Kentuckiana Regional Planning & Development Agency

Transportation Conformity Process
Louisville, KY-IN Metropolitan Planning Area (MPA)
Louisville, KY-IN Nonattainment Area

8-Hour 2015 Ozone Nonattainment Boundary
(August 3, 2018)
Transportation Conformity

State Implementation Plan (SIP)

Metropolitan Transportation plan and Transportation Improvement Program (TIP)
Transportation Conformity

• Meaning of Conformity to the Purpose of the SIP

• Transportation Plans and TIPs
  – Will not cause or contribute to new air quality violations,
  – Will not worsen existing violations, or
  – Will not delay timely attainment of the relevant NAAQS or any interim milestones
Transportation Conformity

Requirements for Passing

Transportation Control Measures

Regional Emissions Analysis

State Implementation Plan (SIP) Motor Vehicle Emissions Budget (MVEB) - developed by ICG or Base year Emissions
What Is Subject to Transportation Conformity?

- CAA 176(c) and 40 CFR 93.102(a) describe the actions that are subject
- Transportation plans
- Transportation improvement programs (TIPs)
- Regionally significant non-federal projects
  - included in regional emissions analysis
  - No project-level conformity determination is required
- Non-exempt “federal” projects, i.e., those that:
  - Receive FHWA or FTA funding or
  - Require FHWA or FTA approval
Projects Exempt from Transportation Conformity Requirements

• Projects exempt from all conformity requirements (40 CFR 93.126)
  – e.g., certain projects under categories for safety, mass transit, air quality and other

• Projects exempt from regional emissions analysis (40 CFR 93.127)
  – e.g., intersection channelization, interchange reconfiguration

• Traffic signal synchronization projects (40 CFR 93.128)
FHWA – Transportation Conformity

SIP: Emissions Budget, Transportation Control Measures (TCMs), Interagency Consultation

Transportation Plan: Fiscal Constraint Planning Factors, Public Involvement

Perform Regional Analysis of Plan:
- Emissions Budget or Interim Emissions Tests
- Timely Implementation of TCMs

Plan Conformity

Yes

Transportation Improvement Program (TIP): Fiscal Constraint Planning Factors Public Involvement

Perform Regional Analysis of TIP:
- Emissions Budget or Interim Emissions Tests
- Timely Implementation of TCMs

Yes

TIP Conformity?

Yes

Project

No

Hot-Spot Analysis in (in CO & PM10 Areas)

Project Conformity

Yes

Project Approval

No

TIP Revision Needed?

Yes

SIP or Plan Revision Needed

No

SIP Revision Needed?

Yes

SIP: Emissions Budget, Transportation Control Measures (TCMs), Interagency Consultation

No

Plan Conformity

Denotes key interagency consultation points

Transportation Plan or Project Approval
Conformity Process for TP / TIP Updates / Amendments

(As specified in the MOU)

- Project Changes
- Interagency Consultation
- Regional Emissions Analysis (if necessary)
- Documentation
- Informal Review by Conformity Partners, Public Review, and Review by Subcommittees
- Review and Action by Technical Committee
- Review and Action by Policy Committee (MPO)
- Federal Conformity Determination
### Amendment 5 and 6 of Horizon 2035 Metropolitan Transportation Plan

**Amendment 5 and 6 of FY 2015 - FY 2018 Transportation Improvement Program**

**April 2016**

<table>
<thead>
<tr>
<th>KIPDA ID</th>
<th>State ID</th>
<th>Project Name</th>
<th>Project Description</th>
<th>Project Sponsor</th>
<th>Description of Plan Amendment</th>
<th>Description of TIP Amendment</th>
<th>Effect on AQ Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INDIANA PROJECTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>160.0436</td>
<td>1-65</td>
<td></td>
<td>Implementation of a truck parking information management system using existing ITS technology on I-65 to help truckers more quickly and reliably identify and update information about the availability of safe truck parking for needed rest and overnight stays. Using TIGER funds.</td>
<td>INDOT</td>
<td>Added to Plan as part of the Regional Truck Parking Information Management System.</td>
<td>Add FY 2018 Construction $414,975.1 federal and $8,895,078 total; TIGER funds.</td>
<td>Exempt</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction of a double rail loop and rail-to-barge transfer facility with additional rail and turnouts, construction of a rail siding extension that will allow rail carriers to deliver a 20 car unit train to the port, and construction of a truck-to-rail intermodal facility in the vicinity of Connector Rd. to accommodate increasing truck traffic expected from the East End Bridge over the Ohio River.</td>
<td>Port of Indiana</td>
<td>Add project to Plan; $17,000,000 cost; Completion in 2019.</td>
<td>Add FY 2017 Construction $10,000,000 federal and $17,000,000 total; TIGER funds.</td>
<td>Exempt</td>
</tr>
<tr>
<td>539</td>
<td>040.0955</td>
<td>Salem Noble Road</td>
<td>Reconstruct as a 2 lane roadway from IN 82 to IN 403.</td>
<td>Clark County</td>
<td>No change to Plan</td>
<td>Delete FY 2016 ROW; STP-Urban funds.</td>
<td>Exempt</td>
</tr>
</tbody>
</table>

| **KENTUCKY PROJECTS** | | | | | | | |
| 223 | 404.01 | Cooper Chapel Road Phase 3 | Phase 3: Extend and construct 2 lane roadway with a continuous center-turn lane from KY 864 (Boulevard Road) to US 31E (Bardstown Road) at Bardstown Falls Road. Project will include consideration of bicycle and pedestrian facilities. | Lou Metro Public Works | No change to Plan | Move FY 2018 ROW to FY 2017; Move FY 2017 Utility to FY 2018; and delete FY 2018 Construction; STP-Urban funds. | Non-Exempt; No change to model |
| 527.00 | 1-65 | Morgan Conservation Park Trail Maintenance and Trailhead | Construction of an ADA accessible trail, placement of water and electricity services and construction of a composting pit comfort station at Morgan Conservation Park. | Oldham County | Add project to Plan; $177,161 project cost; Open to public in 2022. | Add project to TIP; Add FY 2015 Design $2,000,000; State funds. | Exempt |
| | | | Project will provide transportation services for para-transit trips to work that require travel beyond the service area required by the ADA. | TARC | Add project to Plan; $619,920 project cost; Completion in 2017. | Add FY 2017 Operations $4,089,913 federal and $8,19,920 total; Section 5310 funds. | Exempt |
Regional Travel Estimates

Analysis based on Transportation Plan as updated/amended

Primary analysis tool is the regional travel demand forecasting model

Uses socioeconomic data/forecasts from local land use agencies

Is a traditional 4-step model with a single “feedback” loop

Produces link-based traffic volumes and congested speeds

Model output is post-processed to allow adjustment of VMT and speeds

Post-processed model output sent to APCD to allow for the calculation of emissions
Conformity Documentation

Documentation Requirement depends on the type of Update / Amendment

Exempt – only
- Inform the IAC

Non-Exempt Non-Regionally Significant
- “Short” Conformity Report

Regionally Significant
- Full Conformity Report
Louisville Metro Air Pollution Control District (APCD)

Transportation Conformity Emissions Analysis
KY: Bullitt, Jefferson, Oldham
IN: Clark, Floyd
Louisville, KY-IN Nonattainment Area

8-Hour 2015 Ozone Nonattainment Boundary
(August 3, 2018)
Development of SIPs

- Travel Demand Model analyses and summaries
- Development of onroad mobile emission inventory
- Consultation on onroad Motor Vehicle Emissions Budgets (MVEBs) and TCMs
- Development of SIP documentation
- Public review
- State/Local approval
- SIP is submitted to US EPA for approval
Emission Estimates Provided by APCD

VMT by county by MOBILE 6 facility type by speed bin by year for Clark, Floyd (IN) and Jefferson, Bullitt and Oldham (KY) counties developed by KIPDA and provided to APCD

Emission totals calculated by APCD using MOVES in inventory mode

Emission estimates by county by year developed for each pollutant by APCD
First analysis year within 5 years, within 10 years thereafter including planned year of attainment

Every 5 years ensures both requirements with least complication and better consistency

Analysis Years

2018, 2019 (current year)

2020, ... 2025 (current year)

2020  2025  2030  2035  2040
KIPDA-APCD ANALYSIS PROCESS

Conformity analysis required

KIPDA generates input VMT data

MOVES runs in inventory mode

MOVES County Data Base Input files

MOVES generated emission factors (internal)

Compare with SIP MVEB’s

APCD formats and inputs VMT data into MOVES

County Emissions Totals: VOC, CO, NOx
MOVES Inputs
Locally derived/non-default inputs

VMT from KIPDA TDFM for RoadTypeDistrib, AvgSpeedDistrib, VehTypeVMT, RampFracs

Fleet age distribution and vehicle populations from state contracted VIN-decoding (POLK/IHS) data, with MOVES default fill-in for HD using ratios (per FHWA guidance)

KY: Conventional gasoline for Bullitt and Oldham and RFG for Jefferson

IN: Clark and Floyd - RVP

I/M programs discontinued in 2006 (Clark, Floyd, IN) and 2003 (Jefferson, KY)

Meteorology: Airport met data, conservative historical “worst case” July (used to be just 4:00pm hour in MOBILE 6.2)
## INPUT FILE DATA SETS (15) FOR MOVES COUNTY DATABASE

<table>
<thead>
<tr>
<th>Data Set</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Vehicle) Age Distribution *</td>
<td></td>
</tr>
<tr>
<td>Source Type (Vehicle) Population *</td>
<td></td>
</tr>
<tr>
<td>Average Speed Distribution *</td>
<td></td>
</tr>
<tr>
<td>Vehicle Type VMT *</td>
<td></td>
</tr>
<tr>
<td>Month VMT, Day VMT, Hour VMT, AVFT</td>
<td></td>
</tr>
<tr>
<td>Ramp Fractions *</td>
<td></td>
</tr>
<tr>
<td>Road Type Distribution *</td>
<td></td>
</tr>
<tr>
<td>Fuel Formulation, Supply, Fuel Usage Fractions</td>
<td></td>
</tr>
<tr>
<td>Meteorology (humidity, temperature) *</td>
<td></td>
</tr>
<tr>
<td>I/M Programs (or default none)</td>
<td></td>
</tr>
</tbody>
</table>

* Locally developed data
VMT DATA CONVERSION / FORMAT FOR MOVES (customized EPA tools)

COUNTY DATABASE MANAGER INPUT DEVELOPMENT

>> METEOROLOGY <<

Calculate hourly temperatures

Calculate humidity

Temperature: monthly min/max, Rel. Humidity, Barometric Pressure

Humidity: Relative → Absolute

APCD_meteorologicaldataconverter.xls

APCD_meteorologicaldataconverter.xls

State, County

monthID, zoneID, HourID, temperature, relHumidity

Temperature: monthly min/max, Rel. Humidity, Barometric Pressure

Humidity: Relative → Absolute

APCD_meteorologicaldataconverter.xls

APCD_meteorologicaldataconverter.xls

State, County

monthID, zoneID, HourID, temperature, relHumidity
VMT DATA CONVERSION / FORMAT FOR MOVES (customized EPA tools)

COUNTY DATABASE MANAGER INPUT DEVELOPMENT

>> AVERAGE SPEED DISTRIBUTION <<

speed distribution (fractions) by hour for speed bins (urban)

APCD_AverageSpeedDistrib_converter.xls

AverageSpeedDistribution

sourceTypeID, roadTypeID, hourDayID, avgSpeedBinID, avgSpeedFraction
VMT DATA CONVERSION / FORMAT FOR MOVES (customized EPA tools)

COUNTY DATABASE MANAGER INPUT DEVELOPMENT

>> Vehicle Age Distribution, Source Type Population <<

State Fleet VIN-Decoded data

APCD_MOVEScdm_converter_FleetData.xlsx

AgeDistribution

SourceTypePop

AADVMT by HPMS vehicle type (to VMT converter workbook)
VMT DATA CONVERSION / FORMAT FOR MOVES (customized EPA tools)

COUNTY DATABASE MANAGER INPUT DEVELOPMENT

>> BY VEHICLE TYPE, ROAD DISTRIBUTION, RAMP FRACTIONS <<

MOB6 VMT fractions
Annual(ized) VMT
AADVMT by HPMS vehicle type

APCD_MOVEScdm_converter_VMT.xlsx

VehVMT
RoadTypeDistrib
RampFrac

HPMSVTypeID, yearID, HPMSBaseYearVMT, baseYearOffNetVMT
sourcetypeID, roadtypeID, dayID hourID, hourVMTFraction
sourcetypeID, monthID, roadtypeID, dayID, dayVMTFraction

![Excel screenshot](attachment:APCD_MOVEScdm_converter_FleetData_BIU.xlsx)
APCD “Mobile Suite” Custom MySQL Batch File System

MSDOS batch files run from command prompt

**Autoload_v13s.bat**
Create input file databases (for each run)
Load data from input files into databases

**MOVESbatch_v13s.bat**
Execute all (20) ozone season runs

Z:\> MOVESbatch_v13s >> Batchlog_v13.txt
(convenient log file to check for errors)

**Export_v13s.bat**
Automatically export all data into format needed for Excel spreadsheets, into a single folder
Create input file databases (for each run)

```
CREATE database v13_in_je20s;
USE v13_in_je20s;
flush tables;
CREATE TABLE avft select * from _v13_in_generic.avft;
CREATE TABLE avgspeeddistribution select * from _v13_in_generic.avgspeeddistribution;
CREATE TABLE county select * from _v13_in_generic.county;
CREATE TABLE dayvmtfraction select * from _v13_in_generic.dayvmtfraction;
CREATE TABLE fuelformulation select * from _v13_in_generic.fuelformulation;
CREATE TABLE fuelsupply select * from _v13_in_generic.fuelsupply;
CREATE TABLE state select * from _v13_in_generic.state;
CREATE TABLE year select * from _v13_in_generic.year;
CREATE TABLE zone select * from _v13_in_generic.zone;
CREATE TABLE zonemonthhour select * from _v13_in_generic.zonemonthhour;
CREATE TABLE zoneroadtype select * from _v13_in_generic.zoneroadtype;

CREATE database v13_out_je20s;
USE v13_out_je20s;
flush tables;
CREATE TABLE activitytype select * from _v13_out_generic.activitytype;
CREATE TABLE baserateoutput select * from _v13_out_generic.baserateoutput;
CREATE TABLE baserateunits select * from _v13_out_generic.baserateunits;
CREATE TABLE bundletracking select * from _v13_out_generic.bundletracking;
CREATE TABLE movesactivityoutput select * from _v13_out_generic.movesactivityoutput;
CREATE TABLE moveserror select * from _v13_out_generic.moveserror;
CREATE TABLE moveseventlog select * from _v13_out_generic.moveseventlog;
CREATE TABLE rateperhour select * from _v13_out_generic.rateperhour;
CREATE TABLE rateperprofile select * from _v13_out_generic.rateperprofile;
CREATE TABLE rateperstart select * from _v13_out_generic.rateperstart;
CREATE TABLE ratepervehicle select * from _v13_out_generic.ratepervehicle;
CREATE TABLE startspervehicle select * from _v13_out_generic.startspervehicle;
```

exit
echo _COPY INPUT FILES INTO DATABASE FOLDERS
copy Z:\inputs\_v13\_Oz20\KY\je\*.csv "C:\ProgramData\MySQL\MySQL Server 5.6\data\v13_in_je20s"
echo LOAD INPUT FILE DATA INTO DATABASES
call "C:\...\bin\mysql" --user=moves --password=moves < "C:\MySQL\scripts\v13\loaddb_in_je20v13s.sql"
del "C:\ProgramData\MySQL\MySQL Server 5.6\data\v13_in_je20s\*.csv"

use v13_in_je20s;

ALTER table avgspeeddistribution change avgspeedfraction avgspeedfraction DECIMAL(8,7);
LOAD DATA INFILE "AvgSpeedDistrib.csv" INTO TABLE avgspeeddistribution FIELDS TERMINATED BY "," IGNORE 1 LINES;
ALTER table avgspeeddistribution change avgspeedfraction avgspeedfraction FLOAT;

DELETE FROM county;
ALTER table county change GPAFract GPAFract DECIMAL(5,2);
ALTER table county change barometricPressure barometricPressure DECIMAL(6,3);
INSERT INTO county (countyID,stateID,countyName,Altitude,GPAFract,barometricPressure) VALUES (21111,21,"Jefferson County","L",0,29.514);
ALTER table county change GPAFract GPAFract FLOAT;
ALTER table county change barometricPressure barometricPressure FLOAT;

ALTER table roadtypedistribution change roadtypeVMTFraction roadtypeVMTFraction DECIMAL(8,7);
LOAD DATA INFILE "RoadTypeDistrib.csv" INTO TABLE roadtypedistribution FIELDS TERMINATED BY "," IGNORE 1 LINES;
ALTER table roadtypedistribution change roadtypeVMTFraction roadtypeVMTFraction FLOAT;

ALTER table sourcetypeagedistribution change agefraction agefraction DECIMAL(8,7);
LOAD DATA INFILE "AgeDistrib.csv" INTO TABLE sourcetypeagedistribution FIELDS TERMINATED BY "," IGNORE 1 LINES;
ALTER table sourcetypeagedistribution change agefraction agefraction FLOAT;

ALTER table sourcetypeyear change SourceTypePopulation SourceTypePopulation DECIMAL(8,0);
LOAD DATA INFILE "SourceTypePop.csv" INTO TABLE sourcetypeyear FIELDS TERMINATED BY "," IGNORE 1 LINES (yearID,sourceTypeID,sourceTypePopulation);
ALTER table sourcetypeyear change SourceTypePopulation SourceTypePopulation FLOAT;

DELETE FROM state;
INSERT INTO state (stateID,stateName,stateAbbr) VALUES (21,"KENTUCKY","KY");

DELETE FROM year;
INSERT INTO year (yearID,isBaseYear,FuelYearID) VALUES (2020,"Y",2020);

exit
Execute all (20) ozone season runs

```
@echo off
rem Script generated by the MOVES Multiple RunSpec Creator
rem Based on control file: Z:\BatchFiles\moves2014.bat
rem -----------------------------------------------------------
echo Changing to the MOVES folder and compiling code...
C:
cd "C:\Users\Public\EPA\MOVES\MOVES2014b"
call setenv.bat
call ant compile
REM =============================================
REM ---------- O3
echo Running BU20v13s.mrs
java -Xmx512M gov.epa.otaq.moves.master.commandline.MOVESCommandLine -r "Z:\... BU20v13s.mrs"
echo .
echo Running JE20v13s.mrs
java -Xmx512M gov.epa.otaq.moves.master.commandline.MOVESCommandLine -r "Z:\... JE20v13s.mrs"
echo .
echo Running OL20v13s.mrs
java -Xmx512M gov.epa.otaq.moves.master.commandline.MOVESCommandLine -r "Z:\... OL20v13s.mrs"
echo .
echo Running CL20v13s.mrs
java -Xmx512M gov.epa.otaq.moves.master.commandline.MOVESCommandLine -r "Z:\... CL20v13s.mrs"
echo .
echo Running FL20v13s.mrs
java -Xmx512M gov.epa.otaq.moves.master.commandline.MOVESCommandLine -r "Z:\... FL20v13s.mrs"
echo .
echo ********   FINISHED BATCH RUN   ********
cd Z:\batchfiles
```
Use `batchfilename.bat >> logfile.txt` (DOS command) to record batch run

MOVES Batch Run Log File

Text editor Ctrl-F “error” – none, good run!
APCD “Mobile Suite” Custom MySQL Batch File System

Automatically export all data into format needed for Excel spreadsheets, into a single folder

---

rem 3_export_v13s.bat
rem exports moves run database data to post-proc folder
rem *******************************************************
call "C:\Program Files\MySQL\MySQL Server 5.6\bin\mysql" --user=moves --password=moves < "C:\MySQL\scripts\v13\Export_v13s.sql"
rem ----- ozone
move /y "C:\ProgramData\MySQL\MySQL Server 5.6\data\v13_out_je20s\*.xls" Z:\post_proc\v13
move /y "C:\ProgramData\MySQL\MySQL Server 5.6\data\v13_out_je25s\*.xls" Z:\post_proc\v13
move /y "C:\ProgramData\MySQL\MySQL Server 5.6\data\v13_out_je30s\*.xls" Z:\post_proc\v13
move /y "C:\ProgramData\MySQL\MySQL Server 5.6\data\v13_out_je35s\*.xls" Z:\post_proc\v13
rem .
rem **** finished exporting ****
-- ozone
use v13_out_je20s
SELECT movesdb20180517.county.countyName AS County,
v13_out_je20s.movesoutput.yearID AS Year,
movesdb20180517.pollutant.pollutantName AS Pollutant,
movesdb20180517.pollutant.pollutantID AS PollutantID,
movesdb20180517.dayofanyweek.dayName  AS DayofWeek,
Round (sum(v13_out_je20s.movesoutput.emissionQuant) * 0.00220462/2000, 6)
AS TonsPerDay
INTO OUTFILE "je20v13s.xls"
FROM v13_out_je20s.movesoutput
LEFT JOIN movesdb20180517.county ON v13_out_je20s.movesoutput.countyID =
movesdb20180517.county.countyID
LEFT JOIN movesdb20180517.pollutant ON
v13_out_je20s.movesoutput.pollutantID =
movesdb20180517.pollutant.pollutantID
LEFT JOIN movesdb20180517.dayofanyweek ON
v13_out_je20s.movesoutput.DayID =
movesdb20180517.dayofanyweek.dayID
WHERE v13_out_je20s.movesoutput.pollutantID in (2,3,87) AND
v13_out_je20s.movesoutput.processID not in (18,19)
group by countyName, yearID, PollutantID, dayName
order by countyName, yearID, PollutantID, dayName;
ANALYSIS RESULTS (APCD TO KIPDA)

TOTAL EMISSIONS CALCULATED BY APCD FOR KIPDA

APCD Mobile Suite Assumptions - version V13 using MOVES 2014b (Dec. 2015 update, patches to 5/20/19)  rcb 5/20/19
KIPDA 19PlanB, 5/9/19

Ozone / Summer Season (tons per summer day)

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th></th>
<th>2025</th>
<th></th>
<th>2030</th>
<th></th>
<th>2035</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NOx</td>
<td>VOC</td>
<td>CO</td>
<td>NOx</td>
<td>VOC</td>
<td>CO</td>
<td>NOx</td>
<td>VOC</td>
</tr>
<tr>
<td>Clark</td>
<td>5.48</td>
<td>2.07</td>
<td>36.84</td>
<td>3.60</td>
<td>1.57</td>
<td>30.26</td>
<td>2.89</td>
<td>1.13</td>
</tr>
<tr>
<td>Floyd</td>
<td>3.90</td>
<td>2.46</td>
<td>28.07</td>
<td>2.47</td>
<td>1.92</td>
<td>23.04</td>
<td>1.90</td>
<td>1.38</td>
</tr>
<tr>
<td>Bullitt</td>
<td>3.72</td>
<td>1.28</td>
<td>18.06</td>
<td>2.49</td>
<td>0.94</td>
<td>15.15</td>
<td>1.89</td>
<td>0.71</td>
</tr>
<tr>
<td>Jefferson</td>
<td>14.51</td>
<td>7.56</td>
<td>132.61</td>
<td>8.63</td>
<td>5.46</td>
<td>105.22</td>
<td>5.66</td>
<td>4.01</td>
</tr>
<tr>
<td>Oldham</td>
<td>1.61</td>
<td>0.66</td>
<td>9.00</td>
<td>1.03</td>
<td>0.49</td>
<td>7.40</td>
<td>0.68</td>
<td>0.36</td>
</tr>
</tbody>
</table>

MOVES emission calculations using APCD Mobile Suite inputs V1:
V12: 6/28/18, 02/18/19  V13: 6/28/19
V12 vs V13 differences by area:
V13-V12

SUMMER WEEKDAY EMISSIONS FOR THE 8-HOUR MAINTENANCE AREA (kg/day)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Area</th>
<th>VOCs</th>
<th>NOx</th>
<th>PASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>Regional</td>
<td>12734</td>
<td>26501</td>
<td>YES</td>
</tr>
<tr>
<td>2025</td>
<td>Regional</td>
<td>9422</td>
<td>16331</td>
<td>YES</td>
</tr>
<tr>
<td>2030</td>
<td>Regional</td>
<td>6882</td>
<td>11819</td>
<td>YES</td>
</tr>
<tr>
<td>2035</td>
<td>Regional</td>
<td>5386</td>
<td>9487</td>
<td>YES</td>
</tr>
</tbody>
</table>

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.
HELPFUL LINKS
(TRANSPORTATION CONFORMITY)

EPA: Transportation Conformity:
https://www.epa.gov/state-and-local-transportation/transportation-conformity
   Current law, regulations and guidance
   Policy and technical guidance
   Project-level conformity
   General information, contacts and training
   Adequacy review of SIP submissions

State and Local Transportation Resources (EPA):
https://www.epa.gov/state-and-local-transportation
   Conformity, Vehicle I/M, SIP, GHG Planning, Models

DOT (FHWA) website:
https://www.fhwa.dot.gov/environment/air_quality/conformity/index.cfm
   Research and training
   Examples of Transportation Conformity Practice

Nonattainment/maintenance areas (EPA):
   EPA’s Greenbook: https://www.epa.gov/green-book
QUESTIONS?

CONTACT INFO

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E-mail: Randy.Simon@ky.gov