements	Total Estimated Cost in MTP (i.e. CK 2040):	\$!	5,000,000
r rojece rumine.	Stansher 7 Wende Streetscape Impro	Total Cost Programmed in TIP to Date:		N/A	
Funding Source:	N/A		Open to Public Date:		2026
Description:	The project is a complete overhaul of St landscaped medians, curb and gutter, the improvements. The project will also incl lanes.	e addition of	on-street parking, narrowing of the lar	ne widths and o	drainage
Purpose & Need:	Stansifer Avenue is directly off of I-65 and Town recently built a new Fire Station of one of the Gateway's to the Town. It was The lanes are almost 20 feet wide in som This causes confusion and can lead to unimprovement access across the board.	on Stansifer A vill provide ma ne areas, which	venue and is working to redevelop the ain access to two large development a ch lead drivers to think that there are	e area. Stansife res in Town. I two lanes, wh	er Avenue is seen as However it is unsafe. en there is only one.
FY 20-25 TIP Funding:	N/A				

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non-	Evenue	Model	No impact	to model	
Exempt:	Exempt	Impact:	ino impact	to model	
Project Sponsor:	Indiana Department of Transportation	KIPDA	NEW	State ID:	1902858
Troject Sponsor.	(INDOT)	ID:	NEVV	State 15.	1702030
County	Clark	Parent ID:	N/A	Group ID:	N/A
			Total Estimated Cost in MTP (i.e. CK 2040):	\$2	7,432,500
Project Name:	Henryville Welcome Center Recons	truction	Total Cost Programmed in TIP to Date:	N/A	
Funding Source:	Surface Transportation Block Grant (STBG) - State		Open to Public Date:		2027
Description:	Rest area modernization project in Henr	yville on I-65	north bound at mile marker 22.		
Purpose & Need:	The Henryville Welcome Center will be building will be redesigned to accommod truck parking spaces by a minimum of 36	ate a higher	•		
FY 20-25 TIP Funding:	FY 2023 Preliminary Engineering phase w \$2,678,400 (Federal) + \$297,600 (Other *FY 2025 Construction phase with the for \$21,902,400 (Federal) + \$2,433,600 (Other) = \$2,976,00 ollowing STB	00 (Total) G-ST funds:		
TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No impact	to model	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	NEW	State ID:	05-22066.00
County	Bullitt	Parent ID:	N/A	Group ID:	N/A
Project Name:	I-65		Total Estimated Cost in MTP (i.e. CK 2040):	\$59,400,000	
			Total Cost Programmed in TIP to Date:	N/A	
Funding Source:	National Highway System (NHS)			2024	
i unumg source:	<u> </u>	,	Open to Public Date:		2024
Description:	Address condition of I-65 from milepoint	,	_		2024
<u>-</u>	<u> </u>	,	_		2024
Description:	Address condition of I-65 from milepoint	NHS funds:) = \$5,400,00	lepoint 110.7. 00 (Total)		2024

2

Amendment 8 to the Connecting Kentuckiana 2040 Metropolitan Transportation Plan; FY 2020-2025 Transportation Improvement Program Public Comments

Project Name: Stansifer Ave Streetscape Improvements

KIPDA ID: 3019
Project Sponsor: Clarksville

Comments:

"Love to see projects like this, fully support. Please consider finding a way to make any bike lanes physically separated to increase their use and accessibility to all types of cyclists/micro mobility users on this critical east-west connection."

"Stuff like this is the only thing a city can do to make people actually want to love in an area. With how slow Louisville moves, this could be a good start to a series of projects for SO-IN to establish itself as an inexpensive "cool" area."

"This is the type of project that needs to be implemented en masse. 94% of this project funding goes to expressways that only make our community and environment worse. Spend more on people-centric projects and less on soulless expressway projects!""

"Protected bike lanes are a must! This is a great project."

Project Name: I-65 KIPDA ID: New

Project Sponsor: Kentucky Transportation Cabinet (KYTC)

Comments:

"I'm glad that resources are being devoted to maintaining our existing and useful highway infrastructure. However, this highlights the disparity between the resources allocated to highways, vs what's spent on sidewalks/transit/micro mobility in urban cores."

"This is badly needed for this area. The cost is high but considering how much tax dollars travels over this stretch daily, it makes sense. Even the local news has highlighted this stretch and the repair need."

"This money should be used to rebuild our crumbling sidewalks, improving bicycles and pedestrian safety or adding crosswalks around the city. Additionally this money could bury all the power lines along Bardstown Road in the Highlands."

"This is far too much money to be spent on highway infrastructure in a time when we need to swiftly transitioning to more sustainable modes of transport.

Consider cancelling this project and redirecting the money to making city streets safer."

- "I agree with the other commenters. This is a ludicrous amount of money for such a small section of a single highway and will only perpetuate further maintenance costs and pollution."
- "59 MILLION?!??!!? No way! The citizens of Kentucky shouldn't be subsidizing an interstate system when the infrastructure for the people that live here is crumbling!"
- "Why are we spending so much money on something that children and the elderly in our city can't use? We need better ways for seniors who are aging out of driving to feed themselves using the road network."
- "\$10M per mile just for repaying is an unconscionable cost. Cut our losses and reduce the amount of expressway that needs to be maintained- it is draining resources at an alarming rate when we need to focus more on community projects."
- "59 million is plenty to research and implement a longer term solution to the issue of deteriorating roads."
- "How much money has already been poured (literally) into maintaining this section of I-65? It's been patched so many times only to crumble and sink over and over again. Paving seems like another waste of \$. Better solutions are needed."
- "This project is extremely pricey and I believe the money should be spent elsewhere. This project will increase GHG emissions and should not be pursued at this time."
- "59 million just to repave 6 miles of I-65 in Bullitt County. Maintaining so much infrastructure for cars is not sustainable and a waste of tax money that could otherwise be spent better on other projects. There should be no more highway expansion/lane widening/new highways in KY because of the increase to deferred and ongoing maintenance costs like this.



Amendment 9

Connecting Kentuckiana 2040

Metropolitan Transportation Plan &

Fiscal Year 2020 - 2025 Transportation

Improvement Program (TIP)

TPC Approval Scheduled for January 26, 2023

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #9 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan

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 Metropolitan Planning Area encompassing Clark and Floyd counties and a portion of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and a portion of Shelby County in Kentucky; and,

Whereas, Federal laws require the Transportation Policy Committee periodically review and update its Metropolitan Transportation Plan to reflect progress and changes regarding its implementation using the latest forecasts of regional demographic and socioeconomic data; and,

Whereas, pursuant to 23 CFR Section 450.322, the Metropolitan Transportation Plan is based on the latest available estimates and assumptions with regard to population, land use, travel, employment, congestion, and economic activity developed in conjunction with local jurisdictions; and.

Whereas, consistent with Federal and state mandates, states' environmental requirements, and with the KIPDA Transportation Policy Committee's Memorandum of Agreement, Participation Plan, Title VI: Environmental Justice 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; has made draft documents available for public review, has held public meetings and other efforts including providing data and information related to the Metropolitan Transportation Plan update on the KIPDA website, to involve citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of persons with disabilities, and other interested parties in order to facilitate their ability to provide input, discussion, and review of Connecting Kentuckiana 2040, and has incorporated the work of local governments, and the suggestions of citizens, businesses, and interests throughout the MPA in this document; and,

Be it further resolved, that the KIPDA staff is authorized to transmit Amendment #9 of the Connecting Kentuckiana 2040 Metropolitan Transportation Plan for the Louisville/Jefferson County KY-IN Metropolitan Planning Area 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 26th day of January 2023.

City Council Member Bernie Bowling, Chair Andy Rush

Transportation Policy Committee KIPDA Transportation Division Director

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #9 of the FY 2020 - FY 2025 Transportation Improvement Program

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 and a portion of Harrison County in 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, Title VI: Environmental Justice 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, the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is a subset of Connecting Kentuckiana 2040, 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 FY2020 -FY 2025 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 2021 - 2024 Statewide Transportation Improvement Program (STIP), and the Indiana FY 2022 - 2026 STIP, respectively, and will become part of the end of fiscal year fiscal constraint recalculations; and,

Now, therefore be it resolved, by the Transportation Policy Committee of KIPDA that this amendment of the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is adopted by official action at the January 26, 2023, 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 2040 complies with all of 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 2040, 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 2040 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 this amendment of the Connecting Kentuckiana 2040 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 26th day of January 2023.

City Council Member Bernie Bowling, Chair Andy Rush

Transportation Policy Committee

KIPDA Transportation Division Director



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



Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020-2025 Transportation Improvement Program

The Kentuckiana Regional Planning and Development Agency (KIPDA) is the Metropolitan Planning Organization (MPO) for the five-county region covering Jefferson, Bullitt and Oldham Counties in Kentucky and Clark and Floyd Counties in Indiana. The MPO's responsibilities include producing a long-range transportation document, known as *Connecting Kentuckiana 2040* Metropolitan Transportation Plan (MTP) and a short-range planning document, the Fiscal Year (FY) 2020-2025 Transportation Improvement Program (TIP)

Changes have been proposed to the MTP and TIP. The MTP, with the proposed changes, is fiscally reasonable and the TIP remains fiscally constrained. All proposed changes and projects were determined to be and confirmed by the IAC to be exempt-only for air quality. This packet includes the following document:

- A listing of all projects being added, removed and/or modified
- Schedule for Amendment 9
- Air Quality conformity documentation
- Meeting minutes from the Interagency Consultation (IAC) conference call

Providing comments for the proposed changes can be submitted by any of the following methods:

- Visiting https://kipdatransportation.org/amendment-9/ and click on the Amendment 9 Map link
- Emailing kipda.trans@kipda.org
- Mail to the following address

TIP and MTP Amendment, KIPDA 11520 Commonwealth Drive, Louisville, KY 40299

 Attend the virtual open house on January 4th from 5:00-6:00 pm via Zoom. Members of the public are encouraged to ask questions and leave comments. A link to the virtual public meeting can be found at: https://kipdatransportation.org/amendment-9/

Please contact Community and Committee Engagement Specialist Greg Burress at 502-562-6144 ext. 123 or via email at greg.burress@kipda.org for additional questions or information.

Phone: 502.266.6084

Fax: 502.266.5074

TDD: 800.648.6056



TIP Action:	Modify TIP Funding and Update Ope	n to Public I	Date		
MTP Action:	Update Open to Public Date				
Exempt/Non- Exempt:	Non-Exempt Model Impact:		No change to model impact.		
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	2899	State ID:	1900162
County	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	I-64 Added Travel Lanes		Total Estimated Cost in MTP (i.e. CK 2040):		8,229,021 ,,807,800
rroject ivanie.	1-04 Added Travel Laties		Total Cost Programmed in TIP to Date:		8,229,021 9,807,800
Funding Source:	Various		Open to Public Date:		2027 2026
Description:	Added travel lanes project on I-64 fro 64 to State Street and improvements				s on I-265 from I-
Purpose & Need:	The addition of the mainline through and auxiliary lanes on I-64 as well as additional ramp lanes at the US 150 and I-265 interchanges will provide improved densities, levels of service and travel times with significant reduction in driver delay west of I-265.				
FY 20-25 TIP Funding:	FY 2020 Preliminary Engineering phase with State funds: \$0 (Federal) + \$1,557,800 (Other) = \$1,557,800 (Total) FY 2022 Preliminary Engineering phase with NHPP funds: \$13,500,000 (Federal) + \$1,500,000 (Other) = \$15,000,000 (Total) FY 2023 Preliminary Engineering phase with NHPP funds: \$13,500,000 (Federal) + \$1,500,000 (Other) = \$15,000,000 (Total) FY 2023 Right of Way phase with IM funds: \$225,000 (Federal) + \$25,000 (Other) = \$250,000 (Total) *FY 2024 Right of Way phase with IM funds: \$225,000 (Federal) + \$25,000 (Other) = \$250,000 (Total) *FY 2024 Construction phase with NHPP funds: \$27,000,000 (Federal) + \$3,000,000 (Other) = \$30,000,000 (Total) *FY 2025 Construction phase with NHPP funds: \$109,279,099 (Federal) + \$12,142,122 (Other) = \$121,421,221 (Total)				

2

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change to r	nodel impact.	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	NEW	State ID:	2200833
County	Floyd	Parent ID:	N/A	Group ID:	N/A
Project Name:	1 64 Hot miv apphalt (HMA) (Dvorlov	Total Estimated Cost in MTP (i.e. CK 2040):	\$59	9,474,000
rroject ivanie.	I-64 Hot-mix asphalt (HMA) Overlay		Total Cost Programmed in TIP to Date:	\$5	,020,000
Funding Source:	National Highway Performance Program (NHPP)		Open to Public Date:	2027	
Description:	Hot-mix asphalt (HMA) overlay minor structural on I-64 from 0.50 miles west of SR 135 to 1.01 miles west of SR 64				
Purpose & Need:	This project will improve the condit	ions of the p	avement and extend its service life.		
FY 20-25 TIP Funding:	FY 2023 Preliminary Engineering phase with NHPP funds: \$4,500,000 (Federal) + \$500,000 (Other) = \$5,000,000 (Total) *FY 2024 Railroad phase with NHPP funds: \$9,000 (Federal) + \$1,000 (Other) = \$10,000 (Total) *FY 2025 Right of Way phase with NHPP funds: \$9,000 (Federal) + \$1,000 (Other) = \$10,000 (Total)				

3

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change to n	nodel impact.	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	NEW	State ID:	2101799
County	Clark	Parent ID:	N/A	Group ID:	N/A
Project Name:	I-65 & Veterans Parkwa		Total Estimated Cost in MTP (i.e. CK 2040):	\$22	2,900,000
Project Name:	i-os & veterans rarkway		Total Cost Programmed in TIP to Date:	\$2	,700,000
Funding Source:	National Highway Performance Program (NHPP)		Open to Public Date:	2029	
Description:	Modify I-65 & Veterans Prkwy interchange by providing additional left turn capacity and adding pedestrian signal indications and push buttons at the signalized ramp terminal intersections.				
Purpose & Need:	The interchange is currently experiencing poor peak hour operating conditions that are expected to worsen. It is recommended that the interchange be modified to improve traffic operations, especially by providing additional left turn capacity.				
FY 20-25 TIP Funding:	FY 2023 Preliminary Engineering phase with NHPP funds: \$2,000,000 (Federal) + \$500,000 (Other) = \$2,500,000 (Total) *FY 2025 Right of Way phase with NHPP funds:				
	\$180,000 (Federal) + \$20,000 (Othe				

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt Model Impact:		No change to n	nodel impact.	
Project Sponsor:	Indiana Department of Transportation (INDOT)	KIPDA ID:	NEW	State ID:	2200050
County	Clark	Parent ID:	N/A	Group ID:	N/A
Project Name:	SR 60 & Perry Crossing Road Intersection		Total Estimated Cost in MTP (i.e. CK 2040):	\$3	,207,022
r roject Hame.			Total Cost Programmed in TIP to Date:	\$600,000	
Funding Source:	National Highway Performance Program (NHPP)		Open to Public Date:	2028	
Description:	Intersection improvement at SR 60 a	nd Perry Cr	rossing Road.		
Purpose & Need:	Purpose & Need: This project will address safety concerns at the intersection of SR 60 and Perry Crossing Road.				
FY 20-25 TIP Funding:					

5

TIP Action:	Remove project				
MTP Action:	Remove project	T	T		
Exempt/Non- Exempt:	Exempt Model Impact:		No change to r	model impact.	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	2944	State ID:	5-20061.00
County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Duainet Name	I-65		Total Estimated Cost in MTP (i.e. CK 2040):	\$56,000,000	
Project Name:			Total Cost Programmed in TIP to Date:	\$56,000,000	
Funding Source:	National Highway Performance P (NHPP)	Program	Open to Public Date:	2025	
Description:	Address pavement needs on I-65 bet 133.873; replace bridge over Brook S 135.273		•	Ū	
Purpose & Need:	To address existing infrastructure def	ficiencies.			
FY 20-25 TIP	FY 2021 Design phase with NHPP funds: \$1,800,000 (Federal) + \$200,000 (Other) = \$2,000,000 (Total)				
Funding:	FY 2023 Construction phase with NF \$48,600,000 (Federal) + \$5,400,000 (54,000,000 (Total)		

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change to model impact.		
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	NEW	State ID:	5-10064.00
County	Jefferson	Parent ID:	N/A	Group ID:	N/A
Project Name:	I-65 Bridge at Hill, CSX RR & Burnett		Total Estimated Cost in MTP (i.e. CK 2040):	\$2.	5,168,000
rroject Haine.			Total Cost Programmed in TIP to Date:	\$25,168,000	
Funding Source:	Bridge Replacement – On System (BRO)		Open to Public Date:	2025	
Description:	Bridge project in Jefferson County on	(056B0017	(9N) I-65 at Hill, CSX RR & Burnett	:	
Purpose & Need:	Increase safety for all users. Maintain	the existing	transportation network in a state	of good repai	·.
FY 20-25 TIP Funding:	FY 2023 Design phase with BRO funds: \$1,830,400 (Federal) + \$457,600 (Other) = \$2,288,000 (Total) FY 2023 Construction phase with BRO funds: \$18,304,000 (Federal) + \$4,576,000 (Other) = \$22,880,000 (Total)				

7

TIP Action:	Add project					
MTP Action:	Add project					
Exempt/Non- Exempt:	Exempt	Model Impact:	No change to r	No change to model impact.		
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	NEW	State ID:	5-10066.00	
County	Jefferson	Parent ID:	N/A	Group ID:	N/A	
Project Name:	I-65 Bridge at East Kentucky Street Brook Street	t & South	Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed	\$31	1,647,000 1,647,000	
Funding Source:	Bridge Replacement – On System	n (BRO)	in TIP to Date: Open to Public Date:		2025	
Description:	Bridge project in Jefferson County or delivery project)	(056B0018	I 33N) I-65 at East Kentucky & South	I Brook Street	(Potential CMGC	
Purpose & Need:	Increase safety for all users. Maintain	the existing	transportation network in a state	of good repai	·.	
FY 20-25 TIP Funding:	FY 2023 Design phase with BRO fund \$2,301,600 (Federal) + \$575,400 (Oth FY 2023 Construction phase with BR \$23,016,000 (Federal) + \$5,574,000 (her) = \$2,87 O funds:	,			
TIP Action:	Add project					
MTP Action:	Add project					
Exempt/Non- Exempt:	Exempt	Model Impact:	No change to r	model impact.		
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	NEW	State ID:	5-10075.00	
County	Jefferson	Parent ID:	N/A	Group ID:	N/A	
Project Name:	I-264 Bridge at P&L Railwa	у	Total Estimated Cost in MTP (i.e. CK 2040): Total Cost Programmed	\$30),679,000	
			in TIP to Date:	\$30),679,000	
Funding Source:	Federal Bridge Program (FB	P)	Open to Public Date:	2025		
Description:	Bridge project in Jefferson County on	(056B0025	50N) I-264 at P&L Railway			
Purpose & Need:	Increase safety for all users. Maintain	the existing	transportation network in a state	of good repai	·.	
FY 20-25 TIP	FY 2023 Design phase with BRO fund \$2,231,200 (Federal) + \$557,800 (Otl		39,000 (Total)			
Funding:	FY 2023 Construction phase with FB \$22,312,000 (Federal) + \$5,578,000 (Federal)		27,890,000 (Total)			

^{*}This phase will only be shown in the TIP for illustrative purposes since it is outside of the first four years of the FY20-25 TIP.

8

TIP Action:	Add project				
MTP Action:	Add project				
Exempt/Non- Exempt:	Exempt	Model Impact:	No change to r	nodel impact.	
Project Sponsor:	Kentucky Transportation Cabinet (KYTC)	KIPDA ID:	NEW	State ID:	5-22098.00
County	Oldham	Parent ID:	N/A	Group ID:	N/A
Drainet Name	I-71		Total Estimated Cost in MTP (i.e. CK 2040):	\$18,700,000	
Project Name:			Total Cost Programmed in TIP to Date:	\$18,700,000	
Funding Source:	National Highway System Funds for Pavement Management (NHPM)		Open to Public Date:	2025	
Description:	Address condition of I-71 from milep	oint 14.49 t	o milepoint 22.3 (2022CCR)		
Purpose & Need:	Maintenance of the existing transpor	tation netwo	ork in a state of good repair.		
FY 20-25 TIP Funding:	FY 2023 Design phase with NHPM funds: \$1,360,000 (Federal) + \$340,000 (Other) = \$1,700,000 (Total) FY 2023 Construction phase with NHPM funds: \$13,600,000 (Federal) + \$3,400,000 (Other) = \$17,000,000 (Total)				



Connecting Kentuckiana (CK) 2040 Metropolitan Transportation Plan (MTP) Fiscal Year (FY) 2020 - 2025 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 9, 2022

KIPDA staff completes project review

December 15, 2022

Interagency Consultation Group (IAC) Coordination

December 16 - 22, 2022

Public comment period

December 23, 2022 - January 6, 2023

Comments sent to the Transportation Policy Committee (TPC)

January 9, 2023

Transportation Technical Coordinating Committee (TTCC) Recommendation

January 11, 2023

TPC Action

January 26, 2023

ADDITIONAL INFORMATION

The MTP & TIP amendment process is NOT an opportunity to request MPO dedicated funds.

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://kipda.formstack.com/forms/kipda_epif

AIR QUALITY CONFORMITY

The Louisville, KY-IN transportation planning study area consists of Clark and Floyd counties and 0.1 square miles of Harrison County in Indiana, and Bullitt, Jefferson, and Oldham counties and approximately 4 square miles of Shelby County in Kentucky. Much of this area coincides with the local ozone nonattainment area. In the past, a portion of the planning study area also coincided with a local 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 nonattainment 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.

KIPDA is amending *Connecting Kentuckiana 2040*, the metropolitan transportation plan (MTP) and the FY 2021 – FY 2025 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 2015 8-hour ozone standards.

CONFORMITY UNDER THE 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 base year, 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 the actions to reduce precursor emissions were to be incorporated into 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 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.

CONSULTATION FOR CONNECTING KENTUCKIANA 2040

The first step in determining conformity of *Connecting Kentuckiana 2040* was to consult with the interagency consultation (IAC) group concerning matters not explicitly determined by the conformity rule. Conformity under the 2015 8-hour ozone standard had not been previously determined. Nevertheless, 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. This was of importance because the portion of the analysis involving the use of the travel demand model had been done in 2021. The results of this analysis did not have to be updated because no changes to the travel model were needed to reflect any changes due to the projects in this amendment. Therefore, the results of the travel model analysis from 2021 could be used without their being changed.

Consultation for this amendment took two forms. At first, there was a discussion conducted using e-mails in which each e-mail was sent to all of the other members of the IAC. The items sent to the IAC in the original e-mail included the following:

(a) important dates in the schedule for the amendment;

December 9 -- Project applications due from sponsors

December 22 -- IAC consultation concludes

December 23 -- Public Review begins

January 9 -- Public Comments sent to Transportation Policy

January 11 -- Action by the Transportation Technical Coordinating
Committee

January 26 -- Action by the Transportation Policy Committee

January 27 -- Documentation sent to review agencies for the federal conformity determination.

(b) a draft list of projects—sent to the IAC with consultation notice—included in accompanying documentation.

The second portion of the consultation was a video conference held on December 20 to discuss issues relative to amendment 9 of the MTP and the conformity analysis for a future MTP update. The discussion specifically involving amendment 9 focused on the following issue:

(c) the type of analysis to be used in determining conformity — Since none of the projects in the amendment required that a new analysis using the travel demand model, the possibility of determining conformity based on the previous regional emissions analysis was suggested. However, because there were new SIP budgets now available, it was concluded that a new regional emissions analysis would be necessary. Because the project changes in Amendment 9 could not be reflected in the travel demand model, the new analysis would use the travel data (vehicle-miles-traveled and speeds) from an analysis conducted in 2021 and a newer version of the MOVES emissions model. The emissions resulting from this analysis would be compared to the new SIP budgets to determine conformity or not.

Other Issues affecting Amendment 9

(1) the proposed conformity test methodology/ies and analysis years—the set of analysis years and tests to be used are shown in table below.

2015 8-hour Ozone Standard			
Analysis Year Conformity Test(s)			
2025	Less than the 2019 SIP Base Year Emissions		
2030	Less than the 2019 SIP Base Year Emissions		
2035	Budget test using the 2035 MVEBs for the		
	2015 8-hour standard		
2040	Budget test using the 2035 MVEBs for the		
	2015 8-hour standard		

(2) the pollutant(s)/precursor(s) of concern and the motor vehicle emissions budget(s), if applicable—see table 2 at the end of the report.

- (3) information concerning the inputs for the travel demand model and the approved emissions model—the main issue involving these models was that the version of MOVES now being used was MOVES 3.0.4 which should not provide significantly different values than MOVES 3.0.3, which was used in developing the SIP budgets; and
- (4) a listing of any transportation control measures (TCMs) in SIPs, if applicable—there are none.

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 consultation zoom meeting of March 4, 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.

<u>Issues related to the KIPDA travel demand forecasting model</u>

During recent changes to the MTP, there was a change of note to the KIPDA travel demand forecasting model.

During 2017 and 2018, KIPDA staff have updated and calibrated the travel demand forecasting model. This activity involved updating the inputs to the model and developing new values for the parameters of the model. The resulting model was considered calibrated when the model outputs matched observed data (e.g., HPMS VMT), within reason, for the baseyear. This update established 2015 as the baseyear (the year on which calibration was based) for the model.

Conclusion: The IAC members have been informed that the KIPDA travel demand forecasting model has been updated and calibrated and that 2015 is now the baseyear for the model.

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 2017, and the data being used for the Kentucky counties is for 2018. These data represent the most recent information available for this issue.

Conclusion: Based on a consensus of the IAC members, vehicle registration data for 2017 for the Indiana counties and for 2018 for the Kentucky counties is now being used in developing emission estimates.

CONFORMITY OF CONNECTING KENTUCKIANA 2040

The MTP, *Connecting Kentuckiana 2040*, was examined to determine if it met the requirements of the conformity rule under the 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 2040* 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 2040* 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 the 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 the amendment of *Connecting Kentuckiana 2040*, a group of projects had been proposed for 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 being exempt, non-exempt, etc. 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 2040*." (Please see above.) Those projects in *Connecting Kentuckiana 2040* which were not changed were analyzed as they had been previously. The projects which were newly added to the MTP or had been changed in *Connecting Kentuckiana 2040* were analyzed as indicated on the list provided to IAC. For amendment 9, all the projects were exempt except one. The non-exempt project was already in the MTP, and the only change to it was monetary meaning it did not change the results of the travel model analysis. Therefore, in the sections below which reference the calculation of travel-related information, the data provided relates to the analysis performed in 2021.

In the past, there were several projects which could not be analyzed using the travel model. In the past, most of these projects had been evaluated using spreadsheet methods factors. 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.

Also, there was one project affecting Bullitt County that could not be included in the travel model. Unlike the projects described in the paragraph above, this project could have the potential to increase emissions. Therefore, a special effort was made to include its impacts in the analysis of travel behavior impacts and, consequently, in the regional emissions analysis. This project is the relocated (southern) section of US 31E. This project, which had been discussed during consultation in the past, involves 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 were developed using a spreadsheet approach. The VMT estimates were the product of the estimated traffic volumes for each of the analysis years and the length of the relocated section in Bullitt County. The VMT estimates for this project were then added to other Bullitt County VMT estimates of the same functional class. Consequently, the VMT estimates from this project were included with the other Bullitt County VMT, and the emissions in Bullitt County associated with this project were included in the overall emission estimates for Bullitt County.

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 consists of Clark and Floyd counties, and 0.1 square miles in Harrison County 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 recently. This update established 2015 as the new base year for the model. The model update utilized the information incorporated into the travel model during previous updates. In particular, information from the 2000 KIPDA Household Travel Survey had been previously incorporated. Information from 2010 Census, the 2012-2016 American Community Survey, the 1990 and 1995 National Personal Transportation Surveys, and the 2001 and 2009 National Household Travel Surveys was incorporated to update the previous source data, particularly the 2000 KIPDA Household Travel Survey. During the update, the model parameters were adjusted such that the model output matched—within reason—three 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; (2) the distribution of trip lengths

(duration in time) for each of the main trip purposes used in the model; and (3) 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 2015. 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. 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 and utilizes different trip rates for each. 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.

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. The friction factors used in the gravity model were developed as part of the calibration effort performed during the model update. In addition, information from a study which investigated the behavior of travelers crossing the Ohio River and traffic count information from years near 2015 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.

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 2040* utilizes transit information from the previous travel demand model. 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 2040* 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 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 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 MTP update, the time penalties used in the KIPDA travel model were likewise changed to reflect the effect of the new toll structure.

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 2015. 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 2015 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 2015 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).

The HERS equations were used to estimate speeds on 6239 sections for five functional classifications of urban roadways and 2278 sections 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.

There were not many HPMS minor collector and local roadway sections with data that allowed for the calculation of adjustment factors. Since the model contained the minor collector roadways in the area and these roadways were similar to the major collector roadways in the area, the adjustment factor for the rural major collectors

was used for the rural minor collector roadways, and the adjustment factor for the urban major collectors was used for the urban minor collector roadways.

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 provided adjusted travel model output data in the form of vehicle-miles-traveled (VMT), VMT by speed bin, and VMT fractions by speed bin by county and by MOBILE 6 facility type to the staff of the Louisville Metro Air Pollution Control District (LMAPCD). LMAPCD 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). They then provided these estimates to KIPDA staff. This analysis is explained below in further detail in the section below.

MOVES Emissions Model

As previously mentioned, the Louisville region is a nonattainment 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 3.0.3 and 3.0.4 emissions models. The staff of the Louisville Metro Air Pollution Control District (LMAPCD) produced the emissions for all of the counties in the nonattainment 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 that were used in developing the ozone budget update (for VOCs and NOx) in 2003 with a few exceptions where newer data was incorporated. The changes which affected the VOC and NOx emissions included:

- (1) improved consistency and completeness of gasoline data provided with the new MOVES model,
- the incorporation of newer vehicle registration data (for 2017) for Clark and Floyd counties (provided by INDOT),
- (3) the development and use of newer vehicle registration data (for 2018) for Jefferson County (KY), 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 LMAPCD. Most of the inputs to the MOVES model were defaults and/or data used that was consistent with previous SIPs. 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 or had only been designated under the 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 was modeled the same as for Jefferson County.

The assumptions used for Bullitt and Oldham counties were consistent with those for the 2003 ozone budget update with the following exceptions:

- (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) new 2018 vehicle registration data for Bullitt and Oldham counties, and
- (4) improvements in internal model calculations to account for emission controls, driving profiles and engine characteristics.

LMAPCD developed emission estimates of VOCs and NOx using the MOVES model. To review, the following steps were undertaken.

- (1) LMAPCD staff received (from KIPDA staff) the adjusted travel model output in the form of VMT, VMT by speed bin, and VMT fractions by speed bin, all by county and by MOBILE facility type by analysis year.
- (2) LMAPCD reformatted the data from KIPDA to prepare it as input to the MOVES model. Other necessary data was also prepared.
- (3) The MOVES model was run in inventory mode to determine emission estimates of each precursor for each county for each analysis year.
- (4) LMAPCD staff provided the emission estimates to KIPDA staff.

RESULTS OF THE ANALYSIS

The transportation plan, Connecting Kentuckiana 2040, 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 and 2. 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 and 2040, the summer weekday VOC and NOx emission levels for the 2015 8-hour nonattainment area are less than the emission

budgets established in the 2015 8-hour ozone redesignation SIP.

Conclusions - 8-hour Ozone

The regional emissions analysis of *Connecting Kentuckiana 2040* 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 Table 2 indicates that Connecting Kentuckiana 2040 has met the requirements of conformity under the 2015 8-hour ozone standards. In summary, it can be concluded that Connecting Kentuckiana 2040 conforms to the SIPs and meets the requirements of the federal conformity rule.

TABLE 1

SUMMER	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	7894	27297	35191		
2030	8425	28719	37144		
2035	8953	30053	39006		
2040	9440	31183	40623		

TABLE 2

	SUMMER WEEKDAY EMISSIONS FOR THE 8-HOUR NONATTAINMENT AREA (kg/day)					
	EMISSION LEVELS FOR VARIOUS YEARS					
YEAR	Area	VOCs	NOx	PASS		
2025		7110	18828	YES		
2030	Regional	5034	14658	YES		
2035		4416	13669	YES		
2040		4239	13904	YES		

NOTE: The criteria for conformity are as follows:

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

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

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

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



Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020-2025 Transportation Improvement Program Amendment 9 Interagency Consultation Group Conference Call Meeting Minutes December 20, 2022 11:00 AM EST

Participants:

EPA – Sarah LaRocca & Anthony Maietta

FHWA - Erica Tait

FTA – Aviance Webb

INDOT – Jay Mitchell

KYDAQ – Lauren Hedge, Anna Bowman, & Kevin Davis

LMAPCD – Michelle King, Byron Gary, & Craig Butler

TARC - Burcum Keeton

KIPDA – Andy Rush, Alex Posorske, Chris Nicolas, Jeremeih Shaw, Randy Simon, & Spencer Williams

Welcome/Roll Call:

A total of 18 participants, representing eight local, state, regional, and federal agencies participated in the IAC video conference for KIPDA's *Connecting Kentuckiana 2050* Metropolitan Transportation Plan Update and Amendment 9 of KIPDA's *Connecting Kentuckiana 2040* Metropolitan Transportation Plan and the FY 2020-2025 Transportation Improvement Program. The meeting began shortly after 11:00 AM EST on December 20, 2022.

Note: It should be noted that the video conference was for both the 2050 MTP update and Amendment 9 of the 2040 MTP and the FY 2020-2025 TIP. Only those points specifically applicable for Amendment 9 are included in these minutes.

Schedule Discussion:

KIPDA staff discussed key dates (shown below) of the anticipated schedule for the amendment. It was mentioned that there will be multiple activities (including the travel demand modeling and MOVES modeling) as part of the conformity analysis. Also, there will be a public meeting (in-person or video conference) during the public review period.

Key Dates for the schedule for Amendment 9

Project applications due -- December 9

KIPDA staff completes project review -- December 15

IAC video conference -- December 20

Air Quality conformity analysis completed -- December 19

Public Comment period -- December 22 – January 6

Comments sent to the Transportation Policy Committee -- January 9

Transportation Technical Coordinating Committee recommendation -- January 11

Transportation Policy Committee action -- January 26

Federal review starts -- January 27

Conformity Analysis Discussion:

Prior to the video conference, KIPDA Staff sent documentation of the nine (9) projects that are included in Amendment 9. Only one of the projects was discussed. That project was KIPDA ID 2899. The project involved adding travel lanes to I-64 in Floyd County. It was the only project in Amendment 9 that was a not an exempt project. It had been previously included in the MTP, and the only changes to the project were monetary. Therefore, the change included in Amendment 9 would not result in any change to the results in the travel-related data (vehicle-miles-traveled and speeds) from the travel model portion of the regional emissions analysis. Nevertheless, the project was not an exempt project; there were new SIP budgets available; and those budgets had not been used in a previous conformity determination. Therefore, it was determined that Amendment 9 must undergo a new regional emissions analysis to be found to conform to the new SIP.

Other information provided during the video conference:

Emissions Modeling: The emissions model being used for Amendment 9 is MOVES 3.0.3 is being used for the 2019, 2025, 2030, and 2035 analysis years. The emission estimates for these years were developed earlier this year during the development of the new ozone SIP. MOVES 3.0.4 is being used for the 2040 analysis year. The emission estimates for that year were developed recently.

Other Information relevant to Amendment 9 previously provided to the IAC:

The analysis years and conformity tests for Amendment 9 will be:

2015 8-hour Ozone Standard				
Analysis Year	Conformity Test(s)			
2025	Less than the 2019 SIP Base Year Emissions			
2030	Less than the 2019 SIP Base Year Emissions			
2035	Budget test using the 2035 MVEBs for the 2015 8-hour standard			
2040	Budget test using the 2035 MVEBs for the 2015 8-hour standard			

Other Discussion:

KIPDA staff offered the opportunity for any other business or questions to be brought before the IAC.

There was no other business discussed. The conference call adjourned at approximately 11:50 AM EST.



Amendment 10

Connecting Kentuckiana 2040

Metropolitan Transportation Plan &

Fiscal Year 2020 - 2025 Transportation

Improvement Program (TIP)

TPC Approval Scheduled for February 23, 2023

A Resolution of the

Kentuckiana Regional Planning and Development Agency Transportation Policy Committee adopting Amendment #10 of the FY 2020 - FY 2025 Transportation Improvement Program

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 and a portion of Harrison County in 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, Title VI: Environmental Justice 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, the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is a subset of Connecting Kentuckiana 2040, 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 FY2020 -FY 2025 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 2021 - 2024 Statewide Transportation Improvement Program (STIP), and the Indiana FY 2022 - 2026 STIP, respectively, and will become part of the end of fiscal year fiscal constraint recalculations; and,

Now, therefore be it resolved, by the Transportation Policy Committee of KIPDA that this amendment of the FY 2020 - FY 2025 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area is adopted by official action at the February 23, 2023, 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 2040* complies with all of 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 2040, 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 #10 of the Connecting Kentuckiana 2040 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 this amendment of the Connecting Kentuckiana 2040 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 23th day of February 2023.

Mayof J. Byron Chapman,

Transportation Policy Committee

Andy Rush,

KIPDA Transportation Division Director



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



Connecting Kentuckiana 2040 Metropolitan Transportation Plan and FY 2020-2025 Transportation Improvement Program

The Kentuckiana Regional Planning and Development Agency (KIPDA) is the Metropolitan Planning Organization (MPO) for the five-county region covering Jefferson, Bullitt and Oldham Counties in Kentucky and Clark and Floyd Counties in Indiana. The MPO's responsibilities include producing a long-range transportation document, known as *Connecting Kentuckiana 2040* Metropolitan Transportation Plan (MTP) and a short-range planning document, the Fiscal Year (FY) 2020-2025 Transportation Improvement Program (TIP)

Changes have been proposed to the MTP and TIP. The MTP, with the proposed changes, is fiscally reasonable and the TIP remains fiscally constrained. All proposed changes and projects were determined to be and confirmed by the IAC to be exempt-only for air quality. This packet includes the following document:

- The project being modified
- Schedule for Amendment 10

Providing comments for the proposed changes can be submitted by any of the following methods:

- Visiting https://kipdatransportation.org/amendment-10/ and click on the Amendment 10 Map link
- Emailing <u>kipda.trans@kipda.org</u>
- Mail to the following address

TIP and MTP Amendment, KIPDA 11520 Commonwealth Drive, Louisville, KY 40299

Attend the virtual open house on February 2nd from 5:00-6:00 pm via Zoom. Members
of the public are encouraged to ask questions and leave comments. A link to the virtual
public meeting can be found at: https://kipdatransportation.org/amendment-10/

Please contact Community and Committee Engagement Specialist Greg Burress at 502-562-6144 ext. 123 or via email at greg.burress@kipda.org for additional questions or information.

Phone: 502.266.6084

Fax: 502.266.5074

TDD: 800.648.6056





Connecting Kentuckiana (CK) 2040 Metropolitan Transportation Plan (MTP) Fiscal Year (FY) 2020 - 2025 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 January 13, 2023 KIPDA staff completes project review January 17, 2023 Interagency Consultation Group (IAC) Coordination January 17 - 24, 2023 January 25 - February 8, Public comment period 2023 Transportation Technical Coordinating Committee (TTCC) February 8, 2023 Recommendation February 9, 2023 Comments sent to the Transportation Policy Committee (TPC) February 23, 2023 **TPC Action**

ADDITIONAL INFORMATION

The MTP & TIP amendment process is NOT an opportunity to request MPO dedicated funds.

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://kipda.formstack.com/forms/kipda_epif

TIP Action:	Add project					
MTP Action:	Change Project Sponsor, Revise Project Name, Add State ID and Update Open to Public Date					
Exempt/Non- Exempt:	Exempt Model Impact:		Can be modeled			
Project Sponsor:	TARC Louisville Metro	KIPDA ID:	2751	State ID:	5-80214.00	
County	Jefferson	Parent ID:	N/A	Group ID:	N/A	
Project Name:	Broadway All the Way Complete Street		Total Estimated Cost in MTP (i.e. CK 2040):	\$140,000,000		
			Total Cost Programmed in TIP to Date:	\$6,250,000		
Funding Source:	Rebuilding American Infrastructure with Sustainability and Equity (RAISE)		Open to Public Date:	2031 2035		
Description:	A complete street retrofit of Broadway from Shawnee Park to Baxter Avenue to include fixed guide-way BRT, two-way cycle track and pedestrian safety improvements. The project scope should include the following: - Improved roadway design to increase transit speed, reliability and efficiency - Enhanced transit stations and rider amenities to improve the transit user experience - Enhanced bicycle and pedestrian access to frequent high capacity transit services - Operational plan including extension of BRT line southeast on Bardstown Road (non-fixed guideway).					
Purpose & Need:	urpose & Need: Improve connectivity for all modes; improve safety; promote social equity; and enhance neighborhoods.					
FY 20-25 TIP FY 2023 Design phase with RAISE funds: \$5,000,000 (Federal) + \$1,250,000 (Other) = \$6,250,000 (Total)						