



**TRANSPORTATION POLICY COMMITTEE**  
**1:00 p.m., Thursday, January 23, 2014**  
**KIPDA Burke Room**  
**11520 Commonwealth Drive**  
**Louisville, Kentucky 40299**

**AGENDA**

**Kentucky  
Member  
Counties**

Bullitt

1. *Call to Order, Welcome, Introductions*

Henry

2. *November 26 Meeting Minutes* – Review and approval (see enclosed). **Action is requested.**

Jefferson

Oldham

3. *Public Comment Period*

Shelby

4. *Public Meeting Report* – Staff will report on public involvement activities.

Spencer

Trimble

5. *Horizon 2030 Metropolitan Transportation Plan (MTP)* - Staff will present proposed amendments to the document (see enclosed). **Action is requested.**

**Indiana  
Member  
Counties**

6. *FY 2014-2017 Transportation Improvement Program (TIP)* – Staff will present proposed amendments to the document (see enclosed). **Action is requested.**

Clark

7. *Coordinated Human Services Transportation Plan* - The Transportation Policy Committee will be asked to accept the Vision Statement, Goals, and Objectives drafted for the plan (see enclosed). **Action is requested.**

Floyd

8. *FY 2014-2017 Transportation Improvement Program (TIP)* – Staff will present information on Administrative Modifications to the short range funding document.

9. *Transportation Policy Committee Officers* – Chair and Vice-Chair for 2014 will be discussed by the Committee.

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10. *Other Business*

11. *Adjourn*

**Auxiliary aids/services are available when requested 3 business days in advance.**



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**See**  
**<http://www.ridetarc.org/tripplan/>**  
**for TARC service**

**MINUTES**  
**TRANSPORTATION POLICY COMMITTEE (TPC)**  
**Tuesday, November 26, 2013, 10:00 a.m.**  
**Marriott Louisville East – Bluegrass Salon B**  
**1903 Embassy Square Boulevard**  
**Louisville, Kentucky 40299**

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**Call to Order**

Chair J. Byron Chapman called the meeting to order at 10:07 a.m. After introductions were made, it was determined that a quorum was present.

**Review and Approval of Minutes**

**Patti Clare, Louisville Metro Government, made a motion to approve the minutes of the October meeting. Jim Ude, Indiana Department of Transportation (INDOT) – Seymour, seconded the motion and it carried with a unanimous vote.**

**Public Comment Period**

Nancy Snow, TARC, invited TPC members to a transportation summit at the Louisville Zoo on January 29, 2014, at 1:00 p.m.

**Public Meeting/Comment Report**

Larry Chaney, KIPDA staff, reported on recent and upcoming public involvement activities.

**Kentucky Congestion Mitigation Air Quality (CMAQ) Funding Priorities**

Mary Lou Hauber, KIPDA staff, presented proposed priorities for CMAQ funds in Kentucky. **Sherry Conner, City of Shively, made a motion to approve the proposed priorities. Bernard Bowling, City of Saint Matthews, seconded the motion and it carried with a unanimous vote.**

**Kentucky STP-Urban (SLO) Funding Priorities**

Mary Lou Hauber, KIPDA staff, presented revised priorities for dedicated STP funds for Kentucky. There was discussion. **Melanie Roberts, Bullitt County, made a motion to approve the revised priorities. Sherry Conner, City of Shively, seconded the motion and it carried with a unanimous vote.**

**FY 2014-2017 Transportation Improvement Program (TIP)**

Mary Lou Hauber, KIPDA staff, presented information on Administrative Modifications to the short range funding document. No action was required.

**Other Business**

David Burton, KIPDA staff, thanked the committee members for their involvement, engagement and time on ***Connecting Kentuckiana***, the long range planning document.

Jack Couch, KIPDA Executive Director, thanked the committee members for their dedication and partnerships, and wished everyone a happy holiday season.

**Adjournment**

The meeting was adjourned at 10:33 a.m.

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Larry D. Chaney  
Recording Secretary

**Members Present:**

Melanie Roberts	Bullitt County
Bill Dieruf	City of Jeffersontown
Jeff Gahan	City of New Albany
Sherry Conner	City of Shively
Bernard Bowling	City of St. Matthews
Jim Ude	Indiana Department of Transportation – Seymour
J. Byron Chapman	Jefferson County League of Cities
Thomas Witt	Kentucky Transportation Cabinet
*Matt Bullock	Kentucky Transportation Cabinet – District 5
Patti Clare	Louisville Metro Government
*Emily Liu	Louisville Metro Planning & Design
Brian Sinnwell	Louisville Regional Airport Authority
John Black	Oldham County
Trish Fraser	Town of Clarksville
Aida Copic	Transit Authority of River City

**Members Absent:**

David Flowe	City of Charlestown
Mike Moore	City of Jeffersonville
Jack Coffman	Clark County
*Tommy Dupree	Federal Aviation Administration – Memphis
*Michelle Allen	Federal Highway Administration – Indiana
*Greg Rawlings	Federal Highway Administration – Kentucky
*Robert Buckley	Federal Transit Administration – Region 4
Stephen Bush	Floyd County
Karl Browning	Indiana Department of Transportation
*Krista Mills	U.S. Department of Housing & Urban Development

**Others Present:**

Lee Klieman	Bernardin-Lochmueller & Associates
Lisa Craddock	Bullitt County
Matt Meunier	City of Jeffersontown
Ted Stone	Corradino Group
Judi Hickerson	Kentucky Transportation Cabinet – District 5
David Burton	KIPDA
Stacey Burton	KIPDA
Larry Chaney	KIPDA
Jack Couch	KIPDA
Amana Deatherage	KIPDA
Gina Marie Guiles	KIPDA
Mary Lou Hauber	KIPDA
Andy Rush	KIPDA
Randy Simon	KIPDA
Dee Lynch	Louisville Metro Air Pollution Control District
Tom Nord	Louisville Metro Air Pollution Control District
Jerry Miller	Louisville Metro Council
Deana Epperly-Karem	Oldham County Chamber & Economic Development
Nancy Snow	Transit Authority of River City
Tim Emington	TRIMARC

\* Denotes Advisory Members



MEMORANDUM

Kentucky Member Counties

TO: Transportation Policy Committee

FROM: Mary C. Hauber

Bullitt

DATE: January 16, 2014

Henry

SUBJECT: Amendment of the Horizon 2030 Metropolitan Transportation Plan and the FY 2014 – FY 2017 Transportation Improvement Program

Jefferson

Oldham

Shelby

KIPDA has been requested to amend the *Horizon 2030 Metropolitan Transportation Plan* and the *FY 2014 – FY 2017 Transportation Improvement Program*. Attached, please find the proposed amendments to the Metropolitan Transportation Plan and the TIP, a summary of the Interagency Consultation meeting, and the air quality conformity documentation.

Spencer

Trimble

Indiana Member Counties

The projects proposed for amendment to the Metropolitan Transportation Plan were examined and it was determined that a regional emissions analysis was necessary, conducted, and shown to pass conformity. The projects proposed for amendment to the TIP are either currently included in, or proposed for amendment to, the Horizon 2030 Metropolitan Transportation Plan. The TIP is a subset of the Metropolitan Transportation Plan and therefore the conformity analysis is performed on the Plan and not the TIP.

Clark

Floyd

The project changes proposed for both documents, Interagency Consultation meeting summary, and air quality conformity documentation were available for public review from December 24 through January 10 at public libraries and on the KIPDA website. A public open house was held on January 6 at the Middletown Branch Public Library. No public comments were received pertaining to these amendments.

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Action is requested

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**Amendment 9 of Horizon 2030 Metropolitan Transportation Plan  
Amendment 1 of FY 2014 - FY 2017 Transportation Improvement Program  
January 2014**

KIPDA ID	State ID	Project Name	Project Description	Project Sponsor	Description of Plan Amendment	Description of TIP Amendment	Effect on AQ Analysis
<b>INDIANA PROJECTS</b>							
		Big 4 Sidewalk Connections to TARC Services	Construct sidewalk improvements on various roads from the Big 4 Bridge to transit routes on Court Ave. to assist the elderly and disabled.	Jeffersonville	Add to Plan; \$47,674; Open to Public in 2014.	Add to TIP; FY 2014 Construction \$38,139 federal and \$47,674 total; Section 5317 funds.	Exempt per 93.126
		Charlestown Road Corridor Complete Streets	Construction of sidewalks along Charlestown Road from Sunset Dr. to County Line Road.	Floyd County	Add to Plan; \$625,000; Open to Public in 2016.	Add to TIP; FY 2015 Construction \$500,000 federal and \$625,000 total; CMAQ funds.	Exempt per 93.126
		Heavy Haul Road	Construction of a new 2 lane road from the Port of Indiana to I-265, and construction of a 3 lane road from the I-265/Old Salem Road interchange through River Ridge to IN 62. The project will also identify a direct railroad route from the Port of Indiana to River Ridge.	INDOT	Add to Plan; \$22,500,000; Open to Public in 2016.	Add to TIP; FY 2014 PE \$2,400,000, Local funds; FY 2015 ROW \$700,000, Local funds; FY 2016 Construction \$5,750,000, Local funds; FY 2016 Construction \$13,250,000 federal and \$13, 650,000 total, STP-State funds.	Regionally significant; Add project to 2020 and 2030 scenarios
370		Kentuckiana Air Education	Kentuckiana Air Education (KAIRE): Ozone prevention and awareness program.	APCD	No change to Plan	Additional funding; Add FY 2016 \$200,000 federal and \$250,000 total; Add FY 2017 \$200,000 federal and \$250,000 total; CMAQ funds.	Exempt per 93.126
	1382761	Various Bridge Inspections	Quality assurance/quality control program on both State and County bridge inspection data.	INDOT	Add to Plan; \$250,000; Open to public in 2015.	Add to TIP; FY 2014 PE \$200,000 federal and \$250,000 total; Bridge funds.	Exempt per 93.126
<b>KENTUCKY PROJECTS</b>							
1662		AB Sawyer Greenway Shared Use Path	Construct a 2,800' long, 10' wide multiuse path through A.B. Sawyer Park and connecting to surrounding neighborhoods includes an underpass, bridge, and site amenities.	Louisville Metro Parks	Change description to "Construct a multiuse path through A.B. Sawyer Park and connecting to surrounding neighborhoods includes an underpass, bridge, and site amenities, and construction of pedestrian facilities along Hurstbourne Pkwy from Middle Fork of Beargrass Creek bridge to Ormsby Station Road and connect to A.B. Sawyer Park Greenway."	Change Description to same as Plan.	Exempt per 93.126
		Bus Shelters and Accommodations	Installation of new bus shelters and construction of curb cuts and physical improvements which shall include markings of identified bus stops.	Bullitt County	Add to Plan; \$101,000; Open to Public in 2014.	Add to TIP; FY 2014 Transit Capital \$80,800 federal and \$101,000 total; Section 5317 funds.	Exempt per 93.126

**Amendment 9 of Horizon 2030 Metropolitan Transportation Plan  
Amendment 1 of FY 2014 - FY 2017 Transportation Improvement Program  
January 2014**

KIPDA ID	State ID	Project Name	Project Description	Project Sponsor	Description of Plan Amendment	Description of TIP Amendment	Effect on AQ Analysis
		ESCOT Promotion-Oldham County Employment Shuttle	Continuation of promotion and marketing efforts related to Oldham Public Bus's employment service. Employment Shuttle Connecting Oldham and TARC (ESCOT).	City of LaGrange	No change to Plan	Add to TIP; FY 2014 Operations \$8,640 federal and \$10,800 total; JARC funds.	Exempt per 93.126
		I- 65	Operational improvements to reduce congestion and improve safety at the I-65/I-264 interchange.	KYTC	Add to Plan; \$50,000,000; Open to Public in 2025.	Project is not in TIP	Regionally significant; Add to 2030 scenario
		KY 44 Bridge	Rehabilitate bridge approaches on Bridge ID #015B00020N in Bullitt County. MP 10.00 to MP 10.250.	KYTC	Add to Plan; \$1,400,000; Open to Public in 2018.	Project is not in TIP	Exempt per 93.126
956		KY 155	Widen KY 155 (Taylorsville Road) from 2 to 3 lanes (3rd lane will be a center turn lane) from I-265 to KY 148.	KYTC	Change description to "Widen KY 155 (Taylorsville Road) from 2 to 4 lanes from I-265 to KY 148, to include accommodations for all modes." Increase Plan project cost to \$19,500,000.	Project is not in TIP	Regionally significant; Include additional lane in 2020 and 2030 scenarios
1877		KY 329	Intersection realignment/reconstruction at KY 329 and KY 329 Bypass.	Oldham County	No change to Plan	Move FY 2014 PE to future; STP-Urban funds.	Open to Public date is 2020. No change to model.
465	437.00	KY 907	Widen KY 907 and KY 1020 (Southside Drive) from 2 to 5 lanes (5th lane will be a center turn lane) from KY 1865 (New Cut Road) to Strawberry Lane. The design will include the consideration of bicycle and pedestrian facilities. Project length is 1.1 miles	KYTC	No change to Plan	Delete from TIP; Delete FY 2016 ROW; STP-Urban funds.	Regionally significant; No change to model.
		KY 907	Construct minor roadway improvements to KY 907 (Southside Dr.) from KY 1865 (New Cut Road) to Strawberry Lane. Project length is 1.1 miles	KYTC	Add to Plan; \$1,500,000; Open to Public in 2017.	Add to TIP; FY 2016 ROW \$1,500,000; STP-Urban funds.	Exempt per 93.126
		KY 1447	Reduce congestion and improve safety on Westport Rd. at the Herr Lane and Washburn Road intersections.	KYTC	Add to Plan; \$6,200,000; Open to Public in 2020.	Project is not in TIP	Regionally significant; Add to 2020 and 2030 scenarios
1450		KY 1747	Extend dual left turn lanes on KY 1747 (Hurstbourne Parkway) at Bunsen Parkway.	KYTC	Change Open to Public date to 2015	Add to TIP; FY 2015 Design \$50,000 federal; FY 2015 Construction \$250,000 federal; STP-Urban funds.	Exempt per 93.127

**Amendment 9 of Horizon 2030 Metropolitan Transportation Plan  
Amendment 1 of FY 2014 - FY 2017 Transportation Improvement Program  
January 2014**

KIPDA ID	State ID	Project Name	Project Description	Project Sponsor	Description of Plan Amendment	Description of TIP Amendment	Effect on AQ Analysis
		KY 2050	Widen KY 2050 (Herr Lane) from KY 1447 (Westport Rd.) to KY 22 (Brownsboro Rd.) adding turn lanes and operational improvements as necessary to reduce congestion and improve safety.	KYTC	Add to Plan; \$5,080,000; Open to Public in 2020.	Project is not in TIP	Regionally significant; Add to 2020 and 2030 scenarios
		Louisville Loop Trail Bike and Pedestrian Crossing at KY 155	Construct a bike and pedestrian crossing at South Pope Lick Rd. and KY 155 connecting the Louisville Loop Trail at KY 155.	KYTC	Add to Plan; \$1,950,000; Open to Public in 2015.	Project is not in TIP	Exempt per 93.126
		Northeast Louisville Loop Section II	Design and construct a shared-use path system from Eastwood Cut-off Road to Eastwood Recreation Center.	Louisville Metro Parks	Add to Plan; \$500,000; Open to Public in 2016.	Add to TIP; FY 2014 Design, \$80,000 federal and \$100,000 total; STP-Urban funds.	Exempt per 93.126
		Passport Around Louisville Service	Jewish Family & Career Services will expand transportation availability under its Passport Around Louisville Service for same day medical appointments, as well as evening and weekend service.	Jewish Family & Career Services	Add to Plan; \$65,600; Open to Public in 2014.	Add to TIP; FY 2014 Operations \$32,800 federal and \$65,600 total; Section 5317 funds.	Exempt per 93.126
		Pedestrian Access to Transit Facilities	Construction of passenger amenities, sidewalks, curb cuts and boarding area pads at locations where access to fixed route service is obstructed or inadequate. Program will prioritize high passenger activity sites, and will be developed in conjunction with Metro Louisville and/or other local government entities. Funding will also be used to provide infrastructure management. Project was awarded as a result of the 2012 Competitive Selection Process, and in keeping with objectives of the Coordinated Plan.	TARC	No change to Plan	Add to TIP; FY 2014 Transit Capital \$184,383 federal and \$230,479 total; Section 5317 funds.	Exempt per 93.126
		Refugee Employment Training and Transportation	Catholic Charities Migration and Refugee Services provides extensive employment services for resettling refugees. A major component of these services is transportation to job related appointments, such as interviews, orientations, etc. This project is the purchase of a passenger van to be utilized solely for employment related services within the Migration and Refugee Resettlement Program.	Catholic Charities of Louisville, Inc.	No change to Plan	Add to TIP; FY 2014 Operations \$28,452 federal and \$35,565 total; JARC funds.	Exempt per 93.126

**Amendment 9 of Horizon 2030 Metropolitan Transportation Plan  
Amendment 1 of FY 2014 - FY 2017 Transportation Improvement Program  
January 2014**

KIPDA ID	State ID	Project Name	Project Description	Project Sponsor	Description of Plan Amendment	Description of TIP Amendment	Effect on AQ Analysis
		TARC Job Access Trips	This project will provide transportation services for paratransit trips to work that require travel beyond the minimal service area required by the Americans with Disabilities Act. The Americans with Disabilities Act requires that the service area for complimentary paratransit extend 3/4 mile from all fixed routes operated by the operator of public transportation services. Funding for trips beyond the minimal service area has been possible through the JARC program since 2000.	TARC	No change to Plan	Add to TIP; FY 2014 Operations \$483,460 federal and \$966,920 total; JARC funds.	Exempt per 93.126
1583		Watterson Trail Phase II	Widen Watterson Trail from 2 to 3 lanes from Ruckriegel Parkway to Maple Road.	Jeffersontown	Combine with KIPDA # 1584, Watterson Trail Phase III. Change description to "Widen Watterson Trail from 2 to 3 lanes from Ruckriegel Parkway to Maple Road, and widen Watterson Trail from 2 to 3 lanes from Old Taylorsville Road to Ruckriegel Parkway. Project to include streetscape enhancements to improve the corridor." Change Plan Project Cost to \$1,219,624; change Open to Public date to 2016.	Combine with KIPDA # 1584, Watterson Trail Phase III. Change description to "Widen Watterson Trail from 2 to 3 lanes from Ruckriegel Parkway to Maple Road, and widen Watterson Trail from 2 to 3 lanes from Old Taylorsville Road to Ruckriegel Parkway. Project to include streetscape enhancements to improve the corridor." Increase funding to FY 2014 Design \$117,480 federal; FY 2015 ROW \$154,262 federal; FY 2015 Utilities \$194,169 federal; and FY 2016 Construction \$509,788. STP-Urban funds.	Remove the combined project from the 2015 scenario. Exempt per 93.126
1584		Watterson Trail Phase III	Widen Watterson Trail from 2 to 3 lanes from Old Taylorsville Road to Grand Avenue.	Jeffersontown	Combine with KIPDA # 1583, Watterson Trail Phase II (above), delete this project.	Combine with KIPDA # 1583, Watterson Trail Phase II (above), delete this project.	Exempt per 93.126



**Interagency Consultation Conference Call  
Summary**

**December 10, 2013  
10:00 a.m. EST**

Participants

FHWA-KY	-- Bernadette Dupont
FHWA – IN	-- Michelle Allen
EPA-Region 4	-- Dianna Smith
IDEM	-- Shawn Seals
KYTC	-- Justin Harrod, Thomas Witt
KYDAQ	-- Joe Forgacs
TARC	-- Aida Copic
APCD	-- Craig Butler
KIPDA	-- Mary Lou Hauber, Andy Rush, Amanda Deathrage, and Randy Simon

Background

Recently, KIPDA staff has undertaken the steps necessary to amend the Metropolitan Transportation Plan and the FY 2014 – FY 2017 Transportation Improvement Program. KIPDA staff compiled a list of proposed project changes and distributed it—via e-mail—to the members of the Interagency Consultation group (IAC/ICG) on December 3, 2013 along with recommendations about how these changes should be handled with respect to the regional emissions analysis.

Discussion of Schedule

The amendment schedule of activities was discussed and there was concern that the public review period coincided with the Christmas and New Year’s holiday season. Therefore it was suggested by FHWA-KY that the closing of the public review period be extended from January 7 until January 10. The 15 day Transportation Policy Committee (TPC) review of the public comments will remain on the proposed schedule from January 8 through January 22, and both the public and TPC will be conducting reviews on January 8, 9, and 10. Any public comments that are received during the 3-day overlap period will be forwarded to TPC upon receipt. There was consensus among the conference call attendees to make this change to the amendment schedule.

The schedule includes the following key elements:

- the air quality analysis will be completed on December 20
- public review will be from December 24 through January 10
- TPC review of public comments will be from January 8 through January 22
- TPC action on January 23

Discussion of Projects

KIPDA staff described the proposed changes for each of the projects on the list, and provided additional information and clarification of those projects. There was a question concerning the Heavy Haul Road project and whether that project was supposed to be two projects. There was discussion and it was decided that the project would move forward in the amendment as described since the description was submitted by INDOT.

#### Discussion of Conformity Test Methodology

In the consultation notice, KIPDA staff had proposed using Baseline tests to determine conformity for PM 2.5 and its precursors. This proposal was based on the latest information concerning the status of the PM 2.5 redesignation SIP. When the consultation notice was prepared, the information available to KIPDA staff was that the redesignation SIP had not been approved nor had the budgets in it been found adequate. During the consultation call, KIPDA staff confirmed with EPA Region 4 staff that those two conditions were still unchanged. Therefore, the conformity tests for PM 2.5 were accepted as proposed.

In addition, EPA Region 4 staff reminded the consultation group that the 1997 ozone standard had been revoked for the local area and that conformity to that standard need not be demonstrated. Therefore, that portion of the analysis will be eliminated.

The conference call adjourned.

## AIR QUALITY CONFORMITY

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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 in Kentucky. Much of this area coincided with the former ozone maintenance area and/or coincides with the local PM 2.5 nonattainment area. The Louisville 8-hour ozone maintenance area consisted of Clark and Floyd counties, IN, and Bullitt, Jefferson, and Oldham counties, KY. It was designated as a basic nonattainment area under the 8-hour ozone standard in June 2004; then it was redesignated as an attainment area with a maintenance status in July, 2007. This standard was partially revoked for the Louisville area. (The local area is still eligible to receive Congestion Mitigation/Air Quality funding). The revocation became effective in July, 2013. The Louisville fine particulate matter (PM 2.5) nonattainment area consists of Clark and Floyd counties and the Madison Township of Jefferson County, IN, and Bullitt and Jefferson counties, KY. In April 2005, it was designated as a nonattainment area under the PM 2.5 standard (based on average annual concentration).

KIPDA is amending *Horizon 2030*, the metropolitan transportation plan (MTP) and the FY 2014 – FY 2017 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 annual PM 2.5 standard.

### CONFORMITY UNDER THE PM 2.5 STANDARD

In April 2005, when the local area was designated as being in nonattainment of the fine particulate matter standard, there were no previous budgets for PM 2.5. In addition, there were no counties which had been previously divided on an attainment/nonattainment basis for the PM 2.5 standard. The counties which were designated as nonattainment under the PM 2.5 standard were all designated in their entirety with the exception of the Madison Township of Jefferson County, IN which had not been previously designated as nonattainment for any pollutant.

During 2005, along with the designation of PM 2.5 nonattainment areas, EPA promulgated an update to the federal conformity rule (40 CFR 93). This update established new interim tests to be applied when an area sought to determine conformity after being designated as nonattainment under the PM 2.5 standard and before SIPs were developed establishing new budgets for PM 2.5 and its precursors.

### CONSULTATION FOR THE AMENDMENT OF *HORIZON 2030*

The first step in determining conformity of *Horizon 2030* was to consult with the interagency consultation (IAC/ICG) partners concerning matters not explicitly determined by the

conformity rule. Since conformity under both the 8-hour ozone and PM 2.5 standards had been previously determined, many of the issues normally arising in conformity had already undergone consultation. 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 initial consultation involved a review of the following items:

- (a) important dates in the schedule for the amendment;
  - December 20 -- Regional Emissions (Air Quality) Analysis completed
  - December 24 -- Public Review begins.
  - January 8 -- Action by the Transportation Technical Coordinating Committee
  - January 24 -- Action by the Transportation Policy Committee
  - January 25 -- 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—2030;
- (d) the proposed conformity test methodology/ies and analysis years—see the ESTABLISHED PRACTICE section;
- (e) the pollutant(s)/precursor(s) of concern and the motor vehicle emissions budget(s), if applicable—see table 2 at the end of the report;
- (f) information concerning the inputs for the travel demand model and the approved emissions model—see 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

There was no discussion about the projects. With respect to the way the projects were reflected in the regional emissions analysis, the recommendations of KIPDA staff were accepted.

**Conclusion: The IAC/ICG members accepted the recommendations of KIPDA staff concerning the incorporation of the projects into the regional emissions analysis.**

#### Public Review Period

During consultation, the time of the public review period was questioned. It was mentioned that there was a strong correspondence between the proposed public review period and the upcoming holiday season. It was suggested that the public review period be extended to January 10. KIPDA staff accepted this suggestion.

**Conclusion: KIPDA staff accepted the suggestion from the IAC/ICG that the public review period be extended to January 10. This will result in an overlap of the public and Transportation Policy Committee review periods of 3 days.**

#### Discussion of Approval of Pending PM 2.5 SIP

As previously mentioned, the local area has a nonattainment area for the annual PM 2.5 standard. Since the area is now showing attainment of the annual standard based on monitoring, a maintenance State Implementation Plan (SIP) has been prepared and submitted to EPA requesting a redesignation of the local area to attainment of the standard with a maintenance status. That maintenance plan contains motor vehicle emission budgets for PM 2.5 and one of its precursors, NOx. The maintenance plan has not been approved nor have the budgets been found adequate.

During previous consultation, it was noted that EPA – Region 5 had published a federal register notice that, among other things, contained language concerning the replacement of motor vehicle emissions budgets (MVEBs) developed using MOBILE6.2 with MVEBs developed using MOVES for another nearby MPO area. The questioner raised the issue of the effect of a similar action by EPA affecting the local area. The question was referred to EPA staff. It was determined that EPA was not expected to propose approval of the redesignation request nor adequacy of the budgets in time to affect that amendment. So there was agreement that KIPDA staff should proceed with the conformity tests that had been proposed.

During the consultation undertaken on December 10 relating to the upcoming amendments, KIPDA staff confirmed with the staff of EPA – Region 4 that the redesignation request SIP had not been approved nor had the MVEBs in it been found adequate. Based on those two facts, there was agreement that that the baseline tests which had been proposed could be used to demonstrate conformity.

**Conclusion: The IAC/ICG members agreed that KIPDA staff should proceed with the conformity analysis using the baseline tests which had been proposed.**

#### Revocation of the 1997 Ozone Standard

In a matter related to the issue discussed above, the partial revocation of the 1997 ozone standard was mentioned. Because of the revocation, it will not be necessary to demonstrate conformity to the 1997 ozone standard with this amendment.

**Conclusion: The IAC/ICG members agreed that it would be unnecessary for KIPDA staff to consider the ozone standard in demonstrating conformity for the upcoming amendments.**

## 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.

### Source of Bullitt County VMT, Speeds, and Emission Estimates

Originally, the Kentucky Transportation Cabinet (KYTC) had provided the vehicle-miles-traveled (VMT) and speeds to be used in estimating pollutant emissions for Bullitt County in the analyses supporting conformity determinations. During 2006, it was mentioned that the KIPDA travel model included those counties. As a consequence, it was stated that KIPDA should supply that information starting with the next conformity analysis, and KIPDA agreed to do this. KIPDA has provided this data since that time.

Prior to June, 2011, the staff of the Kentucky Division for Air Quality (KYDAQ) had provided emission estimates for Bullitt County. In June, 2011, the MOVES emissions model was first used to estimate emissions for the local area. In order to ensure a more consistent approach to estimating emissions, LMAPCD accepted responsibility for providing emission estimates for Bullitt County, as well as the other counties for which they were previously providing emission estimates.

**Conclusion: The established practice is that KIPDA will provide VMT and speed information for the determination of emission estimates for Bullitt County. The established practice is that LMAPCD will provide emission estimates for Bullitt County, as well as the other counties for which they have been providing emission estimates prior to June, 2011.**

### Analysis Years and Conformity Tests

Since there are not Motor Vehicle Emission Budgets (MVEBs) available for PM 2.5 and its precursor (oxides of Nitrogen), the conformity rule requires that PM 2.5 analyses be done for the last year of the transportation plan and for a year within five years of the present. In addition, other intermittent year(s) are required such that no two analysis years are more than ten years apart.

Since there are no applicable MVEBs for PM 2.5 and NO<sub>x</sub> (as a PM 2.5 precursor), the conformity rule requires the use of an interim emission test. The interim emission test must be either of the following:

- (1) build emissions no greater than no-build emissions, or
- (2) analysis year emissions no greater than 2002 emissions.

The established practice is to use the 2002 baseline or “no greater than 2002” test. The 2002 baseline test would be applied to the entire PM 2.5 nonattainment area for all analysis years.

**Conclusion: The established practice is that the analysis years and conformity tests for the regional emissions analysis is as shown in the tables below.**

Annual PM 2.5 Standard	
Analysis Year	Conformity Test(s)
2015	2002 Baseline test for the PM 2.5 nonattainment area
2020	2002 Baseline test for the PM 2.5 nonattainment area
2030	2002 Baseline test for the PM 2.5 nonattainment area

Vehicle Registration (Fleet Mix) Data

At various times in the past and most recently during 2012 and 2013, 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 2009, and the registration data now being used for the Kentucky counties is for 2011. 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 2009 for the Indiana counties and for 2011 for the Kentucky counties is now being used in developing emission estimates.**

Pollutants and Precursors

The conformity rule requires that direct vehicle PM 2.5 from the tailpipe and brake and tire wear be analyzed. The rule also requires that oxides of Nitrogen (NOx) (one of the PM 2.5 precursors) must be analyzed unless EPA and the respective state air agency make findings that its influence is insignificant. PM 2.5 from road dust and the other precursors (volatile organic compounds, oxides of Sulfur, and ammonia) do not have to be considered because neither EPA nor the respective state air agency has made a finding of significance for them. PM 2.5 from construction dust does not have to be considered because there is no State Implementation Plan (SIP) indicating its influence is significant.

**Conclusion: The established practice is that only direct PM 2.5 from the tailpipe and brake and tire wear and NOx will be considered in the analysis.**

Approaches for Developing Annual Emission Estimates

As stated above, the local area was designated as nonattainment of the PM 2.5 standard because it was exceeding the annual average concentration allowed by the standard. This means that the conformity analysis will need to be based on an estimate of annual direct PM 2.5 and NOx emissions.

Prior to June, 2011, the air quality agencies in the area had previously used MOBILE 6.2 to calculate the emissions of PM 2.5 and its precursor. Recently, the staff of LMAPCD indicated that they were now calculating annual emissions for PM 2.5 and its precursor using twelve month calculations in a single run of the MOVES emissions model for each analysis year. This approach was also used for the analysis for the amendment of *Horizon 2030* for the PM 2.5 nonattainment area with the exclusion of Madison Township of Jefferson County, IN. Madison Township typically accounts for less than five percent of the area's emissions. So any differences in approach for Madison Township should have a minimal effect on the total emissions. Further, because the conformity test is the "not greater than 2002" test, the results for Madison Township cannot affect the passing of conformity unless the 2002 estimates were less than the estimates for a future analysis year, and this has never happened for Madison Township.

**Conclusion: The established practice is now to run MOVES with a twelve month calculation in a single run for calculating annual direct PM 2.5 and NOx emissions.**

#### CONFORMITY OF *HORIZON 2030*

The MTP, *Horizon 2030*, was examined to determine if it meets the requirements of the conformity rule under the annual PM 2.5 standard. In general, examinations for conformity have two major components:

- (1) an air quality (regional emissions) 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 such as 2002 (for PM 2.5); 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 2030* simply by determining that the air pollutant emissions do not exceed the budgets in the SIPs or the base year emissions. For PM 2.5, the pending SIP, which contains budgets for PM 2.5 and NOx, has not been approved nor have the budgets been found adequate. Therefore, conformity will be demonstrated by comparing future year emissions to base year emissions.

In general, the calculation of the regional emissions for 2002 and the other 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. The use of these two steps in estimating emissions for the Madison Township of Jefferson County (IN) may have varied slightly from their use in the other counties, but essentially the same steps were undertaken for all portions of the nonattainment area. The details of their use are discussed in the Regional Emissions Analysis section below.



## AIR QUALITY ANALYSIS

The air quality analysis for the amendment of *Horizon 2030* involved two steps. The first step was to review the projects to determine which projects were “regionally significant” and needed to be included in the regional emissions analysis and to have this list of projects reviewed and accepted by the IAC/ICG. The second step was to develop estimates of travel behavior using the KIPDA travel demand model and to calculate the emissions associated with the travel using the MOVES emissions model. The second procedure is known as the Regional Emissions Analysis. These steps are discussed below in greater detail.

## PROJECT REVIEW

The first procedure involved determining which metropolitan transportation plan projects were "regionally significant" and therefore to be included in the regional emissions analysis. During the development (amendment) of *Horizon 2030*, 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 the regional emissions analysis. Those projects in *Horizon 2030* 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.

As in prior plans, some of the projects in *Horizon 2030* 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. TSM Corridors

A group of corridors was identified for improvements utilizing Transportation System Management. At this point, sufficient detail is lacking for 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 procedures—(1) the analysis of travel behavior impacts and (2) the estimation of emissions due to those impacts. Two slightly different methods were used for estimating the travel behavior impacts—one for Madison Township of Jefferson County, IN and the other for the rest of the nonattainment area. The reason for the two methods is that there is no travel demand model for Madison Township. The estimation of emissions for both areas was done using a similar method.

The analysis of the travel behavior impacts for the portion of the nonattainment area excluding Madison Township involved using the KIPDA travel demand 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 model and adjustment factors for travel model output.

As previously mentioned, the procedures used for the Madison Township of Jefferson County (IN) varied slightly from those used for the rest of the nonattainment area. VMT was based on values from the Highway Performance Monitoring System. A growth rate approach was used to estimate VMT for future years. Further discussion of the methodology for estimating emissions for Madison Township is included in the section concerning the MOVES emissions model. For this amendment, INDOT staff reviewed the changes in travel impacts occurring in the non-Madison Township portion of the local PM 2.5 nonattainment area and concluded that the emission estimates developed for Madison Township during the previous amendment could be used for this amendment, as well.

In addition, there were several projects which could not be analyzed using the travel model. The ones 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 (0.18 mile) section of US 31E from Nelson County (outside of the nonattainment area) to Bullitt County (inside the PM 2.5 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. Regardless of the method to analyze the travel behavior impacts, 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 all of the nonattainment area except Madison Township of Jefferson County, IN 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. It should be noted that the emissions for PM 2.5 and its precursor were estimated for each of the twelve months with the annual emissions being the sum of the monthly values.

#### KIPDA Travel Demand Model

The KIPDA travel demand 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, and Bullitt, Jefferson, and Oldham counties, KY. This area is divided into 807 smaller units called traffic analysis zones.

The KIPDA regional travel demand model was updated and calibrated during 2011. This update established 2007 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 Census, 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. 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) daily VMT for all highway facilities except local

roads for the region; (2) the distribution of trip lengths (duration in time); 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 2007. The updated travel model was used in the regional air quality analysis.

The KIPDA travel demand 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 48 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 2007 was 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 2030* 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 2030* 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 0.1 percent of the minimum (optimal) value or less.

Tolls will be used as a means of providing for a portion of the cost of the Ohio River Bridges project. To reflect this in the MTP amendment, the KIPDA travel model was modified by placing time penalties on the bridges where tolls may be placed. The use of this modification was continued.

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 VMT. The VMT can be calculated as the product of the volume of traffic using a link times the distance 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 year of the 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 2007. 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 2007 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 2007 to develop adjustment factors to be applied to the model output for subsequent years. The PM 2.5 analysis is based on annual traffic and the accompanying annual emissions. Therefore, the adjustment factors were based on 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: (1) the equations of the Highway Economic Reporting System (HERS) and (2) the use of data from the Automatic Continuous Traffic Recorders (ATRs) of the Kentucky Transportation Cabinet (KYTC) for 2001-2002.

The HERS equations were used to estimate speeds on 402 sections of urban roadways for five functional classifications. The speeds from these roadway sections were used to determine the average speed for each of five functional classes. The speeds used in the travel model were also averaged for each urban functional class. The speed adjustment factor for each urban functional class was calculated as the ratio of the average speed using the HERS equations to the average speed using the travel model data.

The KYTC ATR data was used to estimate speeds on 84 sections of rural roadways for four functional classifications. The speeds from these roadway sections were used to determine the average speed for each of four functional classes. The speeds used in the travel model were also averaged for each rural functional class. The speed adjustment factor for each rural functional class was calculated as the ratio of the average speed using the ATR data to the average speed using the travel model data.

The procedures described above produced speed adjustment factors for all functional classes except rural minor collectors and 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 the rural minor collectors and rural and local roads, the speed adjustment factor of the next higher functional class was used. For 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 PM 2.5 and must therefore control direct PM 2.5 and its precursor, NOx. The emission estimates for PM 2.5 and NOx were determined using the MOVES emissions model. The Louisville Metro Air Pollution Control District (LMAPCD) produced the emissions for all of the nonattainment area except for the Madison Township of Jefferson County, IN. The emission estimates for the Madison Township were developed by the Indiana Department

of Transportation (INDOT). The procedures used in calculating these emission estimates are 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 were modeled as being in existence in 2002 but not for the other analysis years. 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<sub>x</sub>) in 2003 with a few exceptions where newer data was incorporated.

The changes which affected the VOC and NO<sub>x</sub> emissions included:

- (1) the incorporation of newer vehicle registration data (for 2009) for Clark and Floyd counties (provided by IDEM),
- (2) the development and use of newer vehicle registration data (for 2011) for Jefferson County (KY),
- (3) the new (twelve month) approach to calculating emissions of PM 2.5 and its precursor described in the ESTABLISHED PRACTICE was utilized , and
- (4) the development and use of newer vehicle registration data (for 2011) for Bullitt County in Kentucky.

The emissions for Bullitt County were also developed by LMAPCD. Most of the inputs to the MOVES model were defaults and/or data used in previous SIPs. A portion of Bullitt

County (the “original” portion) had previously had a nonattainment/maintenance status for the 1-hour ozone standard, and a portion (the “new” portion) had only been designated under the 8-hour ozone standard. Neither portion of the 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 portion of Bullitt County while unregulated gasoline is used in the new nonattainment areas of the county. 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 Bullitt County.

The assumptions used for Bullitt County were the same as those for the 2003 ozone budget update with two exceptions, aside from the new VMT and speed estimates that were developed for this amendment of *Horizon 2030*. New vehicle registration data for Bullitt County for 2008 was developed and used, and the new (twelve month) approach to calculating emissions of PM 2.5 and its precursor described in the ESTABLISHED PRACTICE was utilized.

The PM 2.5 emission estimates for the Madison Township of Jefferson County, IN were developed by INDOT. INDOT used an approach to developing emission estimates that was similar to the method used by LMAPCD. However, since there is no travel model for Madison Township, determining the origin of the travel in that township required another source of information. The estimates of the origin of tripmaking (and therefore gasoline specifications and the presence/ absence of I/M programs) were based on data from 2000 Census. In addition, other data was “borrowed” from the Floyd County data developed by LMAPCD. This data was adjusted to account for conditions typical of the Madison Township (e.g. no freeways or ramps, no I/M program for 2002).

The PM 2.5 emission estimates for the Madison Township of Jefferson County, IN were developed by INDOT in the following manner.

- (1) VMT was estimated from a countywide estimate (using an updated growth rate).
- (2) VMT was identified by source (origin) county.
- (3) The proportion of each source county’s VMT of total county VMT was used to weight emission factors reflecting control and fuel programs for that source county.
- (4) The weighted, composite emission factors were applied to the Madison Township VMT to calculate criterion pollutant burdens.

As previously stated, for this analysis, INDOT staff reviewed the changes in travel impacts occurring in the non-Madison Township portion of the local PM 2.5 nonattainment area and concluded that the emission estimates developed for Madison Township during the previous amendment could be used for this amendment, as well.



## RESULTS OF THE ANALYSIS

The transportation plan, *Horizon 2030*, 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 2002 emission levels for PM 2.5 and NOx.

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 PM 2.5 are discussed below.

### PM 2.5 Analysis

There are no emission budgets for fine particulate matter, PM 2.5, or oxides of Nitrogen, one of its precursors. The regional emissions analysis was conducted to provide estimates of the levels of emissions of PM 2.5 and NOx for the various analysis years. These emission levels for the years after 2002 were then compared to the emission levels in 2002 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 annual vehicle-miles-traveled from the analysis. Table 2 shows that for 2015, 2020, and 2030, the annual PM 2.5 and NOx emission levels for the local PM 2.5 nonattainment area are less than those for 2002.

### Conclusions

The regional emissions analysis of the amended *Horizon 2030* indicates that the plan is consistent with the goals established in the State Implementation Plans of Indiana and Kentucky. The effect of the results shown in Table 2 indicates that *Horizon 2030* has met the requirements of conformity under the PM 2.5 standard. In summary, it can be concluded that *Horizon 2030* conforms to the SIPs and meets the requirements of the federal conformity rule.

**TABLE 1**

<b>ANNUAL VEHICLE-MILES-TRAVELED (VMT) ESTIMATED FOR THE PM 2.5 NONATTAINMENT AREA (in 1,000,000's of vmt/year)</b>			
<b>YEAR</b>	<b>INDIANA</b>	<b>KENTUCKY</b>	<b>TOTAL</b>
<b>2002</b>	<b>2326</b>	<b>7963</b>	<b>10289</b>
<b>2015</b>	<b>2692</b>	<b>9126</b>	<b>11818</b>
<b>2020</b>	<b>2856</b>	<b>9496</b>	<b>12352</b>
<b>2030</b>	<b>3247</b>	<b>10572</b>	<b>13819</b>

**TABLE 2**

<b>ANNUAL EMISSIONS FOR THE LOUISVILLE PM 2.5 NONATTAINMENT AREA (in 1000's of kg/year)</b>			
<b>EMISSION LEVELS FOR VARIOUS YEARS</b>			
<b>YEAR</b>	<b>PM 2.5</b>	<b>NOx</b>	<b>PASS</b>
<b>2002</b>	<b>1102</b>	<b>35168</b>	<b>-----</b>
<b>2015</b>	<b>389</b>	<b>12134</b>	<b>YES</b>
<b>2020</b>	<b>277</b>	<b>8061</b>	<b>YES</b>
<b>2030</b>	<b>223</b>	<b>5917</b>	<b>YES</b>

NOTE: The criteria for conformity are as follows:  
The emission levels for 2015, 2020, and 2030 must be no greater than those for 2002.



**MEMORANDUM**

Kentucky  
Member  
Counties

TO: Transportation Policy Committee

FROM: Stacey Burton

Bullitt

DATE: January 16, 2014

Henry

SUBJECT: Coordinated Plan – DRAFT Vision Statement, Goals & Objectives

Jefferson

Oldham

Shelby

Spencer

Trimble

Indiana  
Member  
Counties

Beginning in October of last year, the working group for the Coordinated Human Services Transportation Plan (Coordinated Plan) met several times to draft a vision statement, goals, and objectives. These were developed based on the approved Connecting Kentuckiana Goals and Objectives, Federal regulations and guidance for the development of a Coordinated Plan, and existing coordinated plans.

With information provided by KIPDA staff, the working group discussed the various inputs as well as how the transportation system for our region may evolve to enhance transportation services and amenities for the targeted populations, which are primarily persons with disabilities and older adults. Many issues were identified, which then culminated in the DRAFT vision statement, goals and objectives. In the end, the working group drafted these items to guide the development of the Coordinated Plan for the KIPDA Region. They will provide a framework allowing us to move forward with a plan in a cooperative and collaborative fashion for the betterment of those we serve.

Clark

Participants in the Working Group sessions included:

Floyd

- AARP of Kentucky
- Bullitt County Chamber of Commerce
- Center for Accessible Living
- KIPDA Area Agency on Aging
- KIPDA Aging Advisory Council
- KYTC District 5 Office
- LifeSpan Resources, Inc.
- Regional Mobility Council
- Shelby County Planning and Zoning
- Southern Indiana Transit Advisory Group
- KIPDA Staff

Equal  
Opportunity  
Employer

The Transportation Policy Committee is asked to accept the Vision Statement, Goals, and Objectives presented in the attachment. **ACTION IS REQUESTED.**

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# KIPDA Regional Coordinated Plan

## DRAFT Vision Statement, Goals, and Objectives

### VISION STATEMENT

This plan will serve as a unified, comprehensive strategy by identifying and meeting the transportation needs of individuals with disabilities and older adults. KIPDA's goal is to expand the present system of transportation providers but also improve the system's efficiency to enhance the quality of life for KIPDA residents. Future projects/programs should give special consideration to these targeted populations.

### GOAL I

**Improve access** to transportation services for targeted populations.

**Objective A** – Improve existing infrastructure for targeted populations.

*Action Statement 1:* Install audible/tactile signals at intersections.

*Action Statement 2:* Install ADA-compliant curb cuts where needed.

*Action Statement 3:* Install ADA-accessible shelters, benches, and/or other amenities where the need has been identified.

*Action Statement 4:* Ensure any new infrastructure is ADA-compliant, comfortable, and efficient for the targeted users.

**Objective B** – Enhance the level of service for the targeted populations.

*Action Statement 1:* Increase the number and availability of accessible vehicles to meet transit needs.

*Action Statement 2:* Ensures fares are kept affordable to the targeted populations by providing low-cost or discounted transportation options.

**Objective C** – Maintain and/or reduce current costs for transportation service providers that provide transportation for the targeted populations.

*Action Statement 1:* Implement operational improvements that reduce costs while maintaining safety and reliability.

### GOAL II

**Enhance the real and perceived safety** of transportation services.

**Objective A** – Increase transit usage and reduce the number of crashes involving pedestrians by enhancing the safety of transit services and pedestrian facilities.

*Action Statement 1:* Provide lighting, as appropriate, along pedestrian walkways.

*Action Statement 2:* Ensure there are appropriate pedestrian facilities leading to and from destinations in order to provide a safe walk way along busy roads.

*Action Statement 3:* Reduce the number of crashes involving pedestrians by improving pedestrian safety at identified locations, such as cross walks, pedestrian signals, etc.

### GOAL III

**Encourage coordination** among transportation providers.

**Objective A** – Reduce overlapping coverage by X%, leverage funding sources, and increase the number of people served within the targeted population by X%.

*Action Statement 1:* Identify agencies whose service overlap to see if coordination between those services is possible.

*Action Statement 2:* Compare service hours of neighboring agencies to see if coordination is possible.

*Action Statement 3:* Implement and expand the travel management coordination center.

*Action Statement 4:* Coordinate trips between providers based on trip location: mixing passengers with different eligibility and fare types in the same vehicle.

*Action Statement 5:* Promote the sharing of vehicles between agencies by creating programs and/or incentives.

#### **GOAL IV**

**Enhance quality assurance** of transportation services.

**Objective A** –

*Action Statement 1:* Provide customer feedback opportunities regarding programs and services.

*Action Statement 2:* Create a program to ensure proper procedures are being followed.

*Action Statement 3:* Implement change to improve performance of transportation services.

#### **GOAL V**

**Increase education and outreach** about existing transportation services.

**Objective A** – Increase the number of people who know about, currently utilize or may utilize transportation services by X%.

*Action Statement 1:* Raise awareness of existing services and providers.

*Action Statement 2:* Provide travel training programs.

*Action Statement 3:* Identify and create an inventory of transportation providers, their geographic coverage areas, and the types of services they provide, who serve the targeted populations.

#### **GOAL VI**

**Expand the availability and capacity** of transportation services.

**Objective A** – Increase the availability of services where gaps exist.

*Action Statement 1:* Develop and/or expand services to fill geographic gaps in service.

*Action Statement 2:* Develop and/or expand service to fill gaps in the hours served, including nights and weekends.

*Action Statement 3:* Expand services to cover more rural and suburban areas.

*Action Statement 4:* Develop suburban/urban connector services.

*Action Statement 5:* Increase the types of services provided and the destinations served.

*Action Statement 6:* Increase the coverage area served by transportation providers.

*Action Statement 7:* Provide connections to existing fixed-route transportation service.

**Objective B** – Increase the number of destinations served by X%.

*Action Statement 1:* Increase the types of trips provided and the variety of destinations served.

*Action Statement 2:* Offer multiple destinations on a single trip, such as medical appointments, employment, shopping, etc.