

KENTUCKY

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (STIP) For FY 2019-2022

ADMINISTRATIVE MODIFICATION #2018.114

I. Proposed Action:

Modify the KYTC's FY 2019-2022 Statewide Transportation Improvement Program (STIP) to include the Louisville/Jefferson County, KY-Indiana Metropolitan Planning Organization's Amendment #6 to the FY 2018-2021 Transportation Improvement Program (TIP).

Location:

Louisville/Jefferson County, KY-Indiana Metropolitan Planning Area

II. Scope of Activity:

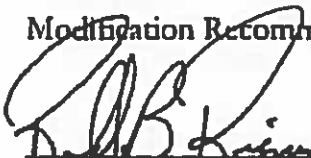
See the attachments for detail information.

III. Additional Remarks:

This modification to the STIP will become part of the 2018 STIP end of Federal Fiscal Year 2019 "fiscal constraint" recalculations.

IV. Administrative Modification Approval:

Modification Recommended for Approval:



Kentucky Transportation Cabinet Date
Ronald B. Rigney, Director
Division of Program Management

Approval of Modification:



Federal Highway Administration Date



Recommended by Date



U.S. Department
of Transportation
**Federal Highway
Administration**

Kentucky Division

July 31, 2019

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 6 to the 2018-2021 Transportation Improvement Program (TIP) and
Amendment 13 to the 2035 Metropolitan Transportation Plan (MTP) for the
Louisville Area Metropolitan Planning Organization (MPO)
(The MPO approval resolution was signed on June 27, 2019)**

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 this document meets 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 source emission budgets in the State Implementation Plan (SIP), and
- provisions for timely implementation of transportation control measures in the SIP.

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,

A handwritten signature in black ink, appearing to read "Steve Mills", written in a cursive style.

Steve Mills,
Acting Division Administrator

cc: Aviance Webb, FTA-R4
Erica Tait, FHWA-IN
Scott Davis, EPA-R4
Melissa Duff, KEEC-DAQ
Keith Talley Sr., Louisville Metro APCD
Barry Barker, TARC
Ron Rigney, KYTC-Program Management
Amanda Spencer, KYTC-Planning
Eric Rothermel, FHWA-KY



MEMORANDUM

TO: Transportation Policy Committee

FROM: Nick Vail

DATE: June 18, 2019

SUBJECT: Amendment 13 of the Horizon 2035 MTP
Amendment 6 of the FY 2018 – 2021 TIP

Kentucky Member Counties

Bullitt

Henry

Jefferson

Oldham

Shelby

Spencer

Trimble

KIPDA is amending the *Horizon 2035 Metropolitan Transportation Plan (MTP)* and the *FY 2018 – FY 2021 Transportation Improvement Program (TIP)*. Attached, you will find the proposed project changes to the MTP and the TIP, a narrative amendment that discusses how these planning documents incorporate newly established performance targets, an updated group projects policy and a summary of staff’s communication with the Interagency Consultation Group regarding the projects.

Indiana Member Counties

Clark

Floyd

The projects proposed for amendment to the FY 2018 – 2021 TIP are either currently included in, or are proposed for amendment to, the Horizon 2035 MTP. The project changes are considered non-exempt; therefore, air quality analysis was required. The regional emissions analysis of the Horizon 2035 MTP indicates that the plan conforms to the State Implementation Plans (SIPs) and meets the requirements of the federal conformity rule under the 1997 and 2015 8-hour ozone standards.

The proposed project changes are available for public review from June 3, 2019 through June 18, 2019, at public libraries and on the KIPDA website. A public meeting was held on June 10, 2019, at the South Central Library, 7300 Jefferson Boulevard, Louisville, KY 40219.

At their June 12, 2019 meeting, the Transportation Technical Coordinating Committee (TTCC) recommended approval by the TPC of both amendments.

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Action is requested to approve Amendment 13 of the Horizon 2035 MTP.

Action is requested to approve Amendment 6 of the FY 2018 – 2021 TIP.

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 Louisville, KY 40299
 502-266-6084
 Fax: 502-266-5047
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 www.kipda.org





**A Resolution of the
Kentuckiana Regional Planning and Development Agency
Transportation Policy Committee adopting Amendment #13 of the
*Horizon 2035 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,

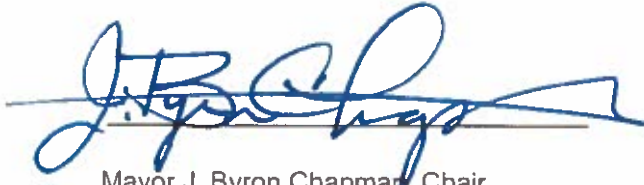
Whereas, Federal laws require the Transportation Policy Committee periodically review and update its Metropolitan Transportation Plan to reflect progress and changes regarding its implementation using the latest forecasts of regional demographic and socioeconomic data; and,

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 Horizon 2035, 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 this amendment of the *FY 2018 - FY 2021 Transportation Improvement Program 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 this 27th day of June 2019.



Mayor J. Byron Chapman, Chair
Transportation Policy Committee



Larry D. Chaney
KIPDA Transportation Division Director



**A Resolution of the
Kentuckiana Regional Planning and Development Agency
Transportation Policy Committee adopting Amendment #6 of the
*FY 2018 - FY 2021 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 2018- FY 2021 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area* is a subset of *Horizon 2035, the Louisville/Jefferson County KY-IN Metropolitan Transportation Plan*, which has been determined to conform to the State Implementation Plans of Indiana and Kentucky; and,

Whereas, the *FY 2018- FY 2021 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 2017 - 2020 Statewide Transportation Improvement Program (STIP), and the Indiana FY 2018 - 2021 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 2018 - FY 2021 Transportation Improvement Program for the Louisville/Jefferson County KY-IN Metropolitan Planning Area* is adopted by official action at the March 28, 2019 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 *Horizon 2035* 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, *Horizon 2035*, 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 #11 of the *Horizon 2035 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 *Horizon 2035* 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 this 27th day of June 2019.



Mayor J. Byron Chapman, Chair
Transportation Policy Committee



Larry D. Chaney, Recording Secretary
KIPDA Transportation Division Director



**Horizon 2035 Metropolitan Transportation Plan and
FY 2018 – FY 2021 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, Horizon 2035 Metropolitan Transportation Plan, as well as a short range planning document, the Transportation Improvement Program (TIP) that is updated at least every four years.

Bullitt

Henry

Jefferson

Oldham

Shelby

Spencer

Trimble

Changes have been proposed to the Metropolitan Transportation Plan and the Transportation Improvement Program. The Horizon 2035 Metropolitan Transportation Plan with the proposed changes is financially reasonable, and the proposed TIP is fiscally constrained.

We invite you to review the project information and submit comments to the following address by June 18, 2019.

TIP & Plan Updates

KIPDA

**11520 Commonwealth Drive
Louisville, KY 40299**

Indiana
Member
Counties

Email comments to: kipda.trans@kipda.org

Clark

Floyd

In addition, you can review the documents and ask questions in person during a public open house held at the following times and locations:

- **June 10, 2019, 4:30 p.m. – 6:00 p.m.** at the South Central Regional Library, 7300 Jefferson Blvd., Louisville, KY 40219

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

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**Amendment 13 of Horizon 2035 Metropolitan Transportation Plan
Amendment 6 of FY 2018 - FY 2021 Transportation Improvement Program
Tentatively Scheduled for June 27, 2019**

Project Sponsor	County	KIPDA ID	State ID	Project Name	Project Description	Change to MTP	Effect on AQ Analysis	Change to TIP	Funding Source
KENTUCKY PROJECTS									
KYTC	Jefferson	1879	5-481.00	KY 864	Widen Beulah Church Road from 2 lanes to 3 lanes from I-265 to Cedar Creek Road. Milepoints from 1.818 to 3.445.	Change Open to Public date from 2020 to 2024.	Non-Exempt, remove from 2020 model scenario	Change Open to Public date from 2020 to 2024.	STBG-U
Louisville Metro	Jefferson	224	5-378.10	I-65	Extend and reconstruct I-65 southbound ramp to Brook Street and Floyd Street. The project will include the consideration of bicycle and pedestrian facilities.	Change Open to Public date from 2020 to 2024.	Non-Exempt, remove from 2020 model scenario	Change Open to Public date from 2020 to 2024.	STBG-U
Oldham County	Oldham	1808	5-754.00	Buckner Connector	Construct new connection from Old LaGrange Road to KY 393. Project length is 0.8 miles.	Change Open to Public date from 2020 to 2021.	Non-Exempt, remove from 2020 model scenario	Change Open to Public date from 2020 to 2021.	STBG-U

Amendment 6 to the TIP and Amendment 13 to the MTP Schedule

Task	MTP Amendment 13 / TIP Amendment 6
Project Information Forms due	April 30, 2019
Staff review of projects	May 1 - 2, 2019
Email Packet to IAC	May 2, 2019
IAC Conference Call	May 9, 2019
Air Quality Analysis	May 9 – May 30, 2019
Finalize amendment documents	May 31, 2019
Mail documents to libraries	May 31, 2019
Informal IAC Review of AQ Analysis	May 31 – June 7, 2019
Public review period	June 3 - 18, 2019
Public meeting	June 10, 2019
TPC Comment Period	June 11 – June 26, 2019
TTCC Recommendation	June 12, 2019
TPC Approval	June 27, 2019
Federal Review and Approval	June 28 – August 27, 2019

Interagency Consultation Conference Call

May 9, 2019
2:00 p.m. EST

Participants

FHWA-KY	-- Bernadette Dupont
EPA – Region 4	-- Dianna Myers, Kelly Sheckler
KYTC	-- Justin Harrod
KY DAQ	-- Anna Bowman, Ben Cordes, Ashlee Whisman
LMAPCD	-- Michelle King
KIPDA	-- David Burton, Larry Chaney, Amanda Deatherage, Andy Rush, Randy Simon, Nick Vail

Background

Recently, KIPDA staff has undertaken the steps necessary to conduct Amendment 13 of the Horizon 2035 Metropolitan Transportation Plan (MTP) and Amendment 6 of the FY 2018 – FY 2021 Transportation Improvement Program (TIP). KIPDA staff compiled lists of proposed project changes and distributed them via e-mail to the members of the Interagency Consultation group (IAC/ICG) on May 2, 2019. A regional emissions analysis will be conducted for this amendment since all project changes are non-exempt.

Discussion of Amendment Schedule

The amendment schedule of activities was discussed and it includes the following key elements:

- Air Quality Analysis: May 9 through June 3, 2019
- Public review: June 7 through 24, 2019
- KIPDA TPC review of public comments: June 11 through 26, 2019
- KIPDA TPC action on June 27, 2019
- This will be KIPDA's last MTP and TIP Amendments until new MTP and TIP Updates are completed.

Discussion of Amendment 6 of the FY 18 – FY 21 TIP/Amendment 13 of the Horizon 2035 MTP

The MTP and TIP amendments were driven by a need to make updates to Open to Public dates of non-exempt projects that are not expected to be complete by 2020. This process resulted in changes to the Open to Public dates of three projects from 2020 or prior to 2021 or later, which results in the removal of these projects from the 2020 Scenario, and thus, a new regional emissions analysis will need to be conducted.

The MTP and TIP amendments are also an opportunity to update the performance management narrative in the MTP and TIP documents to reflect the 2015-2019 PM 1: Safety Performance Targets that were adopted by TPC in February 2019.

Lastly, the MTP and TIP amendments will fully implement a Group Projects Policy that specifies the requirements a new project must meet in order to be added to the TIP for the first time through an Administrative Modification. The Group Projects Policy was adopted by TPC in January 2019.

Discussion of Projects

The list of three project changes was reviewed. KIPDA staff reiterated that the projects' changes on this list were non-exempt, and therefore a regional emissions analysis will be conducted to ensure air quality conformity.

Regarding the I-65 southbound ramp to Brook Street reconstruction project, Andy Rush, KIPDA, stated that Louisville Metro has submitted an updated project design since we last modeled it, and therefore the model will be updated to reflect those modifications.

There were no other questions or comments about any of the projects included in the amendments.

Bernadette Dupont, FHWA-KY, asked that KIPDA staff elaborates on the cost thresholds within the group projects policy.

Nick Vail, KIPDA, stated that KIPDA staff have streamlined how we put new projects into our TIP; in the past there have been lots of various projects but now we have consolidated them into groups. Then we established dollar thresholds for each group and any project in excess of them would have to be amended instead of added to the TIP through an administrative modification. This policy has been approved by our committees.

There were no other questions or discussion.

The conference call adjourned at 2:14 p.m.

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 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 *Horizon 2035*, the metropolitan transportation plan (MTP), and the FY 2018 – FY 2021 Transportation Improvement Program (TIP). This conformity analysis will support conformity determinations by the metropolitan planning organization and the U. S. Department of Transportation agencies for both documents. This analysis is intended to support determinations of conformity under the 1997 and 2015 8-hour ozone standards.

CONFORMITY UNDER THE 8-HOUR OZONE STANDARD

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. Interim tests are used between the time an area is designated as nonattainment and the time motor vehicle emission budgets (MVEBs) are established. The MVEBs limit the amount of a pollutant or precursor that can be emitted. When the Louisville area was designated as nonattainment of the 2015 8-hour ozone standard, there were no MVEBs for that standard. Therefore, the MVEBs for the 1997 8-hour ozone standard were used in the process of determining conformity to both the 1997 and 2015 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) or the level of emissions in a baseyear, which is set by US EPA, when the standard is promulgated.

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. 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 State Implementation Plans (SIPs). Originally, the plans including these sets of actions were to be included in an attainment demonstration, which would show how the local area would reach the standard. While these plans were being developed, the data from the air quality monitors in the area indicated that the 8-hour ozone standard had been met. With this data in hand, the air quality agencies were able to submit a redesignation request instead. The establishment of the MVEBs was one of the components of the redesignation request. Since the MVEBs were included in the redesignation request for ozone, the MVEBs are established for its precursors, volatile organic compounds and oxides of Nitrogen.

CONSULTATION FOR *HORIZON 2035*

The first step in determining conformity of *Horizon 2035* 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.

The second consultation conference call, which was held to discuss issues relative to Amendment 13, involved a review and discussion of the following items:

- (a) important dates in the schedule for the amendment;
 - June 3 -- Regional Emissions (Air Quality) Analysis completed
 - June 7 -- Public Review begins.
 - June 12 -- Action by the Transportation Technical Coordinating Committee
 - June 27 -- Action by the Transportation Policy Committee
 - June 28 -- Documentation sent to review agencies for federal

conformity determination

- (b) a draft list of projects—sent to the IAC/ICG with consultation notice;
- (c) the horizon year of the transportation plan—2035;
- (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 tables 2 and 4 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

With the exception of KIPDA ID 224, the changes to the other three projects are simply to update the Open to Public (OTP) dates. These OTP date changes triggered the need for an amendment. During the IAC conference call, the project list was reviewed, including a recommendation concerning how the projects should be handled with respect to the regional emissions analysis. KIPDA staff discussed various projects and provided additional information, changes and/or clarification of those projects. The projects that were discussed include the following:

- **I-65 Southbound Ramp to Brook St, KIPDA ID 224:** KIPDA staff noted that Louisville Metro has submitted an updated project design. The project will be analyzed in the KIPDA travel demand forecasting model consistent with the new project design.
- The other two projects—the Beulah Church Road widening and the Buckner Connector were accepted by the IAC as non-exempt without discussion.

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.

ESTABLISHED PRACTICE

In addition to the issues discussed during consultation, there were several issues which were not explicitly discussed or received little discussion, 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 Metropolitan Transportation Plan 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.

Issues related to the KIPDA travel demand forecasting model

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 update.
- (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 2014, the horizon year of the plan was being changed to 2035, 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 was added as an analysis year. 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 was in the past. Recently, 2015 was being 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.

8-hour Ozone Standard	
Analysis Year	Conformity Test(s)
2020	Budget test using the 2020 MVEBs for the 8-hour maintenance area
2025	Budget test using the 2020 MVEBs for the 8-hour maintenance area
2030	Budget test using the 2020 MVEBs for the 8-hour maintenance area

2035	Budget test using the 2020 MVEBs for the 8-hour maintenance area
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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. 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 2016. 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 2016 for the Kentucky counties is now being used in developing emission estimates.

CONFORMITY OF *HORIZON 2035*

The MTP, *Horizon 2035*, 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 *Horizon 2035* simply by determining that the air pollutant emissions do not exceed the budgets in the SIPs or the base year emissions.

In general, the calculation of the regional emissions for the analysis years involved two steps. First, the travel-related information (VMT, speeds, etc.) was determined. Second, the travel-related information was used as inputs to the MOVES emissions model, which provided emission estimates for the pollutants and precursors.

CONFORMITY PROCESS

The process leading to a conformity determination for *Horizon 2035* involved two main procedures. The first procedure was to review the projects to determine which projects were “regionally significant” (including whether they were exempt or non-exempt) and needed to be included in the regional emissions analysis. After KIPDA staff reviewed the projects which were added, deleted, or changed, a list of the projects was prepared with information about the projects and a staff recommendation concerning the project’s status relative to being exempt, non-exempt, “regionally significant”, etc. During consultation, this list was reviewed and accepted by the IAC/ICG. The second procedure was to perform the calculations necessary to quantify the estimates of travel behavior and pollutant / precursor emissions. This procedure involved two analyses. The first analysis was to develop estimates of travel behavior using the KIPDA travel demand model. The second analysis was to calculate the emissions associated with the travel using the MOVES emissions model. Collectively, these two analyses are known as the Regional Emissions Analysis. These activities are discussed below in greater detail.

PROJECT REVIEW

The first procedure involved determining which metropolitan transportation plan projects were “regionally significant” (including whether they were exempt or non-exempt) and therefore needed to be included in the regional emissions analysis. During the development (update) of *Horizon 2035*, a group of projects had been proposed for the plan, reviewed by conformity partners, and incorporated into the plan. For each amendment, additions, deletions, and/or changes to the projects are proposed. These additions, deletions, and/or changes are discussed with the IAC/ICG, and agreement is reached as to how each of the additions, deletions, and/or changes should be analyzed in first the travel behavior analysis and subsequently the regional emissions analysis. Those projects in *Horizon 2035* which were not changed will be analyzed as they were previously. There is usually a straightforward explanation for why projects are included in the analysis and why they are analyzed as they are. The following paragraphs explain why some projects are excluded from the regional emissions analysis. The details of the consultation concerning the project review are discussed above in the section entitled, “CONSULTATION FOR *HORIZON 2035*.”

As in prior plans, some of the projects in *Horizon 2035* have been excluded from the regional emissions analysis. 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. In addition, a few projects were excluded from the regional emissions analysis due to a lack of sufficiently detailed information. They include:

1. **Transportation System Management (TSM) Projects**

Incident Management Program:

This project involves providing the motorist with information concerning lane closures due to accidents, construction, etc., which reduce the capacity of the facility. At this time, the route for diversion is totally at the discretion of the motorist. Therefore, there is insufficient information to quantify the emission impacts using the travel demand model approach.

Spot Improvements:

This is a funding mechanism for undetermined intersection improvements which would have minimal air quality impacts. No projects with air quality impacts are currently proposing use of these funds.

2. Operational Improvements

A group of corridors was identified for operational improvements that did not involve an increase in the capacity of the roadway(s). At this point, sufficient detail is lacking for some of these corridors to facilitate their inclusion in the air quality conformity analysis.

These projects continue to be excluded from the regional emissions analysis.

REGIONAL EMISSIONS ANALYSIS

The regional emission analysis consists of two analyses—(1) the analysis of travel behavior and (2) the estimation of emissions due to that travel behavior. The details of the two analyses are described below.

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 VMT and speed. The method for accomplishing this 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.

In addition, there were several projects which could not be analyzed using the travel model. The TSM projects and corridors discussed above were not included in the emissions analysis; others had been previously evaluated using spreadsheet methods involving emission factors. Since the MOVES emissions model was being used in the inventory mode, emission factors were not available for this analysis. However, past experience has shown that the emission impacts for these projects were always small and positive (i.e. emission reducing). Therefore, it is reasonable to predict that the

emission impacts of these projects—if they could be quantified—would decrease the emissions shown in the tables at the end of this document.

In addition, 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.

The method used to translate those travel impacts into emission impacts was the MOVES emissions model. The inputs to the MOVES model were different for each county, but the MOVES model was used for all counties. The description of its use is provided in more detail in the section concerning the MOVES emissions model below

The emission estimates for the nonattainment area were determined in the following manner. First, the KIPDA travel demand forecasting model was used to estimate travel behavior in the region. Second, the output from the travel model was adjusted using the adjustment factors discussed below, and the adjusted VMT was placed in five miles per hour speed bins. Third, the VMT in each of the speed bins was divided by the total VMT for that county to determine VMT fractions. Fourth, the VMT fractions and total VMT were used as input to the MOVES emissions model to determine the emissions for the county.

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 the 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 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 *Horizon 2035* 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 *Horizon 2035* 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 change significantly 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).

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 NO_x. The emission estimates for VOCs and NO_x were determined using the MOVES emissions model. 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. These factors include the fuel used by the vehicles driven in each county, and in the past, the presence of inspection/maintenance (I/M) programs in some of the counties. In the past, 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. 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 County, 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 NO_x) in 2003 with a few exceptions where newer data was incorporated. The changes which affected the VOC and NO_x emissions included:

- (1) the incorporation of newer vehicle registration data (for 2014) for Clark and Floyd counties (provided by IDEM), and
- (2) the development and use of newer vehicle registration data (for 2016) for Bullitt County (KY), Jefferson County (KY), and Oldham County (KY).

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. Both counties had portions (the "original" portions) which had previously had a nonattainment/ maintenance status for the 1-hour ozone standard and portions (the "new" portions) which 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, reformulated gasoline (RFG) is required for the original nonattainment/ maintenance portions of Bullitt and Oldham counties while unregulated gasoline is used in the new nonattainment areas of those counties. 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, a choice had to be made concerning which one to use. The choice was made to use the characteristics of unregulated (conventional) gasoline since this was the more "conservative" choice. (It was more "conservative" because

this choice produces higher emission estimates and, therefore, reduces the margin by which conformity is passed.) LMAPCD received VMT and speed information by functional class from KIPDA. Using this data, LMAPCD developed emission estimates for each of the counties.

The assumptions used for Bullitt and Oldham counties were consistent with those for the 2003 ozone budget update. New VMT and speed estimates were developed as a part of the *Horizon 2035 development process*, and new 2016 vehicle registration data for Bullitt and Oldham counties was developed and approved in 2017.

RESULTS OF THE ANALYSIS

The transportation plan, *Horizon 2035*, 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 NO_x 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 (NO_x). The regional emissions analysis was conducted to provide estimates of the levels of emissions of VOCs and NO_x 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, and 2035, the summer weekday VOC and NO_x 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 *Horizon 2035* 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 *Horizon 2035* has met the requirements of conformity under the 1997 and 2015 8-hour ozone standards. In summary, it can be concluded that *Horizon 2035* 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	7339	25900	33239
2025	7871	27189	35060
2030	8394	28611	37005
2035	8932	29931	38863

TABLE 2

SUMMER WEEKDAY EMISSIONS FOR THE 8-HOUR MAINTENANCE AREA (kg/day)				
EMISSION LEVELS FOR VARIOUS YEARS				
YEAR	Area	VOCs	NOx	PASS
2020	Regional	12734	26501	YES
2025		9422	16531	YES
2030		6882	11819	YES
2035		5386	9487	YES

NOTE: The criteria for conformity are as follows:

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

Performance-Based Planning and Programming

Per federal regulation [23 USC 150\(b\)](#), MPOs must take a performance-based approach to planning and programming by incorporating Federal Transit Administration (FTA) performance measures and PM 1, PM 2, and PM 3 issued by the Federal Highway Administration (FHWA).

The Louisville/Jefferson County KY-IN Metropolitan Planning Organization (MPO) intends to incorporate into the metropolitan transportation planning process 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*. In cooperation with regional and state planning partners, targets have been (and will continue to be) established for the FTA and FHWA performance measures.

[KIPDA's Performance Management Plan \(PMP\)](#) outlines the federally-required performance measures, both FHWA-required and FTA-required. At the discretion of KIPDA's Transportation Policy Committee (TPC), KIPDA has also included MPO-developed performance measures in addition to what is federally-required. The PMP details all of the baseline data, historical data, performance targets, and target-setting methodology for all performance measures. The PMP is updated when new data is made available, when performance targets are established, and when progress made towards achieving the targets is reported.

Performance management is integrated into a variety of transportation planning activities, including:

- The Planning Process Memorandum of Agreement (MOA) by and between KIPDA, INDOT, KYTC, and Transit Authority of River City (TARC) that details KIPDA's metropolitan transportation planning effort, coordination responsibilities, and the creation of this PMP.
- [Unified Planning Work Program \(UPWP\)](#)
- [Metropolitan Transportation Plan \(MTP\)](#)
- [Transportation Improvement Program \(TIP\)](#) and the Project Management Processes for both Kentucky and Indiana
- [Congestion Management Process \(CMP\)](#)
- [Participation Plan](#)
- [Freight Mobility Study](#)
- [KIPDA Online Resource Center](#)
- Any other relevant planning documents, programs, and procedures

KIPDA Performance Measures, Baselines, and Targets

The following are the performance measures adopted by the KIPDA Transportation Policy Committee:

SAFETY				
REQUIRED BY:	PERFORMANCE MEASURE	BASELINE	BASELINE	TARGET
FHWA	<u>S1</u> Number of Fatalities	125.8	Fatalities (2013-2017 5-year rolling average)	133.7
FHWA	<u>S2</u> Fatality Rate	1.14	Fatalities per 100 million VMT (2013-2017 5-year rolling average)	1.18
FHWA	<u>S3</u> Number of Serious Injuries	877.7	Serious Injuries (2013-2017 5-year rolling average)	766.0
FHWA	<u>S4</u> Serious Injury Rate	7.93	Serious Injuries per 100 million VMT (2013-2017 5-year rolling average)	6.74
FHWA	<u>S5</u> Number of Non-Motorized Fatalities and Serious Injuries	104.0	Non-Motorized Fatalities and Serious Injuries (2013-2017 5-year rolling average)	114.5
MPO	<u>S6</u> Crash Rate	399.0	Crashes per 100 million VMT (2012-2016 5-year rolling average)	Reduce by 20% by 2040 to 319 crashes per 100 million VMT

TRANSIT				
REQUIRED BY:	PERFORMANCE MEASURE	BASELINE	BASELINE	TARGET
RIDERSHIP				
MPO	<u>T1</u> Transit Ridership	11,811,902	Boardings on TARC buses during FY 2017	Increase by 20% by 2040 to 14,174,282 boardings
AGE OF FLEET				
FTA	<u>(a)</u> Percent of non-revenue vehicles exceeding the useful life benchmark (ULB)	TBD	% of TARC's non-revenue vehicle fleet (equipment) above the ULB	≤ 10% of non-revenue service vehicles exceed default ULB of 8 years
	<u>(b)</u> Percent of revenue vehicles exceeding the useful life benchmark (ULB)	TBD	% of TARC's revenue vehicle fleet (rolling stock) above the ULB	≤ 10% of bus fleet exceeds ULB of 15 years/600K miles ≤ 5% of cutaway bus fleet exceeds ULB of 10 years/300K miles

TRANSIT ACCESS TO CLUSTERS AND SCHOOLS					
MPO	(a)	Community Access Clusters served by transit	91.03%	of land area within these clusters are within ¼ mile of a transit route	Increase to 100% by 2040
	(b)	High Density Medical Clusters served by transit	100%	of land area within these clusters are within ¼ mile of a transit route	Maintain at current levels in 2040
	(c)	High Density Shopping Clusters served by transit	100%	of land area within these clusters area within ¼ mile of a transit route	Maintain at current levels in 2040
	(d)	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
MPO	T4	Enhance transit access to schools	230	Schools are within ¼ mile of a transit route	Increase by 20% by 2040 to 276 schools
HEADWAY TIME					
MPO	T5	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
PARK AND RIDE LOTS AND RIDESHARE					
MPO	T6	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	(a)	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
	(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
MPO	T8	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	T9	Percent of facilities rated under 3.0 on the TERM scale	TBD	% of facilities within an asset class, rated below condition 3 on the TERM scale	<p>≤ 10% of facilities rated under 3.0 on the TERM scale</p> <p>Each On-Route Bus Charging Station > 3.0 on the TERM scale</p> <p>USTA Emergency Power Station at ≥ 95% availability</p>

NON-MOTORIZED

REQUIRED BY:	PERFORMANCE MEASURE	BASELINE		TARGET	
BICYCLE AND PEDESTRIAN SAFETY					
MPO	<u>(a)</u>	Reduce number of crashes involving pedestrians	555.2	Crashes involving pedestrians (2012-2016 5-year rolling average)	Reduce by 20% by 2040 to 444 crashes involving pedestrians
	<u>(b)</u>	Reduce number of crashes involving bicyclists	238.0	Crashes involving bicyclists (2012-2016 5-year rolling average)	Reduce by 20% by 2040 to 190 crashes involving bicyclists
BICYCLE AND PEDESTRIAN NETWORK					
MPO	<u>(a)</u>	Reduce gaps in the existing pedestrian network	212.0	# of miles of gaps in the pedestrian network (within 1 mile of existing facilities on the same roadway)	Reduce by 20% by 2040 to 169.6 miles of gaps in the pedestrian network
	<u>(b)</u>	Reduce gaps in the existing bicycle network	40.0	# of miles of gaps in the bicycle network (within 1 mile of existing facilities on the same roadway)	Reduce by 20% by 2040 to 32.0 miles of gaps in the bicycle network
BICYCLE AND PEDESTRIAN ACCESS TO SCHOOLS AND CLUSTERS					
MPO	<u>(a)</u>	Enhance pedestrian access to schools	291	Schools are located within ¼ mile of pedestrian facilities	Increase by 20% by 2040 to 349 schools
	<u>(b)</u>	Enhance dedicated bicycle access to schools	71	Schools are located within ¼ mile of dedicated bicycle facilities	Increase by 20% by 2040 to 85 schools
MPO	<u>(a)</u>	Enhance pedestrian access within Community Access Clusters	296.8	Miles of pedestrian facilities inside these clusters	Increase by 10% by 2040 to 326.5 miles of pedestrian facilities
	<u>(b)</u>	Enhance dedicated bicycle facilities leading to and within Community Access Clusters	129.1	Miles of dedicated bicycle facilities inside these clusters and within 1 mile of the boundary	Increase by 10% by 2040 to 142.0 miles of bicycle facilities
MPO	<u>(a)</u>	Enhance pedestrian access within High Density Medical Clusters	73.4	Miles of pedestrian facilities inside these clusters	Increase by 10% by 2040 to 80.7 miles of pedestrian facilities
	<u>(b)</u>	Enhance dedicated bicycle access leading to and within High Density Medical Clusters	64.4	Miles of dedicated bicycle facilities inside these clusters and within 1 mile of the boundary	Increase by 10% by 2040 to 70.8 miles of bicycle facilities
MPO	<u>(a)</u>	Enhance pedestrian access within High Density Shopping Clusters	142.9	Miles of pedestrian facilities inside these clusters	Increase by 10% by 2040 to 157.2 miles of pedestrian facilities
	<u>(b)</u>	Enhance dedicated bicycle access leading to and within High Density Shopping Clusters	78.9	Miles of dedicated bicycle facilities inside these clusters and within 1 mile of the boundary	Increase by 10% by 2040 to 86.8 miles of bicycle facilities

ECONOMIC IMPACT

REQUIRED BY:	PERFORMANCE MEASURE	BASELINE	TARGET
MPO	<p><u>(a)</u> Enhance transit access leading to High Density Employment Clusters</p>	1,117 Miles of transit routes within 1 mile of the boundary of these clusters	Increase by 20% by 2040 to 1,340 miles of transit routes
	<p><u>E1</u> <u>(b)</u> Enhance pedestrian facilities within High Density Employment Clusters</p>	384.1 Miles of pedestrian facilities inside these clusters	Increase by 10% by 2040 to 423 miles of pedestrian facilities
	<p><u>(c)</u> Enhance dedicated bicycle facilities leading to and within High Density Employment Clusters</p>	126.2 Miles of dedicated bicycle facilities inside these clusters and within 1 mile of the boundary	Increase by 10% by 2040 to 139 miles of bicycle facilities
MPO	<p><u>(a)</u> Enhance pedestrian facilities within areas of moderate to significant employment growth</p>	268.4 Miles of pedestrian facilities inside areas of moderate to significant employment growth	Increase by 10 % by 2040 to 295.2 miles of pedestrian facilities
	<p><u>E2</u> <u>(b)</u> Enhance dedicated bicycle facilities leading to and within areas of moderate to significant employment growth</p>	45.1 Miles of dedicated bicycle facilities inside areas of moderate to significant employment growth and within 1 mile of the boundary	Increase by 10% by 2040 to 49.6 miles of bicycle facilities

MOTOR VEHICLE ACCESS

REQUIRED BY:	PERFORMANCE MEASURE	BASELINE	TARGET
LEVEL OF TRAVEL TIME RELIABILITY			
FHWA	<u>V1</u> Level of Travel Time Reliability (LOTTR) on the Interstate	KIPDA supports the statewide targets set forth by KYTC and INDOT by planning and programming projects that contribute to the accomplishment of each state's Interstate LOTTR target	
FHWA	<u>V2</u> Level of Travel Time Reliability (LOTTR) on the non-Interstate NHS	KIPDA supports the statewide targets set forth by KYTC and INDOT by planning and programming projects that contribute to the accomplishment of each state's non-Interstate NHS LOTTR target	
CONGESTION			
MPO	<u>V3</u> Maintain or improve level of service on Interstates at LOS D or worse	56.5% of Interstate and freeway roadway miles were at LOS D, E, or F in 2016	≤ 56.5% of Interstate and freeway roadway miles at LOS D, E, or F in 2040
MPO	<u>V4</u> Maintain or improve level of service on arterials at LOS D or worse	28.0% of arterial roadway miles were at LOS D, E, or F in 2016	≤ 28.0% of arterial roadway miles at LOS D, E, or F in 2040

ROADWAY MAINTENANCE

REQUIRED BY:	PERFORMANCE MEASURE	BASELINE	TARGET
PAVEMENT CONDITION			
FHWA	(a) Percent of pavements in "Good" condition on Interstates	46.2% of pavements in "Good" condition	50.0% of pavements in "Good" condition on Interstates by 2022
MPO	M1 (b) Percent of pavements in "Borderline" condition on Interstates	13.0% of pavements in "Borderline" condition	10.0% of pavements in "Borderline" or worse condition on Interstates by 2022
FHWA	(c) Percent of pavements in "Poor" condition on Interstates	1.9% of pavements in "Poor" condition	1.0% of pavements in "Poor" condition on Interstates by 2022
FHWA	(a) Percent of pavements in "Good" condition on non-Interstate NHS	24.9% of pavements in "Good" condition	27.0% of pavements in "Good" condition on non-Interstate NHS by 2022
MPO	M2 (b) Percent of pavements in "Borderline" condition on non-Interstate NHS	16.0% of pavements in "Borderline" condition	13.5% of pavements in "Borderline" or worse condition on non-Interstate NHS by 2022
FHWA	(c) Percent of pavements in "Poor" condition on non-Interstate NHS	3.9% of pavements in "Poor" condition	3.5% of pavements in "Poor" condition on non-Interstate NHS by 2022
BRIDGE CONDITION			
FHWA	M3 (a) Percent of deck area in "Good" condition on bridges carrying the NHS	30.5% of deck area in "Good" condition	30.5% of deck area in "Good" condition on bridges carrying the NHS by 2022
FHWA	(b) Percent of deck area in "Poor" condition on bridges carrying the NHS	10.5% of deck area in "Poor" condition	7.1% of deck area in "Poor" condition on bridges carrying the NHS by 2022
MPO	M4 (a) Percent of bridges on functionally classified roads that are in "Good" condition	27.8% of bridges in "Good" condition	Increase by 50% by 2040 to 41.7% of bridges in "Good" condition
MPO	(b) Percent of bridges on functionally classified roads that are in "Poor" condition	6.9% of bridges in "Poor" condition	Reduce by 50% by 2040 to 3.5% of bridges in "Poor" condition

FREIGHT MOVEMENT			
REQUIRED BY:	PERFORMANCE MEASURE	BASELINE	TARGET
MPO	F1 Maintain or improve roadways on the KIPDA Freight Network that are LOS D or worse	TBD % of roadways on the KIPDA Freight Network were at LOS D, E, or F in 2016.	TBD % of KIPDA Freight Network at LOS D, E, or F in 2040
MPO	F2 Number of locations on the KIPDA Freight Network within 1 mile of Freight Clusters where roadway geometry and/or restrictions impede freight movement	TBD # of locations that impede freight movement	Reduce by 10% by 2040
FHWA	F3 Truck Travel Time Reliability (TTTR) on the Interstate	KIPDA supports the statewide targets set forth by KYTC and INDOT by planning and programming projects that contribute to the accomplishment of each state's TTTR target	

AIR QUALITY			
REQUIRED BY:	PERFORMANCE MEASURE	BASELINE	TARGET
MPO	A1 Meet or do better than mobile source budgets in the State Implementation Plan (SIP)	TBD MTP Air Quality Analysis	Meet or do better than mobile source budgets in the SIP

Investment Priorities

Although still in the early stages of performance-based transportation planning and programming, we anticipate that the projects in this Horizon 2035 MTP may have a positive impact on the achievement of performance targets.

As described in KIPDA's [Project Management Processes](#) for both Kentucky and Indiana, projects that address performance targets are more likely to receive a higher priority in the future for [Transportation Improvement Program](#) (TIP) funding. The effects of project selection and implementation through the TIP is anticipated to help achieve the established performance targets, both federally-required and MPO-developed, which are identified herein and expanded upon in the [Performance Management Plan](#).

Reporting Process

For each performance measure, KIPDA will report on data sources, baseline data, historical data, performance targets, and target-setting methodology in the [Performance Management Plan](#).

On a regular basis, KIPDA will report the necessary performance-based feedback to the Transportation Policy Committee, as well as to our federal, state, local, and community planning partners.

KIPDA will report on progress towards achieving performance targets, both federally-required and MPO-developed performance targets, in periodic Performance Period Reports.

Group Project Categories for MTP and TIP

The intent of including Group Projects in the Metropolitan Transportation Plan and Transportation Improvement Program is to recognize the collective contributions of relatively small scale transportation projects to the region's transportation system. The Group Project concept also serves as a means to more efficiently advance projects through the transportation planning process.

MTP

The Group Project categories will be included in the MTP in order to provide for financial accountability of relatively small scale projects and studies that may not be listed individually in the MTP.

The Group Project Categories in the MTP are considered Financial Place Holders.

All Group Project categories will be based on mode or purpose and are not subject to subdivision based on local jurisdiction or project sponsor. Within each state, Group Categories are available for all jurisdictions and sponsors.

TIP

With appropriate demonstration of fiscal constraint, Group Project categories are eligible for inclusion in the TIP. Group Project categories allow for an administrative modification of the TIP to include eligible new projects.

Without exception, Group Project categories in the TIP must be the same as those in the MTP.

For a project to be considered for administrative modification based on a Group Category, the following are required:

- The proposed project or program meets the eligibility requirement of a Group Project
- The proposed project or program meets the guidelines and standards for being added to the TIP through the Administrative Modification process.

KIPDA Performance Management Plan

The anticipated performance-based contributions of projects and programs that meet eligibility requirements of a Group Project category (and are added to the TIP through amendment or administrative modification) will be accounted for in the KIPDA Performance Management Plan.

GROUP CATEGORIES FOR THE MTP AND TIP

Air Quality Improvements

Projects and programs in the Air Quality Improvements Group are intended to provide for a healthier region by reducing mobile source air pollutants.

Examples of Air Quality Improvements include, but are not limited to:

- Ridesharing and vanpooling
- Park and ride facilities
- Traffic flow improvement programs that demonstrate emissions reductions
- Programs for improved public transit
- Bicycle and pedestrian improvements (not including the rehabilitation of existing facilities)
- Employer-based transportation management plans, including incentives

For projects and programs to be considered for the Air Quality Improvements Group, the projects and programs:

- Must contribute to improving air quality and meet any of the project and program criteria as defined in Section 108(f) of the Clean Air Act of 1990
- Must contribute to meeting KIPDA Performance Targets
- May not have a total project cost in excess of \$1,000,000
- May not be considered regionally significant as defined in 23 CFR 450.104
- May contribute to a reduction in vehicle miles travelled
- Must be categorized as an Air Quality Exempt project as defined in 40 CFR 93.126 and 93.127

Bicycle and Pedestrian Improvements

Projects and programs in the Bicycle and Pedestrian Improvements Group are intended to enhance connectivity for functional trips undertaken by cyclists and pedestrians.

Examples of Bicycle and Pedestrian Improvements include, but are not limited to:

- Sidewalks
- Bicycle lanes
- Shared use paths
- Crosswalks and cross signals
- Pedestrian islands
- Rehabilitation of existing pedestrian and bicycle facilities
- Curb ramps
- Signage

For projects and programs to be considered for the Bicycle and Pedestrian Improvements Group, the projects and programs:

- Must improve modal connectivity for cyclists and pedestrians completing functional trips
- May not have a total project cost in excess of \$1,000,000
- Must contribute to meeting KIPDA Performance Targets
- May not be considered regionally significant as defined in 23 CFR 450.104
- Must be categorized as an Air Quality Exempt project as defined in 40 CFR 93.126 and 93.127
- Must meet ADA accessibility requirements as defined by 28 CFR 35.151
- Are encouraged to:
 - Support the KIPDA Bicycle and Pedestrian planning process
 - Improve bicycle and pedestrian connectivity with transit
 - Reduce automotive trips, trip length, and mobile source emissions
 - Rehabilitate existing bicycle and pedestrian facilities that have deteriorated
 - Assist with meeting ADA requirements

Roadway and Bridge Preservation and Rehabilitation

Projects in the Roadway and Bridge Preservation and Rehabilitation Group are intended to protect and maintain the transportation infrastructure in an efficient manner.

Examples of Roadway and Bridge Rehabilitation include, but are not limited to:

- Pavement resurfacing
- Roadway and bridge rehabilitation
- Preventative maintenance
- Bridge replacement
- Bridge painting
- Bridge inspection

For projects to be considered for the Roadway and Bridge Preservation and Rehabilitation Group, the projects:

- Must preserve the existing roadways and or bridges, retard their future deterioration, and/or contribute to a more safe travelling experience,
- May not have a total project cost in excess of \$15,000,000
- Must contribute to meeting KIPDA Performance Targets
- May not be considered regionally significant as defined in 23 CFR 450.104
- Must be categorized as an Air Quality Exempt project as defined in 40 CFR 93.126 and 93.127

Roadway Operational Improvements

Projects and programs in the Roadway Operational Improvements Group are generally considered low-cost traffic improvements that do not add either capacity for single occupant vehicles or additional roadway miles.

Examples of Roadway Operational Improvements include, but are not limited to:

- Signal timing optimization
- Turning lanes
- Pavement striping
- Lane assignment changes
- Signage and lighting

For projects and programs to be considered for the Roadway Operational Improvements Group, the projects and programs:

- Must improve the flow of traffic
- May not have a total project cost in excess of \$1,000,000
- Must contribute to meeting KIPDA Performance Targets
- May not be considered regionally significant as defined in 23 CFR 450.104
- Must be categorized as an Air Quality Exempt project as defined in 40 CFR 93.126 and 93.127

Safety Improvements

Projects and programs in the Safety Improvements Group are intended to reduce crashes on all public roadways and transit.

Examples of Safety Improvements include, but are not limited to:

- Guardrails
- Signage
- Lighting improvements
- Pedestrian crosswalks and crossing signals
- Intersection improvements
- Access to transit stops
- Transit boarding and alighting
- Education and awareness programs
- Railroad / Roadway Crossing Improvements

For projects and programs to be considered for the Safety Improvements Group, the projects and programs:

- Must contribute to reducing crashes, including those that involve bicyclists or pedestrians; or enhance public transportation safety

- May not have a total project cost in excess of \$1,000,000
- Must contribute to meeting KIPDA Performance Targets
- May not be considered regionally significant as defined in 23 CFR 450.104
- Must be categorized as an Air Quality Exempt project as defined in 40 CFR 93.126 and 93.127
- Are encouraged to:
 - Address safety concerns found at the KIPDA High Crash Locations
 - Consider the *FHWA Proven Safety Countermeasures*
 - Consider HSIP Eligible projects criteria as defined in 23 USC 148(a)(4)(B)
 - Support the *National Public Transportation Safety Plan*
 - Support the *Public Transportation Agency Safety Plan* as defined in 49 CFR Part 673

Transit Improvements

Projects and programs in the Transit Improvements Group are intended to enhance the operation of public transit and to contribute to maintaining, and when possible increasing, its utilization.

Examples of Transit Improvements include, but are not limited to:

- Bus stop improvements
- On-board transit amenities
- Facility improvements
- Bicycle and pedestrian facilities that improve non-motorized access to transit
- Park and ride facilities
- Transit education and awareness programs
- Rolling stock purchases, updates, and modifications

For projects and programs to be considered for the Transit Improvements Group, the projects and programs:

- Must contribute to enhancing the operation of public transit and contribute to maintaining, and when possible, increasing its utilization
- May not have a total project cost in excess of \$1,000,000
- Must contribute to meeting KIPDA Performance Targets
- May not be considered regionally significant as defined in 23 CFR 450.104
- Must be categorized as an Air Quality Exempt project as defined in 40 CFR 93.126 and 93.127

Transportation Enhancements

Projects and programs in the Transportation Enhancement Group are intended to provide for transportation related environmental mitigation and beautification to the transportation system.

Examples of Transportation Enhancements include, but are not limited to:

- Streetscapes

- Landscaping
- Storm water management
- Pedestrian and cyclist amenities such as benches and bicycle racks
- Inventory control or removal of outdoor advertising
- Preservation and rehabilitation of historic transportation facilities

For projects and programs to be considered for the Transportation Enhancements Group, the projects and programs:

- Must contribute to enhancing the transportation system
- May not have a total project cost in excess of \$1,000,000
- May not be considered regionally significant as defined in 23 CFR 450.104
- Must be categorized as an Air Quality Exempt project as defined in 40 CFR 93.126 and 93.127

Transportation Studies

The Transportation Studies Group is intended to facilitate the research, review, and consideration of solutions to various transportation issues and enhancements.

Examples of Transportation Studies include, but are not limited to:

- Corridor studies
- Transit studies
- Bicycle facilities studies
- Pedestrian facilities studies
- Anticipated demographic changes and Transportation Demand Management

For studies to be considered for the Transportation Studies Group, the studies:

- Must contribute to a more informed decision making process, as well as a more efficient and expeditious project and program development and advancement,
- May not have a total project cost in excess of \$1,000,000
- Must demonstrate consideration of contributing to achieving KIPDA Performance Targets
- When applicable, are encouraged to:
 - Include consideration of various modal opportunities
 - Include consideration of TSMO strategies (including ITS and TDM)
 - Include a well-rounded community engagement process, including early and continuous involvement
 - Include consideration of KIPDA's Congestion Management Process
 - Include consideration of KIPDA's Environmental Justice Resource Document