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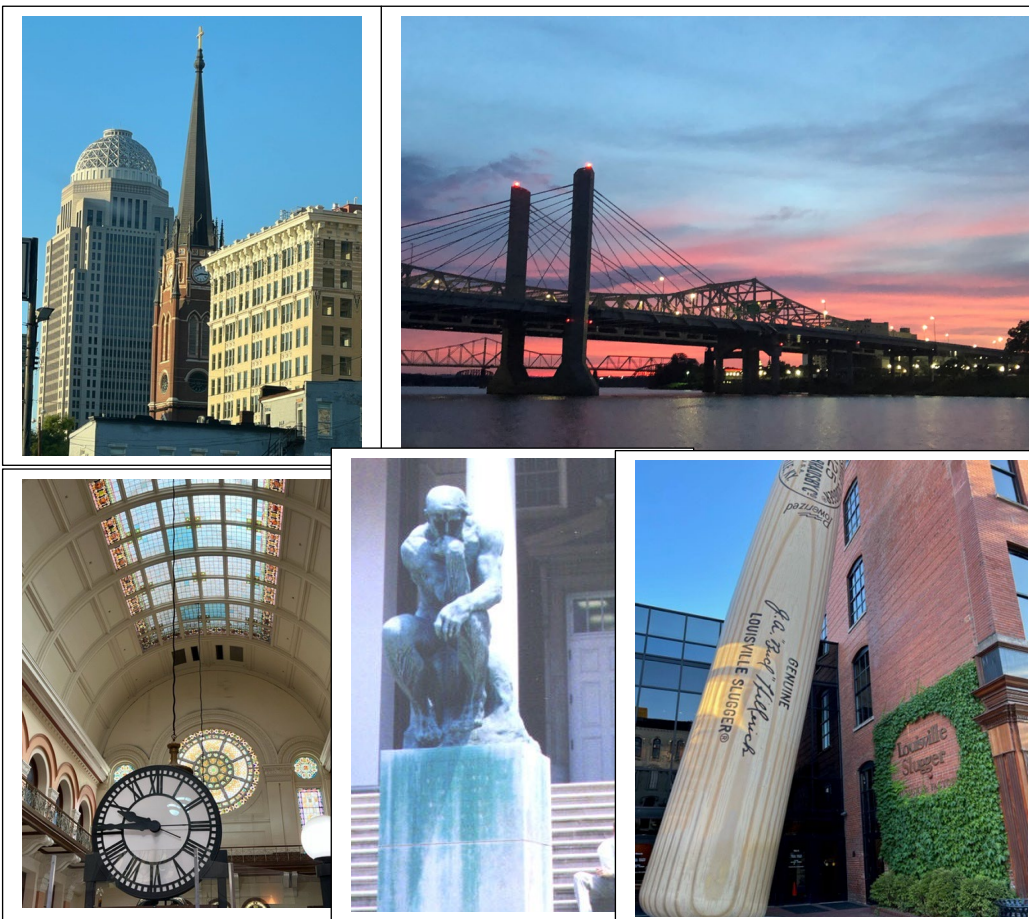
Federal Highway
Administration

Federal Transit
Administration

Transportation Management Area Planning Certification Review

Louisville

Transportation Management Area



Photos taken by Bernadette Dupont, FHWA-KY

September 2022

Summary Report





Table of Contents

1.0	EXECUTIVE SUMMARY	2
1.1	Previous Findings and Disposition.....	2
1.2	Summary of Current Findings	3
2.0	INTRODUCTION	6
2.1	Background.....	6
2.2	Purpose and Objective	7
3.0	SCOPE AND METHODOLOGY	7
3.1	Review Process	7
3.2	Documents Reviewed.....	8
4.0	PROGRAM REVIEW	9
4.1	Metropolitan Agreements (Planning and Conformity)	9
4.2	Unified Planning Work Program (UPWP)	11
4.3	Metropolitan Transportation Plan (MTP)	102
4.4	Transit Planning.....	12
4.5	Transportation Improvement Program (TIP) and Listing of Obligated Projects	126
4.6	Public Participation (PP)	16
4.7	Freight Planning	20
4.8	Intelligent Transportation Systems (ITS) Architecture.....	21
4.9	Transportation Security/Resilience/Climate Change	22
4.10	Congestion Management Process (CMP).....	24
4.11	Transportation Performance Management (TMP)	20



4.12	Financial Planning	27
5.0	CONCLUSION AND RECOMMENDATIONS.....	28
5.1	Commendations	29
5.2	Corrective Actions	30
5.3	Recommendations	30
	APPENDIX A - PARTICIPANTS	31
	APPENDIX B - STATUS OF FINDINGS FROM LAST REVIEW	32
	APPENDIX C – PUBLIC COMMENTS.....	33
	APPENDIX D - LIST OF ACRONYMS.....	38

1.0 EXECUTIVE SUMMARY

On June 22 and 23, 2022 the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) conducted the certification review of the transportation planning process for the Louisville urbanized area. FHWA and FTA are required to jointly review and evaluate the transportation planning process for each urbanized area over 200,000 in population at least every four years to determine if the process meets the Federal planning requirements.

1.1 Previous Findings and Disposition

Certification Reviews have been conducted in the Louisville TMA since the 1990s. Originally, certification reviews were required every three years. Now they occur every four years. The most recent reviews were conducted in 2003, 2006, 2010, 2014, and 2018. The 2018 Certification Review findings and their disposition are provided in Appendix B and summarized as follows.



Finding	Action	Corrective Action/Recommendations	Disposition
Environmental Mitigation within the MTP	Recommendation	The MPO needs to include environmental mitigation in the MTP update for 2019 Connection Kentuckiana. The information needs to meet what is outline in the environmental requirement, particularly describing potential environmental mitigation activities, as well as potential areas to carry them out. The "Red Flags" component of the On-line Project Application tool, as described is a valuable information resource that has been used to information project development. however, us e of this tool during preparation of the next MTP update, during what could be termed "preproject development", could provide a ready means of identifying and addressing potential environmental mitigation issues and during the planning process.	Environmental information added to the MTP.
Public Outreach within the Public Participation Plan	Recommendation	It is recommend that KIPDA's Community Assessment & Outreach Program be updated as soon as possible to reflect current demographic data for use in preparation of the next long-range plan.	Community Assessment & Outreach program updated to reflect current demographic data
Air Quality and Transportation Conformity	Recommendation	It is recommended that the MPO's Conformity MOA be updated as it is ten years old.	Was not updated

1.2 Summary of Current Findings

The current review found that the metropolitan transportation planning process conducted in the Louisville urbanized area MEETS the Federal planning requirements.

As a result of this review, FHWA and FTA are certifying the transportation planning process conducted by the Kentucky Transportation Cabinet (KYTC) and the Indiana Department of Transportation (INDOT), the Louisville Metropolitan Planning Organization (KIPDA MPO) and Transit Authority of River City (TARC) subject to addressing the two corrective actions. There are also ten recommendations in this report that warrant close attention and follow-up, as well as five areas that are to be commended.

Details of the certification findings for each of the following items are contained in this report.



Review Area	Finding	Category	Action	Resolution Date
MPO Structures and Agreements	The Planning MOA is from 2015 and is outdated.	Corrective Action	Update Planning MOA. 23 CFR 450.208	12/31/22
	Current documents include language that can be generalized to make updates easier.	Recommendation	Work with KYTC and INDOT to streamline agreement format to ensure future changes are easier to process.	NA
	The MPO is commended for their Interagency Consultation (IAC) process for Transportation Conformity. Their process has always been exemplary and it continues to improve.	Commendation		NA
UPWP	FHWA/FTA Planning Emphasis Area (PEAS) are listed in the UPWP, but activities to implement them are not addressed.	Recommendation	Expand discussion of the PEAs in the FY 2024 UPWP to demonstrate how they will be integrated into MPO planning activities.	NA
MTP	The MPO staff is commended on the development of the Project Management Guidebook as a resource for the agency's planning partners. It promotes consistency in the project development and selection process. While the Guidebook is used mostly with the TIP, it ensures programmed projects align with the regional goals set forth in the MTP. The Guidebook was just updated to reflect the existence of the KIPDA Complete Streets Policy and the Carbon Reduction Program.	Commendation	NA	NA
	The Environmental Justice Analysis consists of GIS identification of project locations overlaid with census data on socioeconomic and minority populations.	Recommendation	Develop methods to identify and analyze project effects for those EJ populations.	NA
	INDOT has not provided Operations and Maintenance (O & M) budget information to the MPO on a consistent basis.	Recommendation	INDOT provide to the MPO, in a timely manner, the Operations and Maintenance budget information to include in the MTP.	NA
	The coordination efforts in the development of the MTP did not include environmental mitigation.	Recommendation	Expand coordination activities to include environmental mitigation at the project planning and developmental stages.	NA
Transit Planning	TARC is commended on the success of the Dixie Highway Bus Rapid Transit (BRT) project. The Dixie Highway BRT was launched in January 2020, and was the first of its kind in the region. The goal was to reduce travel times, improve transit reliability, expand access to the central business district, and to enhance regional connectivity with other TARC routes.	Commendation	NA	NA
TIP and ALOP	The TIP does not include total project cost for each project or phase.	Corrective Action	The TIP shall include, for each project or phase estimated total project cost, which may extend beyond the 4 years of the TIP. 23 CFR § 450.326 (g)(2)	Future TIP and every TIP amendment before update.
	It is difficult to compare projects in the TIP with those listed in the Annual Listing of Obligate Projects (ALOP).	Recommendation	It is recommended that the MPO staff review the format of the ALOP so that it is easier for the public to identify and compare the projects that have been programmed with the projects that have been funded/obligated.	



Participation Plan	The MPO is commended on its efforts to make the MPO website more ADA compliant. Assistive technology, Text-To-Speech (TTS), was used and it allows text on the website to be read aloud, so that the visually impaired and those with limited English proficiency can more fully engage in the planning process.	Commendation	NA	NA
	It is recommended that the name of the document be changed to "Participation Plan", as 23 CFR 450.316 calls for outreach to multiple agencies not just the general public.	Recommendation	NA	NA
ITS Architecture	ITS Architecture is using an outdated version of the software.	Recommendation	Update the ITS Architecture using the latest version of the national ITS framework Architecture Reference for Cooperative and Intelligent Transportation (ARC-IT) available and the Regional Architecture Development for Intelligent Transportation (RAD-IT) is a software application (formally Turbo Architecture). The FHWA ITS Architecture Implementation website provides a link to the latest ARC-IT which includes all the information and tools needed.	NA
	The ITS architecture is five years old.	Recommendation	Review the ITS architecture least once every five years to ensure that recent initiatives (for example, electric vehicle infrastructure, TSMO, etc.) are included.	NA
Security / Resilience Planning	Transportation is considered critical infrastructure and plans should be in place to provide alternatives should there be a disruption in one of the components.	Recommendation	More fully define the MPO's role in resiliency and security planning.	NA
TPM	The KIPDA MPO was the only Kentucky MPO to set its own Safety target. The MPO worked with KYTC and INDOT to develop an acceptable methodology for setting the Safety Target. The MPO staff has made multiple safety presentations to the TTCC, TPC, and subcommittees, and incorporated crash data as a project ranking criterion, in order to emphasize the importance of safety in the planning process.	Commendation	NA	NA



2.0 INTRODUCTION

2.1 Background

Pursuant to 23 U.S.C. 134(k) and 49 U.S.C. 5303(k), the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) must jointly certify the metropolitan transportation planning process in Transportation Management Areas (TMAs) at least every four years. A TMA is an urbanized area, as defined by the U.S. Census Bureau, with a population of over 200,000. After the 2010 Census, the Secretary of Transportation designated 183 TMAs – 179 urbanized areas over 200,000 in population plus four urbanized areas that received special designation. In general, the reviews consist of three primary activities: a site visit, a review of planning products (in advance of and during the site visit), and preparation of a Certification Review Report that summarizes the review and offers findings. The reviews focus on compliance with Federal regulations, challenges, successes, and experiences of the cooperative relationship between the MPO(s), the State DOT(s), and public transportation operator(s) in the conduct of the metropolitan transportation planning process. Joint FTA/FHWA Certification Review guidelines provide agency field reviewers with latitude and flexibility to tailor the review to reflect regional issues and needs. As a consequence, the scope and depth of the Certification Review reports will vary significantly.

The Certification Review process is only one of several methods used to assess the quality of a regional metropolitan transportation planning process, compliance with applicable statutes and regulations, and the level and type of technical assistance needed to enhance the effectiveness of the planning process. Other activities provide opportunities for this type of review and comment, including Unified Planning Work Program (UPWP) approval, the Metropolitan Transportation Plan (MTP), metropolitan and statewide Transportation Improvement Program (TIP) findings, air-quality (AQ) conformity determinations (in nonattainment and maintenance areas), as well as a range of other formal and less formal contact provide both FHWA/FTA an opportunity to comment on the planning process. The results of these other processes are considered in the Certification Review process.

While the Certification Review report itself may not fully document those many intermediate and ongoing checkpoints, the “findings” of Certification Review are, in fact, based upon the cumulative findings of the entire review effort.

The review process is individually tailored to focus on topics of significance in each metropolitan planning area. Federal reviewers prepare Certification Reports to document the results of the review process. The reports and final actions are the joint responsibility of the appropriate FHWA and FTA field offices, and their content will vary to reflect the planning process reviewed, whether or not they relate explicitly to formal “findings” of the review.

To encourage public understanding and input, FHWA/FTA will continue to improve the clarity of the Certification Review reports.



2.2 Purpose and Objective

Since the enactment of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the FHWA and FTA, are required to jointly review and evaluate the transportation planning process in all urbanized areas over 200,000 population to determine if the process meets the Federal planning requirements in 23 U.S.C. 134, 40 U.S.C. 5303, and 23 CFR 450. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), extended the minimum allowable frequency of certification reviews to at least every four years.

The Kentuckiana Regional Planning and Development Agency (KIPDA) is the designated MPO for the Louisville urbanized area. The Kentucky Transportation Cabinet (KYTC) and the Indiana Department of Transportation (INDOT) are the responsible State agencies, and the Transit Authority of River City (TARC) is the responsible public transportation operator. Current membership of the KIPDA MPO consists of elected officials and citizens from the political jurisdictions in Bullitt, Jefferson, Oldham, and a portion of Shelby County in Kentucky, and Clark, Floyd, and a portion of Harrison County in Indiana. The City of Louisville as the largest population center.

Certification of the planning process is a prerequisite to the approval of Federal funding for transportation projects in such areas. The certification review is also an opportunity to provide assistance on new programs and to enhance the ability of the metropolitan transportation planning process to provide decision makers with the knowledge they need to make well-informed capital and operating investment decisions.

3.0 SCOPE AND METHODOLOGY

3.1 Review Process

The initial certification review was conducted in 2003. Subsequent certification reviews were conducted in 2006, 2010, 2014, and 2018. A summary of the status of findings from the last review is provided in Appendix B. This report details the sixth review, which consisted of a formal site visit and two public involvement opportunities, conducted in June 2022.

Participants in the review included representatives of KYTC, INDOT, TARC and KIPDA MPO staff. A full list of participants is included in Appendix A.

A desk audit of current documents and correspondence was completed prior to the site visit. In addition to the formal review, routine oversight mechanisms provide a major source of information upon which to base the certification findings.

The certification review covers the transportation planning process conducted cooperatively by the MPO, State, and public transportation operators. Background information, current status,



key findings, and recommendations are summarized in the body of the report for the following subject areas selected by FHWA and FTA staff for on-site review:

- MPO Structure and Agreements
- Unified Planning Work Program (UPWP)
- Metropolitan Transportation Plan (MTP)
- Transit Planning
- Transportation Improvement Program (TIP) and the associated List of Obligated Projects
- Public Participation
- Financial Planning
- Transportation Performance Management
- ITS Architecture
- Transportation Security Planning & Resiliency
- Congestion Management Process

3.2 Documents Reviewed

The following MPO documents were evaluated as part of this planning process review:

- 2015 KIPDA-INDOT-KYTC-TARC Memorandum of Agreement (MOA)
- 2008 Louisville Area Conformity MOA
- 2022 Unified Planning Work Program
- 2020 - 2040 MTP, Connecting Kentuckiana
- 2020-2025 TIP and Self-Certification
- 2022 Public Participation Plan
 - Title VI/LEP Plan
- 2017 KIPDA Regional ITS Architecture
- 2018 Congestion Management Process (CMP)
- 2020 Coordinated Public Transit – Human Services Transportation Plan (CPT-HSTP)



4.0 PROGRAM REVIEW

4.1 MPO Agreements (Planning and Conformity)

4.1.1 Regulatory Basis

Planning Agreement: 23 U.S.C. 134(d) and 23 CFR 450.314(a) state the MPO, the State, and the public transportation operator shall cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process. These responsibilities shall be clearly identified in written agreements among the MPO, the State, and the public transportation operator serving the MPA.

Further, 23 CFR 450.314(h) states that the MPO, the State, and the public transportation operator shall jointly develop specific written provisions for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, the reporting of performance targets, the reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO, and the collection of data for the State asset management plans for the National Highway System.

Conformity Agreement: 23 CFR 450.314(c), (d), and (e) all require conformity agreements involving the MPO under different circumstances. The correct citation depends on the circumstance in each area.

4.1.2 Current Status

The Kentuckiana Regional Planning & Development Agency (KIPDA) functions not only as the metropolitan planning organization for the Louisville/Jefferson County KY-IN urbanized area, but also as an area development district that serves a multi-state/multi-county area with over 15 municipalities. KIPDA provides regional planning, review and technical services in the areas of public administration, social services, and community ridesharing programs.

According to the most recent planning agreement (2015), the MPO structure consists of the Transportation Policy Committee (TPC) and the Transportation Technical Coordinating Committee (TTTC). The TPC serves as the decision-making body of the MPO, and has responsibilities including approval of plans, implementation of programs, provision of transportation planning and guidance, and other similar related actions. The TTCC serves as an advisory body to the TPC and provides transportation related technical review and assistance.



KIPDA also utilizes various advisory committees, subcommittees, and working groups to carry out the transportation planning process and to engage stakeholders.

The TPC and TTTC hold meetings monthly, which are open to the public. Meeting minutes and other details are available on the MPO website.

The most recent planning memorandum of agreement by and between the KIPDA, Indiana Department of Transportation (INDOT), Kentucky Transportation Cabinet (KYTC) and Transit Authority of River City (TARC) is available on the MPO website. The agreement outlines the mutual responsibilities of each agency in carrying out the metropolitan transportation planning process in accordance with 23 CFR 450.314(a), and the specific written provisions for cooperatively developing and sharing information related to transportation performance data, as well as the selection and reporting of performance targets in accordance with 23 CFR 450.314(h). However, the agreement on KIPDA's website is outdated with reference to MAP-21 rather than the FAST Act or the most recent legislation, the Infrastructure Investment and Jobs Act (IIJA).

The most recent air quality consultation memorandum of understanding, dated 2008, outlines the interagency consultation process among the KIPDA, INDOT, KYTC, IDEM, and Louisville Metro Air Pollution Control District, TARC and EPA in accordance with 23 CFR 450.314 (c) and (d). An update to the Kentucky, as well as Indiana, consultation procedures is currently underway.

4.1.3 Findings

The Planning agreements and the Conformity Agreements are not current, and do not reflect recent regulatory requirements.

Corrective Action:

KIPDA shall coordinate with TARC, INDOT and KYTC to update the Planning Agreement to include the most recent regulation and regulatory requirements.

Recommendation:

It is recommended that the MPO coordinate with KYTC/INDOT to develop strategies and/or methods to streamline future updates to agreement(s).

Commendation:

The MPO is commended for their Interagency Consultation (IAC) process for Transportation Conformity. Their process has always been exemplary and it continues to improve.



4.2 Unified Planning Work Program (UPWP)

4.2.1 Regulatory Basis

23 CFR 450.308 and 420 set the requirement that planning activities performed under Titles 23 and 49 U.S.C. be documented in a Unified Planning Work Program (UPWP). The MPO, in cooperation with the State and public transportation operator, shall develop a UPWP that includes a discussion of the planning priorities facing the MPA and the work proposed for the next one- or two-year period by major activity and task in sufficient detail to indicate the agency that will perform the work, the schedule for completing the work, the resulting products, the proposed funding, and sources of funds.

4.2.2 Current Status

The KIPDA MPO adopted their Unified Planning Work Program (UPWP) in April 2022. The UPWP is used to describe the urban transportation planning activities that will be programmed, scheduled, and managed by or through the Louisville/Jefferson County, KY-IN Metropolitan Planning Organization in cooperation with the Kentuckiana Regional Planning and Development Agency (KIPDA).

The MPO's FY 2022 UPWP covers transportation planning activities for one fiscal year (FY) and contains sufficient description of the costs and activities the MPO staff plans to complete. The KIPDA MPO staff work directly with Transit Authority of River City (TARC) and other stakeholders in developing the work elements and budget for transit tasks in the UPWP. Many MPO initiatives relating to regional mobility involve coordination with TARC, who is represented on the Transportation Policy Committee (TPC). A Memorandum of Agreement (MOA) is in place between KYTC, INDOT, TARC, and the KIPDA MPO.

The federal funds and expenditures for the MPO are monitored monthly to develop the quarterly progress reports and reimbursement requests. All funds are also summarized in the UPWP task and overall budgets. Each work element is detailed by source and agency. The format of the UPWP is acceptable and the description of the work to be undertaken is thorough. The entire document may be found at: [Louisville-MPO-FY-23-UPWP-Final-COMPILED-2.pdf \(kipda.org\)](https://kipda.org/Louisville-MPO-FY-23-UPWP-Final-COMPILED-2.pdf)

4.2.3 Findings

The UPWP is in compliance with the regulatory requirements.

Recommendation:

Expand discussions of the PEAs in the next FY2024 UPWP to demonstrate how the PEAs will be integrated into MPO planning activities.



4.3 Metropolitan Transportation Plan (MTP)

4.3.1 Regulatory Basis

23 U.S.C. 134(c), (h) & (i) and 23 CFR 450.324 set forth requirements for the development and content of the Metropolitan Transportation Plan (MTP). Among the requirements are that the MTP address at least a 20-year planning horizon and that it include both long- and short-range strategies that lead to the development of an integrated and multi-modal system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

The MTP is required to provide a continuing, cooperative, and comprehensive multimodal transportation planning process. The plan needs to consider all applicable issues related to the transportation systems development, land use, employment, economic development, natural environment, and housing and community development.

23 CFR 450.324(c) requires the MPO to review and update the MTP at least every four years in air quality nonattainment and maintenance areas and at least every 5 years in attainment areas to reflect current and forecasted transportation, population, land use, employment, congestion, and economic conditions and trends.

Under 23 CFR 450.324(f), the MTP is required, at a minimum, to consider the following:

- Projected transportation demand
- Existing and proposed transportation facilities
- Operational and management strategies
- Congestion management process
- Capital investment and strategies to preserve transportation infrastructure and provide for multimodal capacity
- Design concept and design scope descriptions of proposed transportation facilities
- Potential environmental mitigation activities
- Pedestrian walkway and bicycle transportation facilities
- Transportation and transit enhancements
- A financial plan

4.3.2 Current Status

Since the last review, the KIPDA developed an updated Metropolitan Transportation Plan (MTP) entitled Connecting Kentuckiana 2040. It was approved by the KIPDA Transportation Policy Committee on February 27, 2020 and found to conform for air quality to the 2015 8-hour Ozone Standard and the 1997 Ozone Standard on March 3, 2020. Interagency consultation is conducted via Interagency Consultation and in accordance with the MPO's Planning Agreement.



The KIPDA considered and successfully implemented the following in the plan development process:

- Projected transportation demand
- Existing and proposed transportation facilities
- Operational and management strategies
- Congestion management process
- Capital investment and strategies to preserve transportation infrastructure and provide for multimodal capacity
- Design concept and design scope descriptions of proposed transportation facilities
- Potential stormwater and air quality mitigation activities
- Pedestrian walkway and bicycle transportation facilities
- Transportation and transit enhancements
- A financial plan

During the development of Connecting Kentuckiana 2040, KIPDA employed various strategies to provide opportunity for public engagement and comment. KIPDA established and utilized a Public Comment App that allowed stakeholders to submit comments online to the agency directly. KIPDA staff also held several public meetings, including formal public hearings, to gather input. A summary of these events, as well as comments received, were included as an appendix in the final plan document. The final version of the MTP is available for review and download on the MPO's website.

KIPDA coordinates with the local public agencies and transit operators within the urbanized area, as with KYTC and INDOT, to identify and program projects that reflect local priorities on the State-owned facilities. In order to streamline project development and selection processes, the KIPDA staff recently revised their project application process making it on-line and to ensure projects selected reflect priorities of the region, and member jurisdictions. In addition, KIPDA developed a [Project Management Guidebook](#) as a resource for their LPAs and planning partners, to ensure consistency and clarity in the project selection and management process. KIPDA, TARC, KYTC, and INDOT have a good working relationship and collaborate on projects, such as the KIPDA regional rideshare program, I-64 corridor improvements to improve safety and reduce congestion, the Sherman Minton Bridge Rehabilitation project, Heavy Haul Transportation Corridor project, and several multimodal bicycle and pedestrian projects in the urbanized area.

The plan does include an environmental impact section that contains some information about where programmed projects overlap with various underserved populations and minority communities. However, the plan does not include any clear analysis of the distribution of project impacts to different socioeconomic and ethnic minorities. There was discussion during the site review meeting about how to identify and analyze project effects, as well as how to quantify project impacts for various socioeconomic and ethnic minorities. The KIPDA staff has



talked with other area MPOs about their current processes and has requested that the FRT share any resources that are available.

In addition, during the 2018 review, a recommendation was made that the KIPDA staff include a discussion related to environmental mitigation activities in the development of their next MTP update. The Connecting Kentuckiana 2040 document includes a discussion about the online resource center, which includes, among other maps and data sets, a red flag inventory tool that the staff and KIPDA planning partners can use when reviewing planned and/or potential projects. The document also includes a discussion about the coordination and consultation activities that the KIPDA staff completed during the development of plan. During the discussion, the FRT suggested that it would be beneficial for the KIPDA staff to expand their coordination efforts and clearly reflect those coordination activities, as well as the results, in future plan updates. The FRT also suggested that the staff focus on employing additional coordination activities related to environmental mitigation in the project planning and developmental stages.

For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain the Federal-aid highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53). The 2040 MTP financial plan outlines the total amount of federal and local highway revenues expected for local projects for the planning horizon using assumptions based on past trends for inflation and funding availability. Local and State funding for Operations and Maintenance was identified.

For transit projects, the 2040 MTP projects the availability of federal, state, and local funds as well as miscellaneous income and demand response over the planning horizon using assumptions based upon past awarded amounts and inflation. The MTP states which local and transit funds are typically used for operating expenses.

4.3.3 Findings:

The MTP is in compliance with the regulatory requirements.

Commendation:

The MPO staff is commended on the development of the Project Management Guidebook as a resource for the agency's planning partners. It promotes consistency in the project development and selection process. While the Guidebook is used mostly with the TIP, it ensures programmed projects align with the regional goals set forth in the MTP. The Guidebook was just updated to reflect the existence of the KIPDA Complete Streets Policy and the Carbon Reduction Program. The guidebook can be found at: <https://www.kipda.org/wp-content/uploads/2022/09/PMG-Updated-9.22.pdf>



Recommendation:

The Environmental Justice Analysis consists of GIS identification of project locations overlaid with census data on socioeconomic and minority populations. It is recommended that the MPO staff develop methods to identify and analyze project effects for the EJ populations.

Recommendation:

It is recommended that INDOT provide to the MPO, in a timely manner, the Operations and Maintenance budget information to include in the MTP (in accordance with 23 CFR 450.324 (11) (i)).

Recommendation:

The coordination efforts in the development of the MTP did not include environmental mitigation. It is recommended that the MPO staff expand coordination activities to include environmental mitigation at the project planning and developmental stages.

4.4 Transit Planning

4.4.1 Regulatory Basis

49 U.S.C. 5303 and 23 U.S.C. 134 require the transportation planning process in metropolitan areas to consider all modes of travel in the development of their plans and programs. Federal regulations cited in 23 CFR 450.314 state that the MPO in cooperation with the State and operators of publicly owned transit services shall be responsible for carrying out the transportation planning process.

23 CFR 450.300(a) states: "...the MPO designated for each urbanized area is to carry out a continuing, cooperative, and comprehensive multimodal transportation planning process... 23 CFR 450.306(a)(6) states: The metropolitan transportation planning process shall...enhance the integration and connectivity of the transportation system, across and between modes..."

4.4.2 Current Status

The coordination between the MPO (KIPDA), the Transit Authority of River City (TARC), KYTC and INDOT is cooperative and effective for addressing the transit needs of the region. TARC also developed a Long-Range Plan, and conducted a Fleet Electrification Study, and a Micro Mobility Study and conducted additional efforts to shape the future of the agency's operations, programs, and services.

TARC was founded in 1974 and provides service to five counties in two states: Kentucky (Jefferson, Bullitt, and Oldham) and southern Indiana (Clark and Floyd). TARC has 227 buses in its fixed route fleet, including 33 hybrid-electric and 15 all-electric. TARC also has 102 additional paratransit vehicles to support its TARC3 service. In 2021, TARC provided an average of 37,468 weekday unlinked trips and currently operates 31 fixed routes in Greater Louisville and



Southern Indiana covering 1,076 miles each day. Paratransit provider TARC3 averages more than 6,000 Paratransit trips per week.

TARC used more than \$2,000,000 in CMAQ funding to open three new routes. Two cross-river routes connecting West and East Louisville to Jeffersonville and River Ridge in Indiana, and one route serving the Outer Loop (Renaissance Business Center on Air Commerce Drive and the Preston Highway corridor) will provide better access to employment centers and other amenities in the region.

TARC partnered with Louisville Metro Government to develop Broadway All the Way, Preston Corridor Plan, and Bardstown Road Corridor improvements, all aimed at providing safer and more efficient transportation and environmental improvements along the corridors.

4.4.3 Findings

Transit planning is in compliance with the regulatory requirements.

Commendation:

TARC is commended on the success of the Dixie Highway Bus Rapid Transit (BRT) project. The Dixie Highway BRT was launched in January 2020, and was the first of its kind in the region. The goal was to reduce travel times, improve transit reliability, expand access to the central business district, and to enhance regional connectivity with other TARC routes.

4.5 Transportation Improvement Program (TIP) and the Annual Listing of Obligated Projects (ALOP)

4.5.1 Regulatory Basis

TIP - 23 U.S.C. 134(c),(h) & (j) set forth requirements for the MPO to cooperatively develop a Transportation Improvement Program (TIP). Under 23 CFR 450.326, the TIP must meet the following requirements:

- Must cover at least a four-year horizon and be updated at least every four years.
- Surface transportation projects funded under Title 23 U.S.C. or Title 49 U.S.C., except as noted in the regulations, are required to be included in the TIP.
- List project description, cost, funding source, and identification of the agency responsible for carrying out each project.
- Projects need to be consistent with the adopted MTP.
- Must be fiscally constrained.
- The MPO must provide all interested parties with a reasonable opportunity to comment on the proposed TIP.



ALOP - 23 U.S.C. 134(j)(7) and 23 CFR 450.334 requires that the State, the MPO, and public transportation operators cooperatively develop a listing of projects for which Federal funds under 23 U.S.C. or 49 U.S. C. Chapter 53 have been obligated in the previous year. The listing must include all federally funded projects authorized or revised to increase obligations in the preceding program year and, at a minimum, the following for each project:

- The amount of funds requested in the TIP
- Federal funding obligated during the preceding year
- Federal funding remaining and available for subsequent years
- Sufficient description to identify the project
- Identification of the agencies responsible for carrying out the project

4.5.2 Current Status

The KIPDA MPO adopted the FY2020-2025 TIP on February 27, 2020. The FY2020-2025 TIP documents how Federal, State, and local funds will be expended on highway and public transportation improvements and contains all federally funded and regionally significant projects. The TIP includes State and local roadway, bridge, bicycle, pedestrian, safety, Intelligent Transportation Systems, Congestion Management Process, and transit projects. For the first time, KIPDA included performance reports in their FY2020-2025 TIP. KIPDA developed a multi-modal, comprehensive TIP through a comprehensive, continuing, and cooperative effort with the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Kentucky Transportation Cabinet (KYTC), the Indiana Department of Transportation (INDOT), the Transit Authority River City (TARC), Local Public Agencies (LPAs), the public, and other interested parties.

KIPDA's TIP is modified on a regular basis. Two processes that KIPDA follows when modifying the TIP are amendments and administrative modifications. Amendments are major project changes that are deemed as regionally significant in the KIDPA region, while minor projects are administrative modifications. New projects may be added to the TIP if they qualify through KIPDA's Grouped Projects Policy. A listing of Grouped Projects is included in the TIP and in the Connecting Kentuckiana 2040 (CK2040) Metropolitan Transportation Plan (MTP). Grouped Projects in the TIP and MTP recognizes projects that are not considered to be of appropriate scale for individual identification. Grouped Project categories are eligible for inclusion in the TIP and allow for an administrative modification of the TIP to include eligible new projects. For consistency, the Group Project categories in the TIP are listed the same as in the MTP. This policy allows certain projects to be added expeditiously while maintaining accountability.

In accordance with regulatory requirements for performance measures and management, KIPDA has coordinated with the respective DOTs and transit agencies, and has documented the required performance measures (i.e., safety, bridge and pavement condition, travel time reliability, air quality, and transit asset management) in the FY2020-2025 TIP, as well as the CK2040 MTP. In addition, the MPO has specifically outlined the anticipated effect of the projects included in the



TIP toward achieving the performance targets identified in the MTP, linking investment priorities to those performance targets.

In accordance with the procedures outlined in KIPDA's Participation Plan, KIPDA used various tools newspaper advertisements, public meetings, hosted the Transportation Policy Committee Public Comment Review Working Group for Transportation Technical Coordinating Committee (TTCC) members and Transportation Policy Committee (TPC) members to carefully review and collect feedback from members of the public and stakeholders. Also, KIPDA staff developed a Public Comment App that allowed for online access to submit comments to the agency. The app was shared on social media and through the KIPDA [website](#). Comments received were reviewed and documented by KIPDA staff and made available as an Appendix to the FY2020-2025 TIP.

4.5.3 Findings

Currently, the TIP includes total project costs for that fiscal year and project phase only.

Corrective Action:

The next TIP update and all amendments before the TIP update should include total project costs for all phases of the project in accordance with 23 CFR 450.326.

Recommendation:

It is difficult to compare the TIP and the ALOP. It is recommended that the MPO staff review the format of the ALOP so that it is easier for the public to identify and compare the projects that have been programmed with the projects that have been funded/obligated.

4.6 Public Participation (PP)

4.6.1 Regulatory Basis

Sections 134(i)(5), 134(j)(1)(B) of Title 23 and Section 5303(i)(5) and 5303(j)(1)(B) of Title 49, require a Metropolitan Planning Organization (MPO) to provide adequate opportunity for the public to participate in and comment on the products and planning processes of the MPO. The requirements for public involvement are detailed in 23 CFR 450.316(a) and (b), which require the MPO to develop and use a documented participation plan that includes explicit procedures and strategies to include the public and other interested parties in the transportation planning process.

Specific requirements include giving adequate and timely notice of opportunities to participate in or comment on transportation issues and processes, employing visualization techniques to describe metropolitan transportation plans and TIPs, making public information readily available in electronically accessible formats and means such as the world wide web, holding public meetings at convenient and accessible locations and times, demonstrating explicit



consideration and response to public input, and a periodically reviewing of the effectiveness of the participation plan.

4.6.2 Current Status

The Public Participation Plan was adopted February 24, 2022. The MPO uses a variety of techniques to engage the public. The MPO:

- utilizes social media (Facebook, Instagram, YouTube, LinkedIn, and Twitter) and sends e-mail announcements to help generate awareness of planning activities.
- uses visualization and web-based input opportunities for public comment.
- Has an on-line library housing pertinent studies and analysis
- provides live streaming access for both their Technical and Policy meetings.
- makes a conscious effort to select locations for public meetings that are accessible by bus and in traditionally underserved communities to further engage those communities.

The MPO successfully hosted all their meeting virtually during the pandemic, and now continues to have a hybrid (both in-person and virtual) meeting structure. The participation in the TTCC and the TPC meetings is at a high point. In the past, MPO staff used to worry about having a quorum present, but no longer as the hybrid format attracts a much larger group of participants.

4.6.3 Findings

The Participation Plan is in compliance with the regulatory requirements.

Commendation:

The MPO is commended on its efforts to make the MPO website more ADA compliant. Assistive technology, Text-To-Speech (TTS), was used and it allows text on the website to be read aloud, so that the visually impaired and those with limited English proficiency can more fully engage in the planning process.

Recommendation:

It is recommended that the name of the document be changed to “Participation Plan”, as 23 CFR 450.316 calls for outreach to multiple agencies not just the general public.

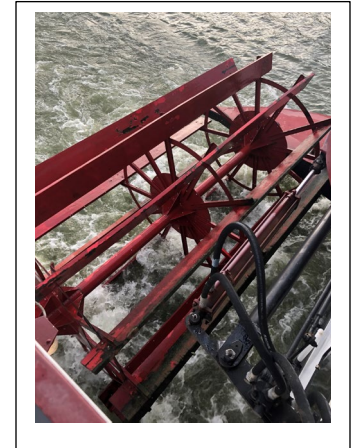


4.7 Freight Planning

4.7.1 Regulatory Basis

The MAP-21 established in 23 U.S.C. 167 a policy to improve the condition and performance of the national freight network and achieve goals related to economic competitiveness and efficiency; congestion; productivity; safety, security, and resilience of freight movement; infrastructure condition; use of advanced technology; performance, innovation, competition, and accountability, while reducing environmental impacts.

In addition, 23 U.S.C. 134 and 23 CFR 450.306 specifically identify the need to address freight movement as part of the metropolitan transportation planning process.



4.7.2 Current Status

Freight is a significant component in the MPO planning process. The Louisville area has a large number of freight generators and within the Metropolitan Planning Area (MPA) all five modes of freight exist.

- **RAILWAYS:** There are two Class I railroads (CSX Transportation and Norfolk Southern), two Class II Railroad (Paducah and Louisville and RJ Corman), and multiple short line railroads that provide service to the MPA.
- **AIRWAYS:** There is one Commercial Aviation Airport/Part 139 (Louisville Muhammad Ali International Airport or SDF) and it ranks third in the nation's airports in terms of landed weight of all-cargo operations. The United Parcel Service (UPS) Worldport Hub generates the majority of the air freight at the SDF Airport and attracts logistics and warehousing operations to the area. There is also one General Aviation Airport in the MPA (Bowman Field or LOU).
- **WATERWAYS:** The Ohio River is a major thoroughfare for freight moving to and from the Mississippi River. There are two public riverports on the Ohio River, one on the Kentucky side (Louisville-Jefferson County Riverport Authority) and one on the Indiana side (Port of Indiana-Jeffersonville).
- **PIPEWAYS:** Both liquid petroleum and natural gas pass through the MPA.
- **HIGHWAYS:** Three interstates converge in Louisville, (I-64, I-65, I-71), and I-264, and I-265 all pass through the Louisville MSA carrying large volumes of freight.

The Louisville MPO addresses freight in a variety of ways:

The **MTP**, Connecting Kentuckiana 2040, supports the federal Planning Factor that states “to increase accessibility and mobility of people and freight”. The MTP lists “The efficient, reliable, and safe movement of freight” as one of the goals of the MTP. Projects that support the goals of the MTP receive extra points in the prioritization process.



The MPO's **Congestion Management Process (CMP)** is used to develop freight performance measures.

The MPO's **Regional Freight Network** is used as a planning tool that highlights where high truck volumes are occurring. It was last updated in April 2019. The MPO Freight Network was updated in May 2018. The freight network has two tiers, Tier I contains the National Highway Freight Network and the KY Highway Freight Network. Tier II contains roads that provide access to high-density freight clusters, high density regional shopping clusters, and interstates, and freeways. Freight Corridors were identified by existing truck traffic (10%) and by proximity to freight distribution centers.

The MPO's "**Regional Freight Mobility Study**" developed in 2019 is a supplement to the MTP and guides investment in the transportation system. The study evaluates current and forecasted freight conditions, identifies freight mobility issues, and provides recommendations to implement solutions.

4.7.3 Findings

Freight Planning is in compliance with the Planning Factors.

4.8 Intelligent Transportation Systems (ITS) Architecture

4.8.1 Regulatory Basis

23 CFR 450.324(f)(5) requires the MTP include operational and management strategies to improve the performance of the existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods. Effective M&O strategies include measurable regional operations goals and objectives and specific performance measures to optimize system performance.

The FHWA Final Rule and FTA Policy on Intelligent Transportation Systems (ITS) Architecture and Standards was issued on January 8, 2001 and codified under 23 CFR Part 940 ITS Architecture and Standards, implements Section 5206(e) of the Transportation Equity Act for the 21st Century (TEA-21). This Final Rule/Policy requires that all ITS projects funded by the Highway Trust Fund and the Mass Transit Account conform to the national ITS architecture, whether they are stand-alone projects or combined with non-ITS projects, as well as to U.S. DOT-adopted ITS standards.

4.8.2 Current Status

KIPDA has a regional ITS architecture that was adopted in 2017 and serves as a roadmap for transportation systems integration. The MPO coordinates with transit providers in the region,



as well as KYTC and INDOT, to maximize operational and management strategies related to ITS. While there are no current plans to update the ITS architecture, the MPO is funding a planning study for the city of Louisville to review/develop updates to their ITS architecture.

During the site review meetings there was some discussion about coordination with regional and statewide stakeholders. The MPO staff indicated that while the city of Louisville manages the ITS infrastructure for all of Jefferson County, and TRIMARC manages ITS coordination with INDOT, coordination occurs through regular meetings of the MPO committees. In addition, the MPO identifies ITS projects in the MTP. There was some additional discussion about the identification of potential TSMO corridors and/or projects, as well as about the incorporation of electric vehicle infrastructure.

4.8.3 Findings:

The ITS Architecture is in compliance with the regulatory requirements.

Recommendation:

It is recommended that the latest version of the national ITS framework Architecture Reference for Cooperative and Intelligent Transportation (ARC-IT) available and the Regional Architecture Development for Intelligent Transportation (RAD-IT) is a software application (formally Turbo Architecture). The FHWA ITS Architecture Implementation website provides a link to the latest ARC-IT which includes all the information and tools needed.

Recommendation:

It is recommended that the ITS architecture be reviewed at least once every five years to that recent initiatives (for example, electric vehicle infrastructure, TSMO, etc.) are included.

4.9 Security/Resiliency Planning

4.9.1 Regulatory Basis

23 U.S.C. 134(h)(1)(C) requires MPOs to consider security as one of ten planning factors. As stated in 23 CFR 450.306(a)(3), the Metropolitan Transportation Planning process provides for consideration of security of the transportation system.

The regulations state that the degree and consideration of security should be based on the scale and complexity of many different local issues. Under 23 CFR 450.324(h), the MTP should include emergency relief and disaster preparedness plans and strategies and policies that support homeland security, as appropriate.



4.9.2 Current Status

The metropolitan planning areas (MPA) is adjacent to the Ohio River and the levees and flood walls provide flood control. However, there is potential for flooding from the Ohio's tributaries and is a concern as the frequency of extreme events has increased in recent years. Therefore, building resiliency into the transportation system is extremely important.

The MTP, Connecting Kentuckiana 2040, mentions climate change under the Environment goal and states the need to "reduce and/or mitigate negative environmental impacts, including climate change". The MTP also includes a listing of the federal planning factors. One addresses resiliency, "Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation", and another that addresses security, "increase the security of the transportation system for motorized and non-motorized users." There is no further mention of security, resiliency, or climate change anywhere else in the document and it is not listed as a major function on the MPO website, and there are no standing committees for security or resiliency. However, the MPO secures their information on the cloud so that it can be accessed from any location.

4.9.3. Finding:

Security and Resiliency Planning is **substantially compliant** with regulatory requirements.

Recommendation:

Transportation is considered critical infrastructure and plans should be in place to provide alternatives should there be a disruption in one of the components. During natural disasters (i.e. Hurricane Katrina, Smoky Mountain Fires, Hurricane Harvey) an MPO can be of vital importance. The MPO should more fully define its role in resiliency and security planning in the MTP, TIP, and UPWP by doing the following:

- The MPO should consider building redundancy into the project selection process in case one of the transportation assets is unavailable during a crisis.
- The MPO, TARC, and Homeland Security should identify critical infrastructure and emergency corridors and share that information with the Counties as they upgrade their Comprehensive Emergency Management Plans (CEMPs) so that the counties can develop appropriate strategies should a disaster occur.
- The MPO should create a listing of key partners in disaster planning. Some suggestions include:

Road Network: Hospitals



Water: Army Corp of Engineers, Louisville-Jefferson County Riverport Authority, the Ports of Indiana-Jeffersonville

Airports: Louisville Muhammad Ali International Airport, Bowman Field

Railroads: CSX, Norfolk-Southern, Paducah and Louisville, RJ Corman

Pipelines: Petroleum and Natural Gas agencies. The MPO should consider pipelines as part of the critical infrastructure and work with the appropriate agencies to develop a plan of action should a disaster occur.

- The MPO investigate new funding opportunities included in the IIJA, and others such as the Building Resilient Infrastructure and Communities (BRIC) grant program which has a 6% set-aside for post disaster-money for each state (state and local).

4.10 Congestion Management Process / Management and Operations

4.10.1 Regulatory Basis

23 U.S.C. 134(k)(3) and 23 CFR 450.322 set forth requirements for the congestion management process (CMP) in TMAs. The CMP is a systematic approach for managing congestion through a process that provides for a safe and effective integrated management and operation of the multimodal transportation system. TMAs designated as non-attainment for ozone must also provide an analysis of the need for additional capacity for a proposed improvement over travel demand reduction, and operational management strategies.

23 CFR 450.324(f)(5) requires the MTP include Management and Operations (M&O) of the transportation network as an integrated, multimodal approach to optimize the performance of the existing transportation infrastructure. Effective M&O strategies include measurable regional operations goals and objectives and specific performance measures to optimize system performance.

4.10.2 Current Status

The TMA is subject to the conformity requirements for the for the 2015 8-hr ozone standard and well as the 1997 8-hour ozone standards due to the South Coast judicial ruling. Therefore, the CMP is used to develop strategies to assist MPO staff in selecting and prioritizing projects for the MPO's MTP and TIP that will have positive and impactful results on traffic congestion and air quality.

The Louisville MPO's CMP was last updated in 2018. It follows the recommended 8-step process and analyzes congestion on interstates and arterials. The CMP and the Travel Demand Forecasting (TDF) model are intricately linked. The CMP references output from the TDF model as one of its data sources in the analysis of congestion problems and needs. The CMP has



performance measures that link with the MPO's MTP and TIP. CMP performance measures include travel time index (TTI) and reliability. The CMP also takes into consideration crash rate, V/C Ratio, level of service (LOS), average travel speed, and delay which allows the MPO to better plan using the TPM measures. The MPO has recently decided to move away from V/C ratio to Travel Time Index and Speed. This was done to provide better information regarding the directionality and the peak hour nature of congestion. KYTC has been able to provide Kentucky specific NPMRDS link level data since 2011 and provides it upon request. (From 2011-2013 HERE data for interstates was available; from 2013-Jan 2017 HERE data was available for the interstates and the rest of the NHS; from Jan 2017 through August 2022 INRIX data was provided for most of the NHS). INDOT has just recently purchased the NPMRDS data but the MPO has not had the opportunity to use that data yet. The MPO has procured StreetLight Data™ which provides origin and destination data and has expanded coverage to include estimates of traffic counts and speeds. The MPO uses the RITIS Platform to evaluate many of the Transportation Performance Measures (TPM)s.

4.10.3 Findings:

The CMP is compliant with the regulatory requirements.

4.11. Transportation Performance Management (TPM)

4.11.1 Regulations

23 U.S.C. 150(b) identifies the following national goals for the focus of the Federal-aid highway program: Safety, Infrastructure Condition, Congestion Reduction, System Reliability, Freight Movement and Economic Vitality, Environmental Sustainability, and Reduced Project Delivery Delays. Under 23 U.S.C. 134(h)(2), the metropolitan planning process shall provide for the establishment and use of a performance-based approach to transportation decision-making to support the national goals, including the establishment of performance targets.

23 CFR 450.306(d) states that each MPO shall establish performance targets to support the national goals and track progress towards the attainment of critical outcomes. Each MPO shall coordinate with the relevant State to ensure consistency, to the maximum extent practicable, and establish performance targets not later than 180 days after the State or provider of public transportation establishes its performance targets. The selection of performance targets that address performance measures described in 49 U.S.C. 5326(c) and 49 U.S.C. 5329(d) shall be coordinated to the maximum extent practicable, with public transportation providers to ensure consistency with the performance targets that public transportation providers establish under 49 U.S.C. 5326(c) and 49 U.S.C. 5329(d). Additionally, each MPO shall integrate the goals, objectives, performance measures, and targets from other performance-based plans and programs (PBPP) integrated into the metropolitan transportation planning process.



23 CFR 450.314(h) states that the MPO, the State, and the public transportation operator shall jointly develop specific written provisions for PBPP, which can either be documented as part of the metropolitan planning agreements or in some other means.

23 CFR 450.324(f) (3) states that MTPs shall include descriptions of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with 23 CFR 450.306 (d), a system performance report evaluating the condition and performance of the transportation system with respect to the performance targets, and progress achieved in meeting the performance targets in comparison with system performance recorded in previous reports.

23 CFR 450.326 (d), the Transportation Improvement Program (TIP) shall include, to the maximum extent possible, a description of the anticipated effect of the TIP toward achieving the performance targets identified in the MTP, linking investment priorities to those performance targets.

4.11.2 Current Status

As noted in the 2018 certification review report, the KIPDA staff took the initiative to develop an independent document, [The Performance Management Plan](#) (PMP) in August 2015. The PMP outlines the baseline and current status for each of the nationally required performance measures. The MPO 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 2040 MTP references this document, and also includes a chapter (Chapter 5) which specifically outlines potential impacts of projects programmed in the MTP on the overall system performance. [The Performance Management Plan](#) document is updated regularly, most recently in April 2022, and is available to the public on the MPO website.

While several PM3 measures were not required for/applicable to KIPDA during the development of the 2040 MTP, they are now required and should be documented in the development of the 2050 MTP, currently underway. The Performance Management Plan document should also be updated to reflect the applicable PM3 measures and targets once they are established.



KIPDA PERFORMANCE MANAGEMENT PLAN

TABLE 1: RELATIONSHIP BETWEEN NATIONAL GOALS, MTP GOALS, AND PERFORMANCE MEASURES

National Goals		MTP Goals		Performance Measure Sections and PM Codes
Safety	To achieve a significant reduction in traffic fatalities and serious injuries.	Safety	Increase safety for all users.	Safety S1, S2, S3, S4, S5, S6, N1
Infrastructure Condition	To maintain the highway infrastructure asset system in a state of good repair.	Maintenance	Maintain the existing network in a state of good repair.	Roadway Maintenance M1, M2, M3, M4, T2, T9
Congestion Reduction	To achieve a significant reduction in congestion on the National Highway System.	Congestion	Manage roadway congestion.	Motor Vehicle Access V1, V2, V3, V4 Freight Movement F1, F2, F3
System Reliability	To improve the efficiency of the surface transportation system.	Multi-modal	Increase the availability and efficiency of multi-modal options.	Transit T2, T3, T4, T5, T6, T7, T8, E1 Non-Motorized N2, N3, N4, N5, N6, E1, E2
Freight Movement and Economic Vitality	To improve the national freight network and support regional economic development.	Freight	Ensure timely movement of freight.	Freight Movement F1, F2, F3
		Economy	Influence positive economic impacts.	Economic Impact E1, E2
Environmental Sustainability	To enhance the performance of the transportation system while protecting and enhancing the natural environment.	Environment	Reduce environmental impacts.	Air Quality A1
Reduced Project Delivery Delays	To reduce project costs by accelerating project completion through eliminating delays in the project development and delivery process.	Not an MTP Goal: KIPDA Project Management Process	KIPDA's policy for planning, programming, and prioritizing federal funds dedicated to the KIPDA MPO.	Not addressed in the Performance Management Plan, this is a component of the TIP
		Transit	Improve transit connectivity to clusters.	Transit T1, T2, T3, T4, T5, T6, T7, T8, T9, E1
		Non-Motorized	Improve connectivity of the pedestrian network. Improve connectivity of dedicated bicycle facilities.	Non-Motorized N2, N3, N4, N5, N6, T7

The Performance Measure Sections identified here are the sections in which all of KIPDA's performance measures are categorized, including both federal and MPO-developed measures. Refer to the tables on pages 9-18 for more details.

The MPO elected to develop their own performance targets for Safety (PM1), Infrastructure Condition (PM2), and to support the KYTC and INDOT targets for System Performance (PM3)- particularly level of travel time reliability. In development of Connecting Kentuckiana 2040, the MPO also established regional performance measures and targets that aligned with the overall plan goals, as well as the national performance measures (see image below).

4.11.3 Findings

The TPM is in compliance with the regulatory requirements.

Commendation:

The KIPDA MPO was the only Kentucky MPO to set its own Safety target. The MPO worked with KYTC and INDOT to develop an acceptable methodology for setting the Safety Target. The MPO staff has made multiple safety presentations to the TTCC, TPC, and subcommittees, and incorporated crash data as a project ranking criterion, in order to emphasize the importance of safety in the planning process.

4.12 Financial Planning

4.12.1 Regulations

For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be



available to adequately operate and maintain the Federal-aid highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53).

23 CFR 450.324(f)(11)(ii) states “...the MPO(s), public transportation operator(s), and State shall cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under § 450.314(a). 23 CFR 450.324(f)(11)(iii) states... “The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the metropolitan transportation plan. In the case of new funding sources, strategies for ensuring their availability shall be identified. The financial plan may include an assessment of the appropriateness of innovative finance techniques (for example, tolling, pricing, bonding, public private partnerships, or other strategies) as revenue sources for projects in the plan.”

4.12.2. Current Status

The MTP includes a discussion about project funding over the life of the MTP, and defines project costs and funding resources. This includes traditional and non-tradition funding sources, operations and maintenance, and a comparison of the costs versus resources. System-level estimates of operation and maintenance costs for Federally supported facilities and services are used to determine remaining resources available for capital expenditure.

For proposed transportation investments, project costs were included and documented within the MTP. Cost and revenue estimates incorporate inflation rates reflected in year of expenditure (YOE) dollars. Total estimated cost of projects is compared with the anticipated revenue indicated. Financial reasonableness is indicated when the estimated project costs for each state are within 10% of the estimated funding resource. Only traditional funding sources (formula fund distribution) were used in calculating anticipated resources dollars. Resource projections assume a similar level of federal, state, and local availability of funds through the horizon year of the MTP.

Proposed investments are carried forward into the TIP. Funding categories are based on the funding programs for each year of the TIP. Similar in format of the MTP, the TIP includes project costs and proposed funding strategies for all approved investments. The MPO has shown that the MTP and TIP are fiscally constrained. The process for determining future funding estimates begins with a review of the cost of projects programmed in the previous years of the TIP. The MPO serves as a sub-recipient of federal funds which are passed on to local public agencies (LPAs). The MPO is responsible for the oversight of the LPAs Federal award supported activities and monitors such activities to assure compliance with applicable Federal requirements.

4.12.3 Findings

The Financial Planning is in compliance with the regulatory requirements.



5.0 CONCLUSION AND RECOMMENDATIONS

The FHWA and FTA review found that the metropolitan transportation planning process conducted in the Louisville urbanized area **MEETS WITH CORRECTIVE ACTIONS** Federal planning requirements as follows.

5.1 Commendations (5)

The following are noteworthy practices that the KIPDA MPO is doing well in the transportation planning process:

- The MPO is commended for their Interagency Consultation (IAC) process for Transportation Conformity. Their process has always been exemplary, and it has continued to improve.
- The MPO is commended on the development of the Project Management Guidebook as a resource for the agency's planning partners. It promotes consistency in the project development and selection process. While the Guidebook is used mostly with the TIP, it ensures programmed projects align with the regional goals set forth in the MTP. The Guidebook was just updated to reflect the existence of the KIPDA Complete Streets Policy and the Carbon Reduction Program.
- TARC is commended on the success of the Dixie Highway Bus Rapid Transit (BRT) project. The Dixie Highway BRT was launched in January 2020, and it was the first of its kind in the region. The goal was to reduce travel times, improve transit reliability, expand access to the central business district, and to enhance regional connectivity with other TARC routes.
- The MPO is commended on its efforts to make the MPO website more ADA compliant. Assistive technology, Text-To-Speech (TTS), was used and it allows text on the website to be read aloud, so that the visually impaired and those with limited English proficiency can more fully engage in the planning process.
- The KIPDA MPO was the only Kentucky MPO to set its own Safety target. The MPO worked with KYTC and INDOT to develop an acceptable methodology for setting the Safety Target. The MPO staff has made multiple safety presentations to the TTCC, TPC, and subcommittees, and incorporated crash data as a project ranking criterion, in order to emphasize the importance of safety in the planning process.



5.2 Corrective Actions (2)

The following are corrective actions that the KIPDA MPO must take to comply with Federal Regulations:

- The Planning MOA is no longer current and needs to be updated (23 CFR 450.208).
- The TIP needs to include an estimated total project cost for each project or phase of a project, which may extend beyond the four years of the TIP (23 CFR 450.326 (g)(2)).

5.3 Recommendations (10)

The following are recommendations that would improve the transportation planning process:

- Work with KYTC and INDOT to streamline Agreement format to ensure future changes are easier to process.
- Expand discussion of the Planning Emphasis Areas to demonstrate how they will be integrated into MPO planning activities.
- Develop methods to identify and analyze projects effects for the EJ populations.
- Expand coordination activities to include environmental mitigation at the project planning and developmental stages.
- Review the format of the Annual Listing of Obligated Projects to improve clarity between the TIP and ALOP so that it is easier for the public to identify and compare the projects that have been programmed and the projects that have been funded/obligated.
- Update the ITS architecture using the most recent software application.
- Review the ITS architecture at least once every 5 years to ensure no updates are needed, and that any recent initiatives are included.
- It is recommended that INDOT provide to the MPO, in a timely manner, the Operations and Maintenance budget information to include in the MTP.
- More fully define its role in resiliency and security planning.



APPENDIX A - PARTICIPANTS

The following individuals were involved in the Louisville urbanized area on-site review:

Federal Review Team:

- Bernadette Dupont, FHWA-Kentucky Division
- Noura Akkad, FHWA-Kentucky Division
- Erica Tait, FHWA-Indiana Division
- Steven Minor, FHWA-Indiana Division
- Aviance Webb, FTA Region IV
- Cecilia Crenshaw-Godfrey, FTA Region V
- Sarah LaRocca, EPA-Region IV



L to R. Bernadette Dupont, Erica Tait, Aviance Webb, Sarah LaRocca, Noura Akkad, and Steven Minor.

Kentuckiana Regional Planning and Development Agency (KIPDA):

- Andy Rush, Director of Transportation
- Greg Buress, Community and Committee Engagement Specialist
- Elizabeth Farc, Transportation Planner III
- Zach Herzog, GIS Department Manager
- Valerie Mohr, Transportation Planner I
- Alex Posorske, Transportation Planner III
- Jeremeih Shaw, Transportation Planning Analyst
- Randy Simon, Transportation Planner III
- Nick Vail, Transportation Planner III
- Spencer Williams, Transportation Planner I

Kentucky Transportation Cabinet (KYTC):

- Isidro Delgado, Central Office Planning
- Tom Hall, D5 Planning

Indiana Department of Transportation (INDOT):

- Jay Mitchell, Transportation Planner
- Frank Baukert, Transportation Planner

Transit Authority of River City (TARC):

- Carrie Butler, Executive Director

Louisville Air Pollution Control District (APCD):

- Michelle King, Executive Administrator/director of Program Planning
- Craig Butler, Environmental Coordinator, Emissions Modeler
- Byron Gary, Regulatory Coordinator



APPENDIX B - STATUS OF FINDINGS FROM LAST REVIEW

One of the priorities of each certification review is assessing how well the planning partners in the area have addressed corrective actions and recommendations from the previous certification review. This section identifies the corrective actions and recommendations from the previous certification and summarizes discussions of how they have been addressed.

Corrective Action 1: There were no corrective actions.

Recommendation 1: The MPO needs to include environmental mitigation in the MTP update for 2019, Connecting Kentuckiana. The information needs to meet what is outlined in the environmental requirements, particularly describing potential environmental mitigation activities, as well as potential areas to carry them out. The “Red Flags” component of the Online Project Application tool, as described below, is a valuable information resource that has been used to inform project development. However, use of this tool during preparation of the next MTP Update, during what could be termed “pre-project development,” could provide a ready means of identifying and addressing potential environmental mitigation issues during the planning process.

Disposition 1: The MPO updated the MTP to describe potential environmental mitigation activities and locations to carry out those activities.

Recommendation 2: It is recommended that KIPDA’s Community Assessment & Outreach Program be updated as soon as possible to reflect current demographic data for use in preparation of the next long-range plan.

Disposition 2: The document was updated with current demographic data.

Recommendation 2: It is recommended that the MPO’s Conformity MOA be updated as it is ten years old.

Disposition 2: The Conformity MOA is still not updated.



APPENDIX C – PUBLIC COMMENTS

Survey: The MPO posted a survey on their website for a 60-day period, 30 days prior to the on-site review and 30-days after the on-site review, from May 18 – July 22, 2022. 130 responses were received. Those responses are summarized in the following slides presented to the MPO's Transportation Policy Committee on August 25, 2022.



Federal Certification Review Survey Results

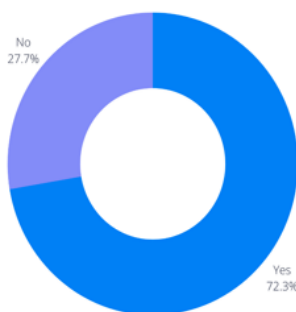
Outreach Strategy

- Social Media Campaign including paid targeting advertising.
- Email campaign to almost 1,900 registered users.
- TARC shared the survey with employees, 1,100 registered riders, and on their social media channels.
- Highlighting the survey at community events KIPDA attended.
- Displayed the survey on KIPDA's website.
- Shared the survey with local libraries, local chamber of commerce newsletters, and business association newsletters.
- 130 total survey completed from May 18 – July 22.

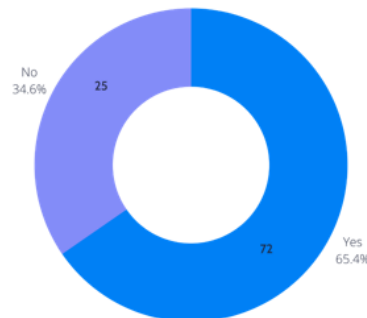


Federal Certification Review Survey Results

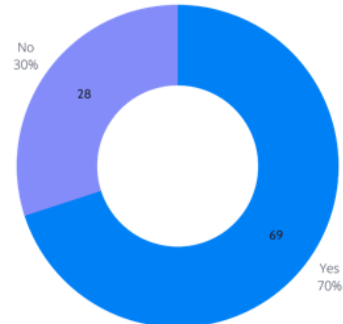
Question 1
Do you know what a MPO is?



Question 2
Do you know KIPDA is the designated MPO for this region ?



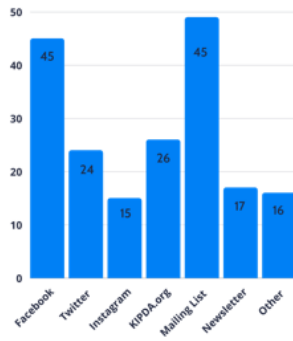
Question 3
Do you know public meeting information can be found on kipda.org?





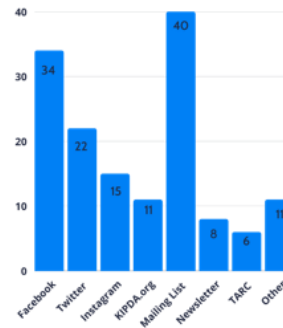
Federal Certification Review Survey Results

Question 4
How do you receive communications and information about the transportation planning process from KIPDA??



*Participants were allowed to choose more than one option

Question 5
How did you hear about this survey?

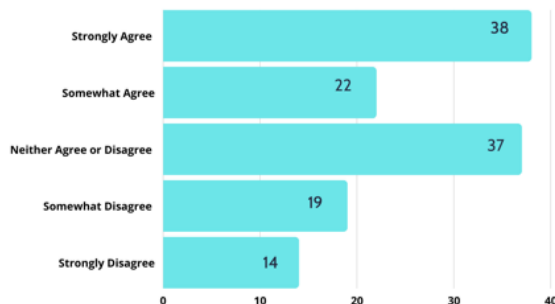


*Participants were allowed to choose more than one option

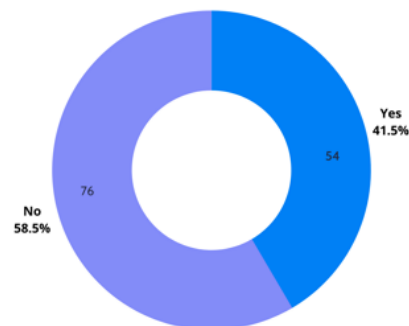


Federal Certification Review Survey Results

Question 7
I believe the MPO is making a concerted effort to having meaningful involvement from everyone in the transportation process regardless of race, color, disability, or income.



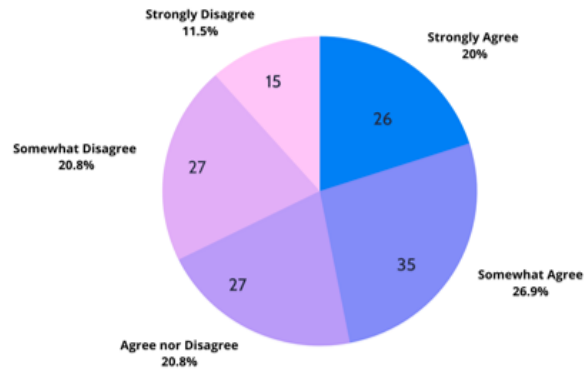
Question 8
Are you aware Title VI regulations can be found at kipda.org?





Federal Certification Review Survey Results

Question 9
**I can participate adequately in the
transportation process.**





Listening Session 1: June 16, 2022 from 2:00 pm -3:00 pm EDT via Zoom

Q: This is my first look at a KIPDA planning mtg. My interest is in how your plans will affect the Oldham County Recycling Center. The future of KY 393 shows that it will go thru the OCRC.

A: Tom Hall, KYTC-D5 discussed details.

Q: I am “the public.” How can we get involved in the planning process—before decisions are made? For example, I have been trying to follow studies on the I-65/I-71 Regional Connector Study. Very difficult to keep apprised.

A: Tom Hall, KYTC D5, discussed details to the corridor study; Erica Tait, FHWA-IN spoke about ways to get involved in the process.

Q: Could you talk about what percent of KIPDA's funding expenditures go towards transportation options besides for car owners? I believe it is very low, but what can be done to increase this percentage for other modes?

A: Andy Rush, KIPDA MPO, Not a specific answer but a good amount of projects are going to other modes. We posted direct links for our long range plans.

Follow up response from Public: Thanks for your answer, it would be great if you get to quantifying that and working to increase the funding dollars

Q: New question. Louisville had 129 deaths on our roadways in 2021, while for comparison a larger city like San Francisco only had 27 in 2021. What work are you doing to reduce these and coordinate with Louisville’s new Vision Zero work?

A: Vision zero is a big step. And KIPDA is a part of the working group since the beginning. We analyze crashes at a planning level.

Comment: One concern in the Louisville area is traffic flow. Please consider alternatives to VERY long traffic lights that cause back-ups, decrease fuel efficiency and increase pollution ...such as roundabouts, etc. Thank you



Listening Session 2: June 22, 2022 from 5:30 – 6:30 PM EDT both in-person at the South Central Library, 7300 Jefferson Blvd, Louisville, KY, and on-line via Zoom.

From the virtual chat room:

I understand that Louisville Metro has an effort underway to create a Complete Streets Coalition which will be a citizen panel dedicated to finding ways to improve transit/pedestrian/bike/etc. infrastructure on Louisville Metro street/roadway projects. I hope that this Complete Streets Coalition, once it is fully established, will be able to interface with KIPDA on these issues and provide input and feedback on these issues within the region.

From public in attendance:

Planning process has greatly improved over the years and the public participation has also improved from the efforts given previously.

Q: Are there any funding opportunities for light rail?

A: RAISE Grant and possible new federal grants. The local match is needed and would need a huge local investment.



APPENDIX D - LIST OF ACRONYMS

ADA: Americans with Disabilities Act
AMPO: Association of Metropolitan Planning Organizations
CAA: Clean Air Act
CFR: Code of Federal Regulations
CMP: Congestion Management Process
CO: Carbon Monoxide
DOT: Department of Transportation
EJ: Environmental Justice
FAST: Fixing America's Surface Transportation Act
FHWA: Federal Highway Administration
FTA: Federal Transit Administration
FY: Fiscal Year
HSIP: Highway Safety Improvement Program
ITS: Intelligent Transportation Systems
LEP: Limited-English-Proficiency
M&O: Management and Operations
MAP-21: Moving Ahead for Progress in the 21st Century
MPA: Metropolitan Planning Area
MPO: Metropolitan Planning Organization
MTP: Metropolitan Transportation Plan
NAAQS: National Ambient Air Quality Standards
NO₂: Nitrogen Dioxide
O₃: Ozone
PM₁₀ and PM_{2.5}: Particulate Matter
SHSP: Strategic Highway Safety Plan
STIP: State Transportation Improvement Program
TDM: Travel Demand Management
TIP: Transportation Improvement Program
TMA: Transportation Management Area
U.S.C.: United States Code
UPWP: Unified Planning Work Program
USDOT: United States Department of Transportation





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