May 2011

MID-OHIO REGIONAL PLANNING COMMISSION

TRANSPORTATION IMPROVEMENT PROGRAM

Air Quality Conformity Appendix

This document serves as an appendix to both:

MORPC CapitalWays Transportation Plan Update
(Amended May 2011)

LCATS 2030 Transportation Plan Update
(May 2008)
MORPC & LCATS SFY 2012-2015 TIP's

Regional Transportation Plan, 2008-2030

morpc

Air Quality Conformity Determination Documentation

Franklin, Delaware, Licking, Fairfield, Madison and Knox County Ozone Maintenance Area

and

Franklin, Delaware, Licking, Fairfield, and Coshocton (Franklin Twp) County PM2.5 Non-Attainment Area

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Section I: Introduction

Under the 1990 Clean Air Act Amendments (CAAA), because of the 8-hour ozone standard, Franklin, Delaware, Licking, Madison, Fairfield and Knox counties were designated as a basic nonattainment area for ozone in 2004. As a result of the PM 2.5 standard, Franklin, Delaware, Licking and Fairfield counties and Franklin Township in Coshocton County were designated nonattainment for PM 2.5 under the annual standard. The CAAA defines nonattainment areas as geographic regions of the country that do not meet the National Ambient Air Quality Standards (NAAQS). In nonattainment areas, air quality implementation plans must be developed that identify strategies and programs that nonattainment areas will implement to provide the emission reductions needed for the areas to meet the NAAQS. In Ohio, the Ohio Environmental Protection Agency (Ohio EPA) is the lead agency for coordinating development of the State Implementation Plan (SIP). The SIP includes actions done on a statewide basis as well as actions done within each specific nonattainment area of the state to achieve the air quality standards.

With regard to the 1997 Ozone standard, U.S. EPA approved Ohio's SIP revision of redesignation to attainment status, in September 2009. Redesignation requests to attainment are SIP revisions that document that the NAAQS have been met and provide a maintenance plan to ensure meeting the standards for the next ten years. The first item of documentation contained in a redesignation request is three consecutive years of air quality monitoring data that meet the NAAQS. Second, an inventory of point source, area source and mobile source emissions is developed. The total of the three sources is certified as the attainment emission levels that will allow the air quality standards to be met. Next, emission projections for each source are made to the end of the maintenance period. It must be documented that the total emissions will not exceed the attainment emissions level. Any difference between the total future emissions and the total attainment level emissions is considered a safety margin.

For the future, on road mobile emissions budgets are then established. These budgets are the future projections plus any of the safety margins that the local area may choose to allocate. A final part of the redesignation request is a contingency plan to be implemented if monitoring data indicate that the air quality fails to meet the NAAQS during the maintenance period. On May 20, 2009, Federal Register announced U.S. EPA's adequacy finding of motor vehicle emissions budgets (MVEBs) for VOC and NOx corresponding to years 2012 & 2020, in the Columbus, Ohio ozone non-attainment area. This notice of finding was effective June 4, 2009. The September 2009 ozone redesignation approval retains these same budgets. This report uses the MVEBs in the transportation conformity determination for ozone.

The Clean Air Act Amendments of 1990 expanded transportation's role in contributing to national clean air goals. The 1990 amendments expand the requirements of "transportation conformity" as:

> *Conformity to the (air quality implementation) plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and that such activities will not (i) cause or contribute to any new violations of any standards in any area, (ii) increase the frequency or severity of any existing violation of any standard in any areas, or (iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.*

One of the requirements is that plans, programs and projects do not delay the timely implementation of transportation control measures (TCMs) in the applicable SIP. Transportation conformity is the process of analyzing the projects included in the Transportation Plan to ensure they do not lead to violations in the air quality standards or delay obtaining the standard. The documentation of this process is called the conformity determination. This appendix is the transportation conformity documentation for the six-county Columbus ozone nonattainment area and the four-plus county PM2.5 nonattainment area.

Section II: Background

1-Hour Ozone Nonattainment Area Designation and Redesignation Request

Under the CAAA Franklin, Delaware and Licking counties were designated a marginal nonattainment area for ozone. This designation was based on 1988 air quality data that violated the NAAQS for ozone. At ground level, ozone is formed by the reaction of volatile organic compounds (VOCs) and nitrogen oxides (NOx). The CAAA requires that VOC and NOx emissions be reduced to lower the amount of ground-level ozone. Since 1988 the nonattainment area has had no violations of the 1-hour standards. However, the area must comply with the nonattainment area requirements in the CAAA.

In January 1994, the Ohio EPA working with the Ohio Department of Transportation (ODOT), the Mid-Ohio Regional Planning Commission (MORPC), and the Licking County Area Transportation Study (LCATS) submitted a redesignation request to the United States Environmental Protection Agency (U.S. EPA) for the three-county nonattainment area. On April 11, 1994, the Ohio EPA provided additional information to U.S. EPA. On February 1, 1996, a direct final rule was published in the Federal Register approving the redesignation request. The approval was effective April 1, 1996.

8-Hour Ozone and Redesignation Request

On April 15, 2004, U.S. EPA issued final designations with regard to the 8-hour ozone standard and final rules on conformity requirements for these areas. It resulted in expanding the central Ohio non-attainment area to expand to six counties: Franklin, Delaware, Licking, Knox, Fairfield and Madison.

Ohio EPA submitted an ozone redesignation package to U.S. EPA in March 2009. The May 20, 2009 Federal Register included a notice that the budgets included in the redesignation request are adequate for transportation conformity purposes and are depicted in Table 1. In September 15, 2009 Federal Register, U.S. EPA approved the redesignation to attainment effective September 15, 2009. The approval retained these budgets.

Table 1: On Road Mobile Source Budgets for the Columbus 8-Hour Ozone Nonattainment Area (VOC, NOx)

	VOC (tons/day)	NOx (tons/day)
2012 Build	54.86	91.64
2020 Build	36.60	46.61

PM2.5 Nonattainment Area Designation

April 14, 2005, U.S. EPA issued final designations with regard to the PM2.5 standard. Franklin, Delaware, Licking, Fairfield counties and Franklin Twp in Coshocton County were designated as a non-attainment area for the annual PM2.5 standard.

NOx Waiver

The CAAA allows the U.S. EPA administrator to issue a waiver of the NOx requirements if the administrator determines that additional reductions of NOx would not contribute to attainment of the air quality standards. A final rule approving a NOx waiver was published in the July 13, 1995, Federal Register. The NOx waiver removed the build/no-build test and the less than 1990 test that apply to NOx. However, an area that is

redesignated to attainment must still meet the approved NOx budget for the conformity analysis. Thus, the NOx waiver is no longer applicable to the Columbus nonattainment area.

Transportation Conformity Procedures

On November 24, 1993, U.S. EPA published regulations, 40 CFR 51 Subpart T, which define the specific process necessary to demonstrate conformity of transportation plans, TIPs and projects. Three updates to the conformity have also been finalized and incorporated into the Ohio Administrative Code (OAC). With the implementation regulations for the 8-hour ozone standard and the PM 2.5 standard, new procedures were established to demonstrate conformity for each of these pollutants. The conformity regulations identified three tests to be performed at various milestone or horizon years to show conformity. These are a budget test, a build/no build test and a no greater than 2002 baseline test. The test that must be satisfied depends upon the status of an area's SIP submittals. As an ozone area with approved on road mobile budgets, the budget test will be used. For the PM2.5 nonattainment area the no greater than 2002 baseline test will be used.

This appendix documents the conformity determination process for the ozone nonattainment area and the PM 2.5 nonattainment area.

Multiple Metropolitan Planning Organizations

The six-county ozone and four-county PM 2.5 non-attainment areas consist of two metropolitan planning organizations (MPOs), MORPC and LCATS with area outside of the two MPO's in Fairfield, Madison, and Knox Counties. The additional PM2.5 area in Coshocton County is also outside of any MPO area. The MORPC transportation planning area consists of Franklin County, Delaware County, Pataskala and Etna Township in Licking County, and Violet and Bloom Townships in Fairfield County. The LCATS transportation planning area covers the remainder of Licking County.

Each MPO develops a transportation plan for its respective transportation study area. The conformity procedures require that the entire non-attainment area be considered as a whole. This requires that the two transportation plans and any projects in the non-MPO area be considered together to make a conformity determination. This appendix documents the process used to combine the entire area to make single conformity determinations for ozone and PM2.5. This document serves as an updated appendix to the MORPC CapitalWays 2008-2030 Transportation Plan (originally adopted May 2008 and amended November 2009, and to be amended in May 2011) and the LCATS 2030 Transportation Plan (adopted May 2008). It also serves as the appendix to the Final Draft SFY 2012-2015 TIP's for MORPC and LCATS.

Latest Planning Assumptions

The Transportation Plans' conformity analysis readily meets this requirement. A 10/11/2000 U.S. DOT/U.S. EPA memorandum further emphasized the use of latest planning assumptions highlighting the following areas: 1) Model Validation; 2) Land Use, Population and Employment Projections; and 3) Travel and Congestion. The following addresses these issues.

1) Model Validation

For the travel demand model in the non-attainment area, model validation is a joint process between MORPC, LCATS and the ODOT Office of Technical Services. In December 2004, a new complete validated model was accepted and installed for use at MORPC. The new model covers all of the MORPC and LCATS area including portions of Pickaway, Madison and Union Counties along with additional portions of Fairfield County outside of the MORPC MPO area. Further, MORPC

continuously updates the highway and transit network information and maintains accurate networks for future year analysis. In 2009 MORPC completed a new validation of the model for the year 2005.

2) Future Networks

The Transportation Plan horizon year for MORPC and LCATS is 2030. Thus, based on previous correspondence for this conformity analysis, the years 2012, 2020 and 2030 are being used. The Transportation Plans list the projects included for the analysis years. Section III lists the projects included for each analysis years.

3) Land Use, Population and Employment Projections

MORPC continually monitors land use, population and employment information. MORPC performs complete land use inventories every five years. The complete documentation of the process and future forecasts is provided in *Land Use and Demographic Trends and Forecast*, a companion report to the Transportation Plan. Any land use updates to the 2030 variables, are incorporated and complete land use variable sets for 2012 and 2020 are utilized to generate the vehicle trip tables. MORPC coordinates with LCATS for updates to the variables for their area.

4) Travel and Congestion

Based on the validated model, highway and transit changes since then, the most up-to-date land use, population and employment projections, 24-hour ADT volumes are produced. An ODOT post processor is then used to estimate congestion and emission information. Additional information is provided later. This technique has been reviewed and approved through the Ohio interagency consultation process and represents the best available means to estimate regional travel and congestion. MOBILE6.2 is used to create the emission factors. ODOT ensures the emission factors used in this process are based on the most up-to-date assumptions.

Urban Transportation Modeling Process

Of the non-attainment areas, the MORPC model covers Franklin County, Delaware County, Licking County and portions of Fairfield, Pickaway, Madison and Union counties. The model employs activity-based modeling procedures. Output from the urban model is link-by-link directional 24-hour traffic volumes for the existing or future regional transportation network. These 24-hour traffic volumes provide the basis for performing the air quality analysis. ODOT, MORPC and LCATS jointly hold the models and provide extensive technical support for each other. The non-modeled areas in the Fairfield, Madison, Knox and Coshocton counties utilize Highway Performance Monitoring System (HPMS) data.

Air Quality Modeling Process

The Transportation Plan conformity demonstration for Ohio's urbanized nonattainment and maintenance areas utilize the capabilities of the urban transportation models to perform milestone year and Transportation Plan horizon year analyses required under the conformity regulations. The modeling process identifies the growth in vehicle miles of travel and changes in the travel patterns resulting from the projects proposed in the non-attainment or maintenance area transportation plans and programs.

To generate pollutant burdens for the respective Transportation Plan analysis scenarios, ODOT completes a two-phase process. Phase 1 uses a process, developed by ODOT, to create the emission factors using U. S. EPA MOBILE6.2. The temperature, percent hot and cold starts, and the vehicle mix vary for each hour of the day for both hydrocarbons (VOCs) and carbon monoxide (CO). Emission factors are calculated for each

speed measured in miles per hour (MPH). The speeds vary from 5 MPH to 65 MPH for freeways and from 5 MPH to 55 MPH for surface arterials. Parameter records are used to override default values. The values for the Inspection Maintenance program, Anti-Tampering program, Pressure Test, the Stage II Vapor Recovery System, and on-board VRS were specified by the Ohio EPA.

Phase 2 uses a process to relate the MOBILE6.2 emission factors with the urban model's 24-hour link data files to generate hourly pollutant burdens for hydrocarbons (VOCs), oxides of nitrogen (NOx), and carbon monoxide (CO). The process reads 1) the transportation links containing the weighted 24-hour volumes; 2) the node grid coordinates; and 3) emission factors and calculates the total resulting emissions.

The directional hourly volumes are estimated by taking the link ADT and applying hourly percent ADT, percent direction, and the seasonal factors. The directional hourly V/C ratio is then estimated by taking the hourly volumes and applying the percent heavy-duty trucks adjusted by 1.7 to represent auto equivalents and divided by the directional capacity. The resulting volume-to-capacity ratio (V/C) is used in a table lookup to determine the directional speed. The hour, functional classification and directional speed are used to derive the directional emission factor using U.S. EPA MOBILE6.2 array file. If required, emission factors are interpolated. The appropriate emission factor is used to calculate the pollutant burden of the link for each hour. Interzonal VMT is calculated by assuming that the zonal area in square miles is represented as a circle. The radius is computed and the interzonal trips are multiplied by the radius to compute the intrazonal VMT.

At a July 15, 1994, meeting, the FHWA suggested comparison between the VMT growth rates projected in Ohio's urban transportation models with the historical HPMS data. It would provide an additional means of ensuring that the models were providing accurate results, thereby meeting the conformity requirements for using the latest planning assumptions.

To initiate this comparison, ODOT reviewed the HPMS data, as submitted to the FHWA, for Ohio's urbanized areas for the years 1980 to 1992. An annual percentage change in the total HPMS VMT growth for each functional class of roadway was calculated for each urbanized area. Fluctuations in the annual HPMS VMT growth led ODOT engineers to assert that any comparison of the pre-1990 data and the post-1990 data is not valid. Hence, the transportation models are the best available information that ODOT can provide for VMT growth. In addition, the most recent population and land use data available are utilized in the models and are validated based upon current traffic counts. ODOT is confident that the urban models accurately project VMT growth in Ohio's urbanized areas.

Analysis Years

The analysis years for transportation conformity must include the Transportation Plan horizon year, any milestone years (maintenance plan out year, 2020), and any interim years (to be less than ten years between analysis years) interim budget year, 2012. The Transportation Plan horizon year for MORPC and LCATS is 2030. Thus, the years 2012, 2020 and 2030 are used for conformity analysis.

PM2.5 Precursors

The annual emission inventories will be developed for the direct PM2.5 pollutants, tail pipe, brake and tire wear and the precursor NOx. It is agreed through interagency consultation that no major pollutant is missing from the analysis. ODOT generated emission factors for both, but used the default values. Also, no significance findings were made for the precursors SOx, ammonia, or road dust.

Air Quality Consultation Process

The 1990 Clean Air Act amendments required identification of the consultation procedures that Ohio's air quality and transportation agencies will follow in the conformity process. To fulfill this requirement, the Ohio EPA has adopted Ohio Administrative Code 3745-101-04 to define the interagency consultation procedures used on air quality issues. These rules define a "straw man" process, whereby the lead agencies in the conformity process assume responsibility for preparing and distributing draft documents, with supporting information, and ensuring that each affected party involved in the conformity process is included in the consultation process. In addition, a Memorandum of Understanding (MOU) between MORPC, LCATS, ODOT and Ohio EPA has been signed to clarify OAC 3745-101-04 for the Columbus maintenance area. As a result of SAFETEA-LU Ohio EPA led the process to update MOU. This process concluded with signatures from all parties obtained in February/March 2008.

The Columbus non-attainment area Transportation Plan's conformity process employed the consultation procedures embodied in the rules. The procedures used in the current air quality analysis are comparable to the previous TIP and Transportation Plan conformity determinations. As necessary air quality consultation reports on conformity process for the Transportation Plan are prepared and distributed to MORPC's TAC and Policy committees, LCATS Policy Committee, ODOT, Ohio EPA, FHWA, FTA, and U.S. EPA. In addition, MORPC has had various telephone conversations and e-mail correspondence with Ohio EPA, ODOT and FHWA. Ohio EPA has also discussed various issues of transportation conformity with U.S. EPA. Documentation is provided in attachments to this appendix.

Section III: Quantitative Analysis

Projects Included in the Air Quality Analysis

Every location-specific project listed in our Transportation Plan is included in the Transportation Plan networks and listed in the following project listing. MORPC annually meets with the local agencies to identify potential Transportation Plan projects. We also compile projects based on the local agencies' Capital Improvement Plans and any local thoroughfare and/or comprehensive plans. Thus, both federally funded and non-federally funded projects are included. Our model network includes all the projects that can be coded on the regional network. These listings include intersection improvements and other minor network changes which are potentially exempt projects as defined the conformity regulations (40 CFR in sections 93.126 and 93.127).There are no TCM's in the SIP for the Columbus maintenance area. Thus, the projects included in the transportation plans are consistent with those stated in the SIP. The following tables (Tables 3-5) identify the projects that are included in the analysis for the years 2012, 2020, and 2030 respectively. The 2012 list includes projects listed in the MORPC or LCATS Transportation Plan which have been completed since the Plans were originally adopted in 2008.

Table 3: Projects identified for year 2012

MORPC TPlan ID	Project Description (2012)
195	Hill Rd (SR-256) from Diley Rd to Norfolk-Southern Railroad, Major Widening
274	Hard Rd Phase C from Linworth Rd to SR-315, Major Widening
329	US 23 (N High St) from Flint Rd to Lazelle Rd (County Line), Major Widening
433	Stelzer Rd/International Gateway interchange at I-670, New Interchange
543	Diley Rd from S of SR-256 to Busey Rd, Major Widening
661	SR-750 from Wellington Blvd to Sawmill Pkwy, Major Widening
689	Sullivant Ave from Georgesville Rd to W of Wilson Rd, Minor Widening
701	Hilliard-Rome Rd from Westchester Woods Blvd to Roberts Rd, Major Widening
724	Scioto Darby Rd from Cosgray Rd to Bradford Dr, Major Widening
726	Alton & Darby Creek Rd from S of Davis Rd to Scioto Darby Rd at Cosgray Rd, ReAlignment
734	US-36 at Galena Rd (CR-34), Intersection Upgrade
792	I-71 at SR-665, Interchange Upgrade
846	US-62/SR-3 (Harrisburg Pk) from Briggs Rd to Belmead Ave, Safety Improvement
957	Alkire Rd from Gardner Rd to Hellbranch Run, Minor Widening
970	Houk Rd from US-36 to SR-37, Minor Widening
974	Sawmill Pkwy Extension from Hyatts Rd, N across US 42 to Section Line Rd, New Roadway
977	Merrick Pkwy from SR-37 and SR-203 to US-23 and Panhandle Rd, New Roadway
982	Hamilton Rd from Clark State Rd to US 62, Major Widening
984	Chatterton Rd from Noe-Bixby Rd to Reynard Dr, Minor Widening
992	Rosehill Rd from Livingston Ave to Rosedale Ave, Minor Widening

MORPC TPlan ID	Project Description (2012)
998	Watkins Rd from US-40 to Refugee Rd, Minor Widening
999	Tech Center Dr Extension from SR 317 to Morrison Rd, New Roadway
1145	SOMA/Trueman Blvd Ph 3 from Davidson Rd to Edward's Farms Rd (Columbus), New
1148	Cemetery Rd from High School Dr to Norwich St, Major Widening
1149	Scioto Darby Rd at Walcutt Rd, Intersection Upgrade
1150	Wilcox Rd at Hayden Run Rd, Intersection Upgrade
1178	Central College Rd at Harlem Rd, Intersection Upgrade
1180	Morse Rd at Reynoldsburg-New Albany Rd, Intersection Upgrade
1182	Dublin-Granville Rd at Harlem Rd, Intersection Upgrade
1184	Trabue Rd at Hague Ave, Intersection Upgrade
1186	Fisher Rd at Hague Ave, Intersection Upgrade
1188	Reynoldsburg-New Albany Rd at Taylor Rd, Intersection Upgrade
1199	Cosgray Rd from Scioto Darby Rd to Rails-to-Trails, Major Widening
1266	Worthington Rd from Lazelle Rd to County Line Rd W, Minor Widening
1270	US 62 (Johnstown Rd) from Beecher Rd to YMCA Pl, Minor Widening
1292	Clime Rd Ph 1 from just e of Georgesville Rd to 900' e of Demorest Rd, Minor Widening
1320	Glenn Rd from US-36 to Peachblow Rd, New Roadway
1329	Westerville Rd (SR-3) from SR-161 to Huber Village Blvd, Minor Widening
1359	US 62 at Central College Rd & Kitzmiller Rd, Intersection Upgrade
1366	I-270 at SR-317 (Hamilton Rd), Interchange Upgrade
1370	Lockbourne Rd from SR 104 to Groveport Rd, Minor Widening
1389	Avery Rd from S of Rings Rd to N of Conrail Railroad, Major Widening
1416	W Johnstown Rd from Sandra Ct to James Rd, Minor Widening
1430	Olde Worthington Rd from Hanawalt Rd/County Line Rd W to Polaris Pkwy, Minor Widening
1435	Busey Rd from Bowen Rd to Gender Rd, New Roadway
1437	Emerald Pkwy from Rings Rd to Tuttle Crossing Blvd, Major Widening
1449	Britton Pkwy Phase 3B from Hayden Run Rd to Carrington Way, Major Widening
1453	US-33 at SR-161/Post Rd, Interchange Upgrade
1481	London-Groveport Rd at US-23, Intersection Upgrade
1489	Rickenbacker Pkwy (Phase 2A) from Lockbourne Eastern Rd to Second St (east intersection),
1529	E Orange Rd from S Old State Rd to Bale-Kenyon Rd, Minor Widening
1538	International Gateway at Stelzer Rd, New Interchange
1682	Harrisburg Pk at Stahl Rd, Intersection Upgrade
1685	Etna Pkwy from US 40 to SR-16, New Roadway

MORPC TPlan ID	Project Description (2012)
1691	Hamilton Rd from N of Preserve Blvd to Dublin-Granville Rd, New Roadway
1694	Alton & Darby Creek Rd at Roberts Rd, Intersection Upgrade
1698	I-70 at Hamilton Rd (SR-317), Interchange Upgrade
1753	Olentangy River Rd at Linworth Rd, Intersection Upgrade
1767	Livingston Ave (US-33) at Parsons Ave, Intersection Upgrade
1769	Alton & Darby Creek Rd from Renner Rd to Walker Rd, Intersection Upgrade
1770	Goodale Blvd at CSX RR bridge near Olentangy River Rd in Columbus, Minor Widening
1771	Third Ave at CSX RR bridge near Olentangy River Rd in Columbus, Major Widening
1778	Stygler Rd from US 62 (Johnstown Rd) to Agler Rd, Minor Widening
1865	Front St from Mound St to Rich St, Operational Upgrades
1866	Glenn Rd at US-36/SR-37, Intersection Upgrade
1867	US-23 at Winter Rd/Peachblow Rd, Intersection Upgrade
1873	SR-605 at Walton Pkwy, Signalization
1880	Industrial Pkwy at SR-161, Realignment
1882	Rickenbacker Pkwy (Phase 2B) from Second St to SR-317, Major Widening
LCATS	2010 SR13/16 interchange safety project - Downtown Newark
LCATS	2011 SR16/21st St safety project - West of downtown
LCATS	2012 SR16/Cedar St safety project - East of downtown

Table 4: Additional Projects identified for year 2020

MORPC TPlan ID	Project Description (2020)
34	Alton & Darby Creek Rd.-Cosgray Rd. connector from Alton & Darby Creek Rd. s. of Davis Rd. to Scioto & Darby Creek Rd. at Cosgray Rd., New Roadway-2 lane(s) each direction
73	SR 317/SR 665 at US 23 (S. High St.), Intersection Modification-Add turn lanes 2 approaches
91	Alkire Rd. at CSX Railroad west of US 62/SR 3, Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
98	Veterans Pkwy. (formerly Southeast Connector) from US 23 at US 42 to Glenn Rd. extension, New Roadway-2 lane(s) each direction
118	Col. signalization phase B, Grandview area, Management and Operations/ITS-
120	Col. signalization phase C, mid-town locations, Management and Operations/ITS-
125	Tuttle Crossing Blvd. extension from Avery Rd. to Wilcox Rd., New Roadway-3 lane(s) each direction
151	Avery Rd. from Tuttle Crossing Blvd. ext. to Woerner Temple Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
196	Alum Creek Dr. from Williams Rd. to Refugee Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
208	US 23 at Pennsylvania Ave., New Interchange-New basic diamond interchange
212	Hilliard-Rome Rd. from I-70 (West Freeway) to Roberts Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
217	Clime Rd. from Georgesville Rd. to Demorest Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
335	Trueman Blvd.-Edwards Farms Rd. connector from Davidson Rd. to Edwards Farms Rd., New Roadway-2 lane(s) each direction
358	I-270 (West Outerbelt) at Cemetery Rd., Interchange Expansion-Expand the interchange with some loop ramps
375	Worthington-Galena Rd. from Wilson Bridge Rd./Huntley Rd. to Sancus Blvd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
380	US 23 (N. High St.) from Wilson Bridge Rd. to I-270 (North Outerbelt), Major Widening-Arterial-Widen road from 4 lanes to 6 lanes total both directions
388	US 23 (N. High St.) from North Woods Blvd. to Delaware Co. line, Major Widening-Arterial-Widen road from 4 lanes to 6 lanes total both directions
397	SR 310 (Hazelton-Etna Rd.) from I-70 (East Freeway) to US 40 (National Road), Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
410	Long Rd. from Bowen Rd. to Diley Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
414	US 33 (Columbus-Lancaster Rd.) at Bixby Rd., New Interchange-New interchange with some loop ramps
421	I-71 (South Freeway) at SR 665 (London-Groveport Rd.), Interchange Expansion-Expand the basic diamond interchange
434	I-71 at Big Walnut Rd., New Interchange-New interchange with some loop ramps
477	Scioto & Darby Creek Rd. from Cosgray Rd. to Cemetery Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
480	Roberts Rd. from Alton Darby Creek Rd. to Hilliard Rome Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions

MORPC TPlan ID	Project Description (2020)
482	Lexington Glen extension from US 36 (William St.) to US 37 (Central Ave.), New Roadway-1 lane(s) each direction
487	Powell Rd. (SR 750) from SR 315 (Olentangy River Rd.) to Highmeadows Village Dr., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
494	Merrick Blvd. ext. from SR 37 at SR 203 to US 23 at Panhandle Rd., New Roadway-2 lane(s) each direction
542	Tech Center Dr. from Hamilton Rd. (SR 317) to Morrison Rd., New Roadway-2 lane(s) each direction
544	Sawmill Pkwy. from Hyatts Rd. to US 42, New Roadway-2 lane(s) each direction
634	Watkins Rd. from National Rd. (US 40) to Refugee Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
636	Col. signalization phase A, Management and Operations/ITS-
643	I-70/I-71 (South Innerbelt) from I-71S/SR 315 (South Freeway) to I-71N (East Innerbelt), Major Widening-Freeway-Widen freeway from 6 lanes to 10 lanes total both directions
644	I-71 north (East Innerbelt) from I-70/I-71 (South Innerbelt) to I-670 (North Innerbelt), Major
737	Clime Rd. from Demorest Rd. to US 62/SR 3 (Harrisburg Pk.), Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
752	Murphy Pkwy extension from Grandshire Subdivision to S Liberty St, New Roadway
817	Busey Rd. relocation at east of Allen Rd., New Roadway-1 lane(s) each direction
830	Rickenbacker Pkwy. West from Ashville Pike to south of SR 317 (London-Groveport Rd.), Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
831	Rickenbacker Pkwy. East from Ashville Pike to SR 317 (London-Groveport Rd.), New Roadway-2 lane(s) each direction
978	US 23 (N. High St.) from I-270 (North Outerbelt) to North Woods Blvd., Major Widening-Arterial-Widen road from 6 lanes to 8 lanes total both directions
1002	I-70/I71 (South Innerbelt) at SR 315 (West Innerbelt), Interchange Expansion-Expand the interchange with some directional ramps
1006	Britton Rd. from Carrington Way to Hayden Run Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
31	Britton-Cosgray connector (part A) from Hayden Run Rd. (east of Cosgray Rd.) to Avery Rd., New Roadway-2 lane(s) each direction
32	Wilcox Rd. extension from Davidson Rd. to Hayden Run Rd. at Wilcox Rd., New Roadway-1 lane(s) each direction
38	Tuttle Crossing Blvd. ext. from Rings-Tuttle connector to Avery Rd., New Roadway-2 lane(s) each direction
67	Taylor Rd. from Taylor Station Rd.. to Reynoldsburg-New Albany Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
70	Watkins Rd. from Groveport Rd. to Alum Creek Dr., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
100	Alton Rd.-Alton & Darby Creek Rd. connector, New Roadway-1 lane(s) each direction
121	Emerald Pkwy. extension from SR 257 (Riverside Dr.) to Bright Rd., New Roadway-2 lane(s) each direction
123	Murphy Pkwy. ext. (south leg) from Liberty St. south of railroad to Murphy Pkwy., New Roadway-1 lane(s) each direction

MORPC TPlan ID	Project Description (2020)
131	Hard Rd. from Sawmill Rd. to Smoky Row Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
166	Dempsey Rd. from I-270 (North Outerbelt) to Sunbury Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
174	SR 3 (Westerville Rd.) from SR 161 to south of Dempsey Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
182	Etna Pkwy. from Heritage Dr. to SR 16 (Broad St.), New Roadway-2 lane(s) each direction
197	Gender Rd. from US 33 (Southeast Freeway) to Brice Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
198	Alum Creek Dr. from Refugee Rd. to Frebis Ave., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
228	Henderson Rd. from US 33 (Riverside Dr.) to Sawmill Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
234	Shier-Rings Rd. from Avery Rd. to Emerald Pkwy., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
244	Avery Rd. from Britton-Cosgray connector to Tuttle Crossing Blvd. extension, Major Widening-Arterial-Widen road from 2 lanes to 6 lanes total both directions
247	Kinnear Rd. from North Star Rd. to Olentangy Riv. Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
271	I-270 (North Outerbelt) at High St. (US 23), Interchange Expansion-Expand the interchange with some directional ramps
274	Cassady Ave. from Bexley north corp. limit to Agler Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
276	Hamilton Rd. from Morse Rd. to Dublin-Granville Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
278	Sunbury Rd. from Leonard Ave. to Agler Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
279	Taylor Station Rd. from Westbourne Ave. to Havens Corner Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
289	Bixby Rd. from Groveport Rd. to SR 317 (London-Groveport Rd.), Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
292	Brice Rd. from Winchester Pk. to Gender Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
299	I-270 (South Outerbelt) at Alum Creek Dr., Interchange Expansion-Expand the interchange with some loop ramps
310	Williams Rd. from Corr Rd./Lockbourne Rd. to Alum Creek Dr., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
312	Groveport Rd. from Watkins Rd. to Williams Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
333	Leap Rd.-Walcutt Rd. connector from Walcutt Rd. at Scioto Darby Rd. to Leap Rd. north of railroad tracks, New Roadway-1 lane(s) each direction
391	Hamilton Rd. from Clark State Rd. to US 62 (Johnstown Rd.), Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
402	Central Pickerington bypass from Hill Rd. (SR 256) to Columbus St. (SR 256), New Roadway-2 lane(s) each direction

MORPC TPlan ID	Project Description (2020)
407	Bixby Rd./Hamilton Rd. from SR 317 to Ebright Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
411	US 33 (Columbus-Lancaster Rd.) from Gender Rd. to Hill Rd./Diley Rd., Convert to Freeway-Convert 4 lane roadway to 4 lane freeway
412	US 33 (Columbus-Lancaster Rd.) from Hamilton Rd. (SR 317) to Gender Rd., Convert to Freeway-Convert 4 lane roadway to 4 lane freeway
431	Big Walnut Rd. from Africa Rd. to SR 3, Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
450	Home Rd. extension from US 23 (Columbus Pk.) to Lewis Center Rd., New Roadway-2 lane(s) each direction
461	Cleveland Ave. n. extension from Polaris Pkwy. to Worthington Rd., New Roadway-1 lane(s) each direction
468	Glenn Rd. extension (south) from Cheshire Rd. to Curve Rd., New Roadway-2 lane(s) each direction
474	Cottswold Dr.. extension from US 23 (Columbus Pk.) to Stratford Rd., New Roadway-1 lane(s) each direction
497	Home Rd. from SR 257 (Riverside Dr.) to US 23 (Columbus Pk.), Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
498	Orange Rd. from SR 315 (Olentangy River Rd.) to Bale Kenyon Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
501	Powell Rd. (SR 750) from High Meadows Village Dr. to US 23 (Columbus Pk.), Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
549	Scioto & Darby Creek Rd. from Alton Darby Creek Rd. to Cosgray Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
556	Powell Rd. from Polaris Pkwy. (SR 750) to Worthington Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
557	Africa Rd. from Sharelane Dr. to Lewis Center Rd./Big Walnut Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
564	Cosgray Rd. from Hayden Run Rd. to Tuttle Crossing Blvd. extension, Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
565	Wilcox Rd. from Hayden Run Rd. to Tuttle Crossing Blvd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
617	Central College Rd. from Lee Rd./Ulry Rd. to Colts Gate Dr., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
619	US 33/SR 161 (Columbus-Marysville Rd.) from Avery Rd. to I-270 (North Outerbelt), Major Widening-Freeway-Widen freeway from 4 lanes to 8 lanes total both directions
622	White Rd. from Hoover Rd. to SR 104 (Jackson Pk.), Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
637	Col. signalization phase D, Management and Operations/ITS-
638	Hamilton Rd. extension from Central College Rd. to Harlem Rd., New Roadway-2 lane(s) each direction
669	Ansmil Blvd. from Leap Rd. to Britton Pkwy., New Roadway-2 lane(s) each direction
675	Thompson Rd. extension from Cleveland Ave. to County Line Rd. (at Thompson Rd.), New Roadway-1 lane(s) each direction

MORPC TPlan ID	Project Description (2020)
684	Avery Rd. from Hayden Run Rd. (south of) to Britton-Cosgray connector, Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
686	Hayden Run Rd. from Cosgray Rd. to Britton-Cosgray connector, Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
689	Edwards Farms Rd. from Hayden Run Rd. (south of) to Hayden Run Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
780	Sycamore St. from Whittier Peninsula to Front St., New Roadway-1 lane(s) each direction
785	Cosgray-Tuttle Crossing connector from Cosgray Rd. to Tuttle Crossing Blvd., New Roadway-1 lane(s) each direction
802	Gender Rd. extension from Winchester Southern Rd. to Lithopolis Rd., New Roadway-2 lane(s) each direction
804	Sims/Rager-Gender Rd. connector from Sims Rd./Rager Rd. to Gender Rd. at Winchester Blvd., New Roadway-2 lane(s) each direction
813	Hill Rd. relocation from Busey Rd. at Hill Rd. (s. leg) to Hill Rd. north of Busey Rd., New Roadway-1 lane(s) each direction
815	Hill Rd. from Hill Rd. relocation (n. of Busey Rd.) to Columbus St. (SR 256), Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
818	Lehman Rd. from Gender Rd. to Bowen Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
822	Bowen-Diley connector from Bowen Rd. to Diley Rd., New Roadway-1 lane(s) each direction
823	Lehman Rd. extension from Winchester Pike to Gender Rd., New Roadway-1 lane(s) each direction
836	Market St. extension from US 62 (Main St.) to Reynoldsburg-New Albany Rd., New Roadway-1 lane(s) each direction
848	Glenn Rd. extension from US 23 (north of Peachblow Rd.) to Cheshire Rd. (at Glenn Rd. extension), New Roadway-2 lane(s) each direction
849	Glenn Rd. from Curve Rd. to US 36/SR 37, Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
854	County Line Rd. - Polaris Pkwy. connector from County Line Rd. (east of Taylor Way Dr.) to Polaris Pkwy. (at Worthington Rd.), New Roadway-1 lane(s) each direction
855	Orion Pl./Worthington Rd. from County Line Rd. to Polaris Pkwy., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
857	SR 161 (Dublin-Plain City Rd.) from Houchard Rd. to Cosgray Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
860	US 33/SR 161 (Columbus-Marysville Rd.) from Dublin-Plain City Rd. (SR 161)/Post Rd. to Avery-Muirfield Dr., Major Widening-Freeway-Widen freeway from 4 lanes to 8 lanes total both
862	Tuttle Crossing Blvd. extension from Cosgray Rd. to Rings-Tuttle connector, New Roadway-2 lane(s) each direction
874	Morse Rd. from US 62 (Johnstown Rd.) to Reynoldsburg-New Albany Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
876	Broad St. (SR 16) from I-270 (East Outerbelt) to McNaughten Rd., Minor Widening/Safety-Widen 6 lane road to standard lane width with turn lanes
902	Britton-Cosgray connector (part B) from Avery Rd. to Britton Rd., New Roadway-2 lane(s) each direction

MORPC TPlan ID	Project Description (2020)
904	Cosgray Rd. from Cosgray-Tuttle Crossing connector to Shier-Rings Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
911	Olde Worthington Rd. connector from Olde Worthington Rd. to County Line-Polaris connector (future), New Roadway-2 lane(s) each direction
925	Sims Rd.-Bixby Rd. connector from Ebright/Richardson-Sims Rd. connector to Sims Rd., New Roadway-2 lane(s) each direction
928	SR 317 (London-Groveport Rd.) from Alum Creek Dr. to Main St. (Groveport Rd.), Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
929	Rohr Rd. from Alum Creek Dr. to Hayes Rd. connector (future), Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
948	William St. (US 36/US 42/SR 521) from Penick Ave. to Central Ave (SR 37), Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
949	Central Ave. (SR 37) from CSX rail line to William St. (US 36/SR 521), Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
951	US 36/SR 37 from William St. (US 36)/Central Ave. (SR 37) to SR 521, Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
954	Lake St (US 42) from William St. (US 36/SR 521) to Horseshoe Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
968	I-71 (South Freeway) at Stringtown Rd., Interchange Expansion-Expand the basic diamond interchange
970	SR 665-Orders Rd. connector from SR 665 (London Groveport Rd.) to Orders Rd., New Roadway-1 lane(s) each direction
996	Downtown Columbus Streetcar Capital, Transit-
997	Third Ave. from Edgehill Rd. to Olentangy River Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
1004	Avery Rd. from Woerner Temple Rd. to Shier-Rings Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
1013	Broad St. (SR 16) at James Rd., Intersection Modification-Add turn lanes 2 approaches
1014	Cleveland Ave. at Oakland Park Ave., Intersection Modification-Add turn lanes 2 approaches
1015	Livingston Ave. (US 33) at Parsons Ave., Intersection Modification-Add turn lanes 2
1016	Livingston Ave. (US 33) at Alum Creek Dr., Intersection Modification-Add turn lanes 2 approaches
1028	Parsons Intermodal Yard and supporting rail and access roads, Railroad Related-
1029	Various Intermodal Yards and supporting rail and access roads, Railroad Related-
1030	Refugee Rd./Chatterton Rd. at Noe Bixby Rd., Intersection Modification-Add turn
1031	High St. (US 23) at Obetz Rd., Intersection Modification-Add turn lanes 2 approaches
1032	Dublin-Granville Rd. (SR 161) at Maple Canyon Ave., Intersection Modification-Add
1033	Morse Rd. at Westerville Rd. (SR 3), Intersection Modification-Add turn lanes 2
1034	Broad St. at Reynoldsburg-New Albany Rd., Intersection Modification-Add turn lanes 2
1035	Refugee Rd. at Courtright Rd. (east leg), Intersection Modification-Add turn lanes 2
1036	Sunbury Rd. at Innis Rd./McCutcheon Rd., Intersection Modification-Add turn lanes

MORPC TPlan ID	Project Description (2020)
1037	Hamilton Rd. (SR 317) at Kimberly Pkwy./Kingsland Ave., Intersection Modification-
1038	Hilliard Rome Rd. at Fisher Rd./Feder Rd., Intersection Modification-Add turn lanes 2
1039	Henderson Rd. at Olentangy River Rd., Intersection Modification-Add turn lanes 2
1040	Dublin-Granville Rd. (SR 161) at Karl Rd., Intersection Modification-Add turn lanes 2
1041	Dublin-Granville Rd. (SR 161) at Sawmill Rd., Intersection Modification-Add turn lanes
1042	Cleveland Ave. at Community Park Dr., Intersection Modification-Add turn lanes 2
1043	Cleveland Ave. at Schrock Rd., Intersection Modification-Add turn lanes 2 approaches
1045	US 23 - Rickenbacker connector from US 23 to Rickenbacker intermodal yard, New Roadway-2 lane(s) each direction
1046	Goodale Blvd. from Edgeworth St. to Olentangy River Rd./Twin Rivers Dr., Minor Widening/Safety-Widen 4 lane road to standard lane width with turn lanes
1384	Cosgray-Britton Connector from Hayden Run Rd to Avery Rd, New Roadway
1443	Avery Rd Phase 2 from Tuttle Crossing Boulevard Ext to south of Woerner Temple Rd, Major Widening
229	I-270 at Roberts Rd, Interchange Modification to diverging diamond interchange (DDI)
871	Taylor Rd from Old Taylor Rd to 475' S of Windsor Dr, Minor Widening
1050	S Old State Rd from 800' S of Polaris Pkwy to 600' N of Orange Rd, Major Widening
1051	Lazelle Rd from Flint Rd to Sancus Blvd, Major Widening
LCATS	SR16 at 21st Street interchange improvement (safety project.)
LCATS	SR16 at Cedar Street interchange improvement with removal of Buena Vista partial interchange (safety project.)
LCATS	SR13 at SR16 interchange upgrade make overpass two-way and along with all of Mount Vernon Road and Hudson Avenue (local project.)
LCATS	Baker Boulevard and Evans Boulevard extensions for better local connectivity
LCATS	New Bridge at end of Thornwood Drive and relocation of Cherry Valley Road to connect to new Bridge.
LCATS	SR79 improvement from Oberlin Drive north to current divided highway (make boulevard.)
LCATS	Extend Beaver Run Road from York Road to Watkins Road.
LCATS	SR16 at Cherry Valley Road interchange addition (convert at grade intersection into

Table 5: Additional Projects identified for year 2030

MORPC TPlan ID	Project Description (2030)
75	Pontius Rd. from Hayes Rd. to SR 317 (London-Groveport Rd.), Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
146	Scioto Darby Rd. from Main St. to Walcutt Rd., Minor Widening/Safety-Widen 2 lane road to
183	I-70 (East Freeway) at Etna Pkwy. extension, New Interchange-New basic diamond interchange
184	Broad St. (SR 16) from Taylor Rd. to New JRS Roadway, Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
193	US 33 (Columbus-Lancaster Rd.) at Winchester Rd., New Interchange-New basic diamond
211	Sullivant Ave. from Georgesville Rd. to Wilson Rd., Minor Widening/Safety-Widen 4 lane road
218	Georgesville Rd. from Sullivant Ave. (north leg) to Lincoln Park Ct., Minor Widening/Safety-
226	Walcutt Rd. from Trabue Rd. to Roberts Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
227	Trabue Rd./Renner Rd. from Hilliard-Rome Rd. to Conrail overpass, Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
239	I-270 (North Outerbelt) at US 33/SR 161 (Columbus-Marysville Rd.), Interchange Expansion-Expand the interchange with some directional ramps
272	I-71 from n. of US 36/SR 37 to Morrow Co. line, Major Widening-Freeway-Widen freeway from 4 lanes to 6 lanes total both directions
275	Morse Rd. from Hamilton Rd. to US 62 (Johnstown Rd.), Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
277	Havens Corners Rd. from Hamilton Rd. (SR 317) to Reynoldsburg-New Albany Rd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
284	McNaughten Rd. from Main St. (US 40) to Broad St. (SR 16), Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
331	Linworth Rd. from SR 161 (Dublin-Granville Rd.) to Hard Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
409	Hill Rd. from Canal Winchester corp. line to Waterloo Eastern Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
454	Section Line Rd. extension from SR 37 to Buttermilk Hill Rd., New Roadway-1 lane(s) each direction
462	Rome Corners Rd. extension from Worthington Rd. to Lewis Center Rd., New Roadway-1
469	Pennsylvania Ave. extension from US 23 to US 42 at Horseshoe Rd., New Roadway-1 lane(s) each direction
470	Glenn Rd. extension (north) from US 36/SR 37 to US 42, New Roadway-1 lane(s) each direction
506	Cheshire Rd. from US 23 (Columbus Pk.) to Piatt Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
519	US 36/SR 37 from I-71 to SR 3, Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
524	I-270 (South Outerbelt) from I-71 (South Freeway) to US 23 (S. High St.), Major Widening-Freeway-Widen freeway from 4 lanes to 6 lanes total both directions
533	I-71 (South Freeway) from SR 665 (London-Groveport Rd.) to Stringtown Rd., Major
580	SR 310 (Hazelton-Etna Rd.) from US 40 (National Road) to Mill Street Rd., Major Widening-
682	Houchard Rd. from Shier-Rings Rd. to SR 161 (Dublin-Plain City Rd.), Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions

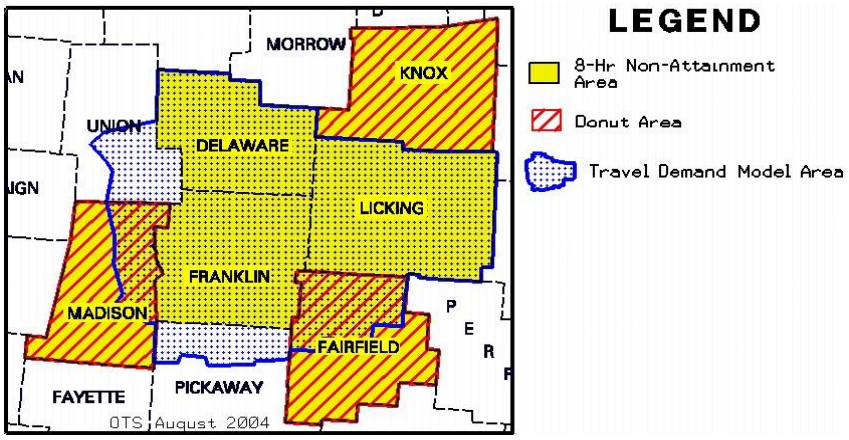
MORPC TPlan ID	Project Description (2030)
701	I-71 at US 36/SR 37, Interchange Expansion-Expand the basic diamond interchange
776	Lockbourne Rd. from Groveport Rd. to SR 104 (Frank-Refugee Freeway), Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
783	James Rd. from Livingston Ave. to Main St. (US 40), Minor Widening/Safety-Widen 4 lane road to standard lane width with turn lanes
806	Groveport Rd. from Gender Rd. (SR 674) to Washington St., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
814	Hill Rd. from Basil Western Rd. relocation to Busey Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
833	West Campus Rd. extension from Hamilton Rd. ext. (future) to New Albany Rd. West, New Roadway-1 lane(s) each direction
852	Lewis Center Rd. at S. Old State Rd., Intersection Modification-Add turn lanes 2 approaches
858	Britton Pkwy. from Britton Rd. extension (Hilliard) to Tuttle Crossing Blvd., Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
864	Britton Rd. extension from Scioto & Darby Creek Rd. to Cemetery Rd., New Roadway-2 lane(s)
873	US 62 from I- 270 (East Outerbelt) to Mill St., Major Widening-Arterial-Widen road from 4 lanes to 6 lanes total both directions
903	Hayden Run Rd. connector from Britton-Cosgray connector (future) to Hayden Run Rd. (near Britton Rd.), New Roadway-2 lane(s) each direction
938	Broad St. (SR 16) from Yearling Rd. to I-270 (East Outerbelt), Major Widening-Arterial-Widen road from 4 lanes to 6 lanes total both directions
952	Central Ave. (SR 37) from Houk Rd. to CSX rail line, Minor Widening/Safety-Widen 2 lane road to standard lane width
956	London Rd. from US 42 to Sandusky St., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
958	Groveport Rd. from Williams Rd. to Alum Creek Dr., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
966	Holt Rd. from Alkire Rd. to Georgesville Square Dr. (north leg), Minor Widening/Safety-Widen
988	Stygler Rd. from Johnstown Rd. to Agler Rd., Minor Widening/Safety-Widen 2 lane road to standard lane width with turn lanes
1007	Frantz Rd. extension from Post Rd. to High St. (Dublin Rd.), New Roadway-1 lane(s) each direction
1008	Houchard-Tuttle connector from Shier-Rings Rd. to Cosgray Rd., New Roadway-2 lane(s) each direction
1009	Cosgray Rd. from Shier-Rings Rd. to Plain City-Dublin Rd. (SR 161), Major Widening-Arterial-Widen road from 2 lanes to 4 lanes total both directions
1010	Eiterman Rd. relocation from Cosgray Rd. to Eiterman Rd., New Roadway-2 lane(s) each direction
1011	Industrial Pkwy. extension from Eiterman Rd. relocation to Post Rd. (SR 161), New Roadway-2 lane(s) each direction
1012	University Blvd. from Eiterman Rd. relocation to Post Rd. (SR 161), New Roadway-2 lane(s) each direction

MORPC TPlan ID	Project Description (2030)
1022	Etna Pkwy. from I-70 (East Freeway) to US 40 (National Road), New Roadway-2 lane(s) each direction
1044	Etna Pkwy. extension from Blacklick Eastern Rd. (SR 204) to I-70, New Roadway-2 lane(s) each direction
LCATS	New Road for local connectivity from Licking Springs Drive at Horns Hill Road to SR13 at
LCATS	Upgrade of Dayton road from East Main Street to SR79 near Stewart Road.
LCATS	New road for local connectivity from King Road at Price Road to SR13 near SR657 or SR657.
LCATS	SR79 improvement from Oberlin Drive south to current divided highway in Hebron (make boulevard.)
LCATS	IR70 Widening from SR256 existing section of three lanes through SR79 to the existing section of three lanes.
LCATS	Upgrade Granville interchanges at SR16, SR37, SR661
LCATS	US62 widening to four lanes from SR161 to Johnstown south corporation limit.

Conformity Analysis for Ozone

The conformity analysis consists of comparing the pollutant burden in the non-attainment area resulting from the projects listed in the MORPC and LCATS Transportation Plans to the approved emission budgets.

Fig 1: Columbus / Newark 8-Hour Nonattainment Area



The ozone redesignation to attainment established 8-hour budgets for VOC and NOx for the six county area. Thus, the conformity test requirements is the budget test with the budgets being the values shown previously in Table 1.

The Regional model is used in evaluating emissions for the Franklin, Delaware and Licking counties. Modeled portions of Fairfield, and Madison Counties are also evaluated by using Regional model. The VOC and NOx emissions modeled are summarized in Table 6.

Table 6: Total VOC & NOx emissions for Franklin, Delaware, Licking counties & modeled portions of Fairfield and Madison counties

	Regional Model Area	
Network	VOC (tons/day)	NOx (tons/day)
2012 build	42.215	70.284
2020 build	29.443	37.77
2030 build	29.926	29.724

For the non-modeled areas in Fairfield and Madison, as well as the entire Knox County, ODOT's HPMS based emission forecast is used. The percentage split of the VMT for the modeled and non-modeled regions are based on the HPMS VMT estimates and geographic coverage of the model. Using GIS, ODOT estimated the percent model VMT coverage as shown in Table 7.

Table 7: VMT Split

	% Modeled	% Non Modeled
County	Percentage	Percentage
Fairfield	40.12%	59.88%
Madison	29.12%	70.88%
Knox	0.00%	100%

The year 2012, 2020 and 2030 pollutant burdens for the non-modeled portion of Fairfield, Madison and Knox Counties were estimated by applying the emission factors to the estimated non-modeled VMT from HPMS forecasts. In the non-modeled portions of the three counties of Fairfield, Madison and Knox, there are no regionally significant projects in that area. Table 8 shows the HPMS based emissions for the non-modeled area.

Table 8: Total HPMS based emissions for Fairfield, Madison, Knox Counties

Network	VOC (tons/day)	NOx (tons/day)
2012 Build	3.476	5.513
2020 Build	2.367	2.796
2030 Build	2.303	2.183

The emission results for the modeled regions and the HPMS data for the non-modeled portions are combined in Table 9.

Table 9: Total Emissions for Columbus Maintenance area (sum of Modeled non-modeled portions)

Network	VOC (tons/day)	NOx (tons/day)
2012 Build	45.691	75.797
2020 Build	31.810	40.566
2030 Build	32.229	31.907

Ozone Conformity Determination

Table 10 illustrates that the emissions for VOC and NO_x are less than their corresponding budgets. Thus, the MORPC and LCATS Transportation Plans are in conformity with the requirements of the CAAA and the SIP.

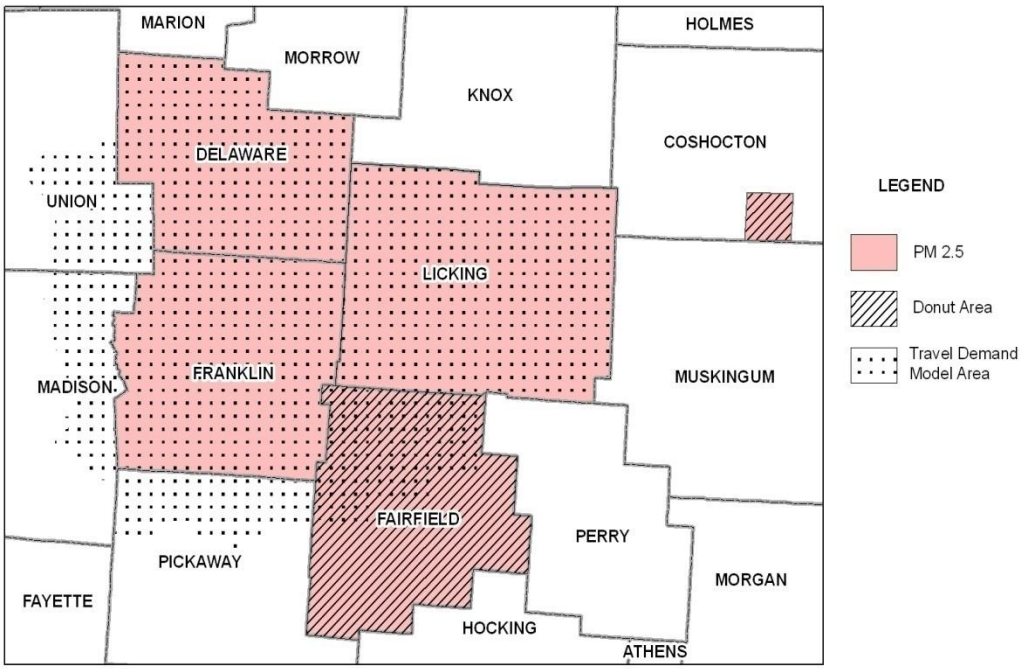
Table 10: Air Quality Analysis for the Columbus Ozone Nonattainment Area

	VOC (tons/day)	Budget (tons/day)	NOx (tons/day)	Budget (tons/day)
2012 Build	45.691	54.86	75.797	91.64
2020 Build	31.810	36.60	40.566	46.61
2030 Build	32.229	36.60	31.907	46.61

Conformity Analysis for PM2.5

The conformity analysis for PM2.5, since there is not yet a SIP with emission budgets, consists of comparing the pollutant burden in the non-attainment area resulting from the projects listed in the MORPC and LCATS Transportation Plans to 2002 baseline levels.

Figure 2: Columbus / Newark PM2.5 Nonattainment Area



The PM2.5 non-attainment area is shown on the above figure as the shaded area. The non-attainment area is divided into a modeled area comprised of Franklin, Delaware and Licking counties and part of Fairfield County, and into the donut area which includes the remainder of Fairfield County, and Franklin Twp in Coshocton County, as shown in Figure 2. Both areas use the Baseline comparison of Year 2002 emission burden. The model coverage area will use the post-processors link-level procedures to compute the emissions, while the non-modeled donut areas will utilize the ODOT HPMS county level VMT by functional class data.

Emissions for the Entire Franklin, Delaware, Licking Counties with modeled portion of Fairfield County

The Regional model is used for the Franklin, Delaware and Licking counties, plus a portion of Fairfield County. The modeled values, in tons/day, are shown in Table 11 for the years 2002, 2012, 2020 and 2030. Table 12 calculates the annualized Emission burdens for 365, in tons/year.

Table 11: Model results and their pollutant burdens for Modeled Area

Network	NOx (tons/day)	PM2.5 tons/day
2002 Baseline	133.634	2.259
2012 Build	66.115	1.123
2020 Build	35.072	0.865
2030 Build	26.291	0.911

Table 12: Model results and their annualized pollutant burdens of Modeled Area

	Yearly Emissions	
Network	NOx (tons/year)	PM2.5 tons/year
2002 baseline	48,776.4	824.5
2012 Build	24,131.98	409.9
2020 Build	12,801.28	315.7
2030 Build	9,596.22	332.5

HPMS-based portions of Fairfield and Coshocton Counties (Less than 2002 comparison)

For the non-modeled area in Fairfield County, as well as Franklin Township in Coshocton County, ODOT's HPMS based emission forecast is used. The percentage split of the VMT for the modeled and non-modeled regions are based on the HPMS VMT estimates and geographic coverage of the model. The proportion of VMT for the sub-county area is estimated using the centerline mileage of the sub-county area-wide road inventory and average volume by functional class. The proportion is applied to total forecasted countywide VMT by functional class.

The HPMS based emissions are then compared to the 2002 emissions for those counties using the "no greater than 2002" test. This procedure is executed the same as was done for previous conformity determinations in the Columbus area for the counties with partial model coverage. This procedure was again agreed to during the interagency consultation. Table 13 shows the split between the modeled and non-modeled areas of the two counties as well as 2002 Non-modeled emissions.

Table 13: 2002 Baseline Emissions Split (HPMS based)

	% Area Non-Modeled	2002 HPMS based Baseline Emissions*		2002 Non-modeled Emissions	
County	Percentage	NOx (tons/year)	PM2.5 (tons/year)	NOx (tons/year)	PM2.5 (tons/year)
Fairfield	59.88%	2800.6	54.8	1677.0	32.8
Coshocton (Franklin Twp)	100.00%	57.2	1.13	57.2	1.13
Total		2857.8	53.8	1734.2	33.95

*All of Fairfield County

The year 2012, 2020 and 2030 pollutant burdens for the non-modeled portion of Fairfield, and Coshocton Counties were estimated by applying the % Area factor to the estimated VMT from HPMS forecasts. In the non-modeled portions of Fairfield, and Coshocton Counties, there are no regionally significant projects. The resulting emissions are illustrated in Table 14.

Table 14: Non-modeled Portions of Fairfield and Coshocton Counties

	Yearly	
Network	NOx tons/year	PM2.5 tons/year
2012 Build	771.8	16.6
2020 Build	383.6	11.7
2030 Build	296.4	12.9

Conformity Determination

The conformity test for the Columbus PM2.5 nonattainment area consisting of the modeled counties of Franklin, Delaware and Licking, the modeled portion of the Fairfield county and the HPMS-based areas of Fairfield County and Coshocton County is the "no greater than 2002 Baseline Interim Conformity Test." Table 15 illustrates that the emissions for NO_x and PM2.5 are less than the 2002 baseline level.

Table 15: Air Quality Analysis for the Columbus PM2.5 Nonattainment Area

	NOx (tons/year)	2002 Emissions (tons/year)	PM 2.5 (tons/year)	2002 Emissions (tons/year)
2012 Build	24,904	50,511	427	858
2020 Build	13,185	50,511	327	858
2030 Build	9,893	50,511	345	858

Thus, the MORPC and LCATS 2030 Transportation Plans are in conformity for PM 2.5 with the requirements of the CAAA and the SIP.

Attachment A

Technical Air Quality Information

Franklin, Delaware, Licking, Fairfield, Madison and Knox County Ozone Maintenance Area

and the

Franklin, Delaware, Licking, Fairfield, and Coshocton (Franklin Twp) County PM2.5 Non-Attainment Area

CMAQT Run: Franklin/Delaware/Licking County MORPC 2030 Transportation Plan

CMAQT Parameter File

HOUR	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PCTADT																								
URB FWY	1.1	0.8	0.7	0.7	1.0	2.3	5.0	7.0	6.1	5.0	4.8	5.0	5.2	5.4	6.1	7.3	7.9	7.8	5.7	4.2	3.5	3.2	2.5	1.8
URB ART	0.8	0.5	0.4	0.4	0.6	1.6	3.7	5.8	5.3	4.9	5.2	6.0	6.4	6.2	6.9	7.7	8.0	7.9	6.1	4.9	4.1	3.2	2.1	1.4
RUR FWY	1.6	1.3	1.3	1.3	1.6	2.5	4.0	5.3	5.3	5.2	5.3	5.4	5.5	5.7	6.2	6.8	7.1	6.8	5.4	4.4	3.8	3.4	2.8	2.2
RUR ART	0.8	0.6	0.5	0.5	1.0	2.6	5.1	6.3	5.4	5.1	5.3	5.8	5.8	5.7	6.5	7.6	7.9	7.5	5.6	4.3	3.6	3.0	2.1	1.4
PCTADT TRK																								
URB FWY	2.2	2.0	1.9	2.1	2.4	2.9	3.9	4.8	5.4	5.7	5.9	6.1	6.1	6.1	6.1	5.8	5.3	5.0	4.2	3.7	3.5	3.2	3.0	2.6
URB ART	0.9	0.9	0.8	1.0	1.3	2.1	4.0	6.3	6.6	6.4	6.7	7.2	7.3	7.2	7.6	7.7	6.6	5.5	3.9	3.2	2.4	1.9	1.5	1.2
RUR FWY	2.7	2.4	2.3	2.4	2.7	3.2	3.6	3.9	4.5	5.0	5.2	5.5	5.5	5.6	5.6	5.5	5.3	5.0	4.8	4.4	4.2	4.0	3.7	3.2
RUR ART	1.5	1.4	1.4	1.6	2.1	2.9	4.3	5.5	6.1	6.6	7.0	7.3	7.0	6.6	6.7	6.3	5.5	4.6	3.7	3.1	2.7	2.4	2.1	1.8
PCTDIR																								
URB FWY	38	40	40	46	56	64	70	70	68	62	58	52	52	52	50	46	38	38	46	52	46	42	42	40
URB ART	44	46	44	48	54	62	66	68	64	56	54	52	50	50	50	46	40	38	46	52	48	46	46	46
RUR FWY	44	46	48	54	60	68	68	64	58	54	52	50	50	52	52	48	42	40	44	48	48	44	46	44
RUR ART	40	42	44	48	58	66	72	68	60	56	54	50	50	50	50	46	40	38	46	50	46	44	44	44

LOS E VC	0	0.625	1.25	1.875	2.5	3.125	3.75	4.375	5	5.625	6.25	6.875	7.5	8.125	8.75	9.375	10	10.625	11.25	11.875	12.5	13.125	13.75	14.375
SPEEDVC																								
curve1	75	75	75	75	75	75	74.9	74.8	74.6	74.2	73.5	72.3	70.5	67.8	64.2	59.5	54	47.7	41.2	34.9	28.9	23.7	19.2	15.5
curve2	70	70	70	70	70	70	70	69.9	69.8	69.6	69.2	68.4	67.1	65.1	62.2	58.2	53	47	40.5	33.9	27.7	22.2	17.6	13.8
curve3	65	65	65	65	65	65	65	65	65	64.9	64.8	64.4	63.8	62.6	60.5	57	52	45.4	37.8	29.9	22.7	16.7	12.1	8.6
curve4	60	60	60	60	60	60	60	60	60	59.9	59.8	59.6	59.1	58.2	56.7	54.3	50.8	46.1	40.3	33.8	27.3	21.3	16.2	12.2
curve5	55	55	55	55	55	55	55	55	55	55	55	54.9	54.7	54.3	53.6	52.3	50	46.5	41.5	35.3	28.5	21.9	16.1	11.5
curve6	60	60	60	60	60	60	60	60	59.9	59.8	59.7	59.4	59.1	58.5	57.7	56.5	55	53.1	50.7	47.9	44.7	41.1	37.3	33.4
curve7	55	55	55	55	55	55	55	55	54.9	54.9	54.7	54.5	54.2	53.8	53.1	52.2	50.9	49.3	47.3	44.9	42.1	39	35.7	32.2
curve8	50	50	50	50	50	50	50	50	49.9	49.9	49.8	49.6	49.4	49	48.5	47.7	46.7	45.4	43.8	41.8	39.5	36.8	33.9	30.9
curve9	45	45	45	45	45	45	45	45	45	44.9	44.8	44.7	44.4	44.1	43.6	43	42.1	40.9	39.4	37.6	35.5	33.1	30.5	27.8
curve10	50	50	50	50	49.9	49.8	49.7	49.4	49	48.4	47.5	46.5	45.1	43.5	41.7	39.6	37.3	34.9	32.4	29.8	27.3	24.9	22.6	20.4
curve11	50	50	50	50	50	49.9	49.7	49.4	48.9	48	46.7	44.9	42.5	39.6	36.2	32.6	28.7	25	21.4	18.2	15.3	12.9	10.8	9
curve12	50	50	50	50	50	49.9	49.8	49.6	49.1	48.2	46.8	44.5	41.4	37.5	32.9	28	23.1	18.7	14.9	11.8	9.2	7.2	5.7	4.5
curve13	40	40	40	40	40	40	39.9	39.8	39.5	39.2	38.6	37.8	36.7	35.3	33.5	31.4	29	26.4	23.7	21.1	18.5	16.1	13.9	12
curve14	40	40	40	40	40	39.9	39.8	39.6	39.1	38.5	37.5	36.1	34.3	32.1	29.4	26.5	23.5	20.5	17.7	15.1	12.8	10.7	9	7.6
curve15	40	40	40	40	40	39.9	39.7	39.4	38.8	37.9	36.5	34.7	32.3	29.5	26.4	23.2	20	17	14.3	11.9	9.9	8.2	6.8	5.6
curve16	35	35	35	35	35	34.9	34.8	34.5	34	33.2	32.1	30.5	28.5	26.1	23.5	20.6	17.9	15.2	12.8	10.7	8.9	7.4	6.1	5.1
curve17	35	35	35	35	35	34.9	34.7	34.4	33.9	33.1	32	30.3	28.3	25.8	23.1	20.3	17.5	14.9	12.5	10.4	8.6	7.2	5.9	4.9
curve18	35	35	35	35	35	34.9	34.6	34.2	33.5	32.4	30.9	28.8	26.3	23.4	20.4	17.4	14.6	12.1	9.9	8.1	6.6	5.4	4.4	3.6
curve19	30	30	30	30	30	29.9	29.8	29.5	29	28.2	27.1	25.6	23.7	21.5	19.1	16.6	14.2	12	10	8.3	6.8	5.6	4.6	3.8
curve20	30	30	30	30	30	29.9	29.7	29.4	28.9	28.1	26.9	25.3	23.4	21.1	18.6	16.1	13.6	11.4	9.5	7.8	6.4	5.3	4.3	3.6
curve21	30	30	30	30	30	29.9	29.7	29.3	28.7	27.7	26.2	24.4	22.1	19.6	17	14.4	12	9.9	8.1	6.6	5.4	4.4	3.6	2.9

VC RATIO TO LOS CONVERSION (VALUE SHOWN IS LOWER LIMIT FOR THAT LOS)(URBAN ROADS USE SPEED BREAKS BELOW FOR LOS DETERMINATION) (ALL USE THE BASE VC'S TO DETERMINE EXCEEDANCE)

	BASE	RUR2	FWY
A	0.00	0.00	0.00

B 0.30 0.00 0.25
C 0.50 0.10 0.40
D 0.70 0.30 0.60
E 0.90 0.50 0.80
F 1.00 1.00 1.00
F+ 1.10 1.10 1.10
F++ 1.30 1.30 1.30

SPEED VC RATIO BREAKS FOR URBAN STREETS (HIGHEST SPEED FOR GIVEN LOS & FF SPEED)
FFS B C D E F
>47 42. 34. 27. 21. 16.
>37 35. 28. 22. 17. 13.
>32 30. 24. 18. 14. 10.
<33 25. 19. 13. 9. 7.

LEVEL OF SERVICE THRESHOLD BY AREA
NUM LOS DEFINITION
1 F CINCINNATI,CLEVELAND,COLUMBUS CENTRAL MPO COUNTIES (CUY,FRA,HAM)
2 E OTHER TMA MPOS (AKRON,CANTON,DAYTON,TOLEDO,YOUNGSTOWN + NON-CENTRAL COUNTIES FROM 1)
3 E OTHER MPOS & PARTS OF AREAS 1 & 2 OUTSIDE URBANIZED AREA
4 E RURAL NON MPO COUNTIES

PEAK SPREADING MODEL INFO (SET MAX ITERATIONS TO 0 TO DISABLE PEAK SPREADING)
MAX VC RATIO FWY: 1.30
MAX VC RATIO ART: 1.30
MAX ITERATIONS : 1000

HC SEASON FACTOR: 1.08
CO SEASON FACTOR: 1.00

Sample Mobile6.2 Input Files

Hourly VMT Fractions by Facility Type by Speed

```
MOBILE6 INPUT FILE :
RUN DATA
EXPRESS HC AS VOC  :
EXPAND EVAPORATIVE :
EXPAND EXHAUST     :
STAGE II REFUELING : 93 3 86. 86.
HOURLY TEMPERATURES: 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0
                     72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0

OXYGENATED FUELS   :  .035 .197 .027 .031 2
FUEL RVP           : 9.0

SCENARIO REC       : COL  2000 MODEL RUN - VOC - ARTERIAL h0 - SPEED 5.0
CALENDAR YEAR      : 2009
EVALUATION MONTH   : 7
AVERAGE SPEED      : 5 ARTERIAL
VMT FRACTIONS      :
                     0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
                     0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC       : COL  2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 6.0
CALENDAR YEAR      : 2009
EVALUATION MONTH   : 7
AVERAGE SPEED      : 6 ARTERIAL
VMT FRACTIONS      :
                     0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
                     0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC       : COL  2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 7.0
CALENDAR YEAR      : 2009
EVALUATION MONTH   : 7
AVERAGE SPEED      : 7 ARTERIAL
VMT FRACTIONS      :
                     0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
                     0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC       : COL  2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 8.0
CALENDAR YEAR      : 2009
EVALUATION MONTH   : 7
AVERAGE SPEED      : 8 ARTERIAL
VMT FRACTIONS      :
                     0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
                     0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC       : COL  2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 9.0
CALENDAR YEAR      : 2009
EVALUATION MONTH   : 7
AVERAGE SPEED      : 9 ARTERIAL
VMT FRACTIONS      :
                     0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
```

0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 10.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 10 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 11.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 11 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 12.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 12 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 13.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 13 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 14.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 14 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 15.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 15 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 16.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 16 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 17.0
CALENDAR YEAR : 2009

EVALUATION MONTH : 7
AVERAGE SPEED : 17 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 18.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 18 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 19.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 19 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 20.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 20 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 21.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 21 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004
SCENARIO REC : COL 2009 MODEL RUN - VOC - ARTERIAL h0 - SPEED 22.0
CALENDAR YEAR : 2009
EVALUATION MONTH : 7
AVERAGE SPEED : 22 ARTERIAL
VMT FRACTIONS :
0.797 0.013 0.042 0.032 0.015 0.031 0.003 0.002
0.002 0.007 0.008 0.009 0.032 0.002 0.001 0.004

Input file for Intra-zonal Emissions

```
********************************************************************************
 M601 Comment:
          User has enabled STAGE II REFUELING.


* # # # # # # # # # # # # # # # # # # # # # # # # #
* COL   2009 INTRA  - CENTROID H24 - SPEED 20.0
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M583 Warning:
        The user supplied arterial average speed of 20.0
        will be used for all hours of the day.  100% of VMT
        has been assigned to the arterial/collector roadway
        type for all hours of the day and all vehicle types.
 M615 Comment:
          User supplied VMT mix.
 M 48 Warning:
         there are no sales for vehicle class HDGV8b

              Calendar Year:  2009
                    Month:  July
                 Altitude:  Low
         Minimum Temperature:  61.0 (F)
         Maximum Temperature:  95.0 (F)
           Absolute Humidity:   75. grains/lb
            Nominal Fuel RVP:   9.0 psi
              Weathered RVP:   8.7 psi
         Fuel Sulfur Content:  300. ppm

         Exhaust I/M Program:  No
           Evap I/M Program:  No
              ATP Program:  No
           Reformulated Gas:  No

  Ether Blend Market Share: 0.035       Alcohol Blend Market Share: 0.197
  Ether Blend Oxygen Content: 0.027     Alcohol Blend Oxygen Content: 0.031
                              Alcohol Blend RVP Waiver: Yes

     Vehicle Type:     LDGV   LDGT12   LDGT34     LDGT     HDGV     LDDV     LDDT     HDDV       MC   All Veh
          GVWR:           <6000    >6000    (All)
                 ------   ------   ------   ------   ------   ------   ------   ------   ------   ------
  VMT Distribution:   0.7932   0.0160   0.0138           0.0515   0.0018   0.0002   0.1175   0.0060   1.0000
 -------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite VOC :     2.035    2.196    3.431    2.768    3.505   0.992    1.012    1.107     3.34    2.029
    Composite CO  :    16.51    20.99    32.89    26.51    38.42   2.118    1.713    5.593    16.71   16.626
    Composite NOX :     1.390    1.520    1.898    1.695    4.540   1.697    1.487   16.133     1.01    3.293
 -------------------------------------------------------------------------------------------------------------
Exhaust emissions (g/mi):
```

VOC Start:	0.425	0.538	0.917	0.714	0.327	0.274	0.394			
VOC Running:	0.586	0.801	1.251	1.010	0.665	0.738	1.463			
VOC Total Exhaust:	1.011	1.340	2.168	1.723	1.879	0.992	1.012	1.107	1.86	1.093
CO Start:	4.45	7.69	15.30	11.22	0.858	0.570	3.037			
CO Running:	12.07	13.30	17.59	15.29	1.259	1.143	13.677			
CO Total Exhaust:	16.51	20.99	32.89	26.51	38.42	2.118	1.713	5.593	16.71	16.626
NOx Start:	0.261	0.299	0.379	0.336	0.087	0.056	0.390			
NOx Running:	1.130	1.222	1.519	1.360	1.610	1.431	0.624			
NOx Total Exhaust:	1.390	1.520	1.898	1.695	4.540	1.697	1.487	16.133	1.01	3.293

Non-Exhaust Emissions (g/mi):

Hot Soak Loss:	0.203	0.174	0.292	0.229	0.355	0.000	0.000	0.000	0.251	0.187
Diurnal Loss:	0.110	0.102	0.157	0.128	0.229	0.000	0.000	0.000	0.861	0.108
Resting Loss:	0.144	0.133	0.221	0.174	0.291	0.000	0.000	0.000	0.371	0.137
Running Loss:	0.527	0.390	0.520	0.450	0.643	0.000	0.000	0.000	0.000	0.465
Crankcase Loss:	0.009	0.011	0.013	0.012	0.015	0.000	0.000	0.000	0.000	0.008
Refueling Loss:	0.031	0.045	0.060	0.052	0.092	0.000	0.000	0.000	0.000	0.031
Total Non-Exhaust:	1.024	0.856	1.264	0.963	1.625	0.000	0.000	0.000	1.483	0.936

Franklin, Delaware, Licking, Fairfield, Madison Counties CMAQT Runs

CMAQT Post Processor Summary

2002 PM2.5

Franklin County & NOx (for PM2.5 analysis)

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	14098445.	14.811	1.730	1.696	2.286	2.193	22.716	56.976	377.966	0.824
ART	13811123.	16.570	4.258	1.678	2.232	2.141	26.878	40.341	307.649	0.815
TOT	27909510.	31.382	5.988	3.374	4.518	4.333	49.594	97.317	685.614	1.639
INTRA	22922.	0.029	0.014	0.003	0.006	0.005	0.058	0.070	0.497	0.000
FINAL	27932432.	31.411	6.002	3.377	4.524	4.338	49.652	97.387	686.111	1.639

Delaware County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	1695951.	1.760	0.180	0.204	0.275	0.264	2.682	7.011	46.194	0.099
ART	2577192.	2.768	0.529	0.307	0.413	0.397	4.413	7.544	57.905	0.148
TOT	4273143.	4.527	0.708	0.511	0.689	0.660	7.095	14.555	104.098	0.247
INTRA	3725.	0.005	0.002	0.001	0.001	0.001	0.009	0.011	0.081	0.000
FINAL	4276868.	4.532	0.710	0.512	0.690	0.661	7.104	14.566	104.179	0.247

Licking County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	1871383.	1.943	0.201	0.225	0.303	0.291	2.964	7.727	50.876	0.109
ART	2864969.	3.043	0.647	0.326	0.460	0.441	4.917	8.052	61.715	0.158
TOT	4736352.	4.986	0.848	0.551	0.763	0.732	7.880	15.779	112.591	0.267
INTRA	2058.	0.003	0.001	0.000	0.001	0.000	0.005	0.006	0.045	0.000
FINAL	4738411.	4.989	0.849	0.551	0.764	0.732	7.885	15.785	112.636	0.267

Fairfield County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	238775.	0.248	0.026	0.029	0.039	0.037	0.379	1.007	6.543	0.014
ART	1590205.	1.718	0.307	0.192	0.256	0.246	2.718	4.868	37.248	0.092
TOT	1828980.	1.966	0.333	0.220	0.295	0.283	3.097	5.875	43.791	0.106
INTRA	6757.	0.009	0.004	0.001	0.002	0.001	0.017	0.021	0.147	0.000
FINAL	1835737.	1.975	0.337	0.221	0.297	0.284	3.114	5.896	43.938	0.106

2012 VOC & NOx (for Ozone analysis)

Franklin County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	17744288.	6.887	1.266	1.414	3.112	1.272	13.951	28.575	214.330	56.644
ART	17429492.	7.648	3.124	1.391	3.049	1.246	16.457	21.871	174.095	105.592
TOT	35173820.	14.534	4.390	2.805	6.161	2.519	30.408	50.447	388.426	162.236
INTRA	26035.	0.013	0.006	0.002	0.005	0.002	0.028	0.035	0.271	0.000
FINAL	35199856.	14.547	4.396	2.807	6.166	2.521	30.436	50.482	388.697	162.236

Delaware County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	1486014.	0.574	0.097	0.118	0.261	0.107	1.157	2.482	18.367	5.317
ART	4452274.	1.696	0.506	0.334	0.776	0.317	3.629	5.356	43.476	18.577
TOT	5938288.	2.270	0.603	0.453	1.037	0.424	4.786	7.838	61.843	23.894
INTRA	5857.	0.003	0.001	0.000	0.001	0.000	0.006	0.008	0.061	0.000
FINAL	5944146.	2.273	0.604	0.453	1.038	0.424	4.792	7.846	61.904	23.894

Licking County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	2407772.	0.922	0.142	0.192	0.422	0.173	1.852	4.040	29.869	8.282
ART	3253751.	1.254	0.399	0.243	0.566	0.231	2.694	3.888	31.421	14.556
TOT	5661523.	2.177	0.542	0.435	0.988	0.404	4.545	7.928	61.290	22.837
INTRA	1522.	0.001	0.000	0.000	0.000	0.000	0.002	0.002	0.016	0.000
FINAL	5663045.	2.178	0.542	0.435	0.988	0.404	4.547	7.930	61.306	22.837

Fairfield County:

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	349219.	0.134	0.022	0.028	0.061	0.025	0.270	0.588	4.338	1.234
ART	1724611.	0.544	0.172	0.106	0.301	0.123	1.246	1.688	13.679	6.206
TOT	2073830.	0.679	0.194	0.134	0.362	0.148	1.516	2.276	18.017	7.440
INTRA	7004.	0.004	0.002	0.001	0.001	0.001	0.007	0.009	0.073	0.000
FINAL	2080834.	0.683	0.196	0.135	0.363	0.149	1.523	2.285	18.090	7.440

Madison County:

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	653695.	0.250	0.037	0.052	0.115	0.047	0.501	1.112	8.172	2.392
ART	503849.	0.196	0.056	0.039	0.087	0.036	0.415	0.627	5.088	2.144
TOT	1157544.	0.446	0.093	0.091	0.202	0.083	0.916	1.739	13.260	4.536
INTRA	1261.	0.001	0.000	0.000	0.000	0.000	0.001	0.002	0.013	0.000
FINAL	1158805.	0.447	0.093	0.091	0.202	0.083	0.917	1.741	13.273	4.536

2012 PM2.5 & NOx (for PM2.5 analysis)

Franklin County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5

FWY	16429965.	6.948	0.813	1.115	2.066	0.924	11.867	27.896	231.436	0.417
ART	16137785.	7.588	1.939	1.095	2.023	0.905	13.550	20.728	190.997	0.406
TOT	32567796.	14.535	2.752	2.211	4.089	1.829	25.417	48.624	422.434	0.823
INTRA	26035.	0.013	0.006	0.002	0.005	0.002	0.028	0.035	0.271	0.000
FINAL	32593832.	14.548	2.758	2.213	4.094	1.831	25.445	48.659	422.705	0.823

Delaware County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	1374881.	0.580	0.063	0.093	0.173	0.077	0.986	2.419	19.750	0.035
ART	4120342.	1.696	0.324	0.263	0.515	0.230	3.028	5.129	47.541	0.098
TOT	5495223.	2.275	0.387	0.357	0.687	0.308	4.014	7.548	67.291	0.133
INTRA	5857.	0.003	0.001	0.000	0.001	0.000	0.006	0.008	0.061	0.000
FINAL	5501081.	2.278	0.388	0.357	0.688	0.308	4.020	7.556	67.352	0.133

Licking County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	2229793.	0.933	0.094	0.151	0.280	0.125	1.584	3.942	32.119	0.057
ART	3011422.	1.256	0.257	0.192	0.375	0.168	2.248	3.722	34.443	0.071
TOT	5241215.	2.189	0.351	0.343	0.656	0.293	3.832	7.665	66.562	0.128
INTRA	1522.	0.001	0.000	0.000	0.000	0.000	0.002	0.002	0.016	0.000
FINAL	5242737.	2.190	0.351	0.343	0.656	0.293	3.834	7.667	66.578	0.128

Fairfield County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	323320.	0.136	0.014	0.022	0.041	0.018	0.230	0.574	4.656	0.008
ART	1598113.	0.544	0.110	0.083	0.200	0.089	1.027	1.615	14.978	0.031
TOT	1921433.	0.680	0.124	0.105	0.240	0.107	1.257	2.189	19.634	0.039
INTRA	7004.	0.004	0.002	0.001	0.001	0.001	0.007	0.009	0.073	0.000
FINAL	1928437.	0.684	0.126	0.106	0.241	0.108	1.264	2.198	19.707	0.039

2020 VOC & NOx (for Ozone analysis)

Franklin County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	20626870.	5.711	0.904	0.593	1.661	0.705	9.574	14.592	193.820	65.100
ART	20031816.	6.205	2.258	0.578	1.609	0.683	11.333	11.942	158.159	122.740
TOT	40658796.	11.916	3.162	1.171	3.270	1.389	20.907	26.534	351.979	187.839
INTRA	27678.	0.010	0.003	0.001	0.002	0.000	0.016	0.017	0.246	0.000
FINAL	40686472.	11.926	3.165	1.172	3.272	1.389	20.923	26.551	352.225	187.839

Delaware County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	1857018.	0.511	0.069	0.053	0.150	0.064	0.847	1.363	17.942	6.598
ART	5657221.	1.519	0.380	0.154	0.453	0.192	2.699	3.201	43.378	23.388
TOT	7514239.	2.030	0.450	0.207	0.603	0.256	3.546	4.564	61.320	29.986
INTRA	7772.	0.003	0.001	0.000	0.001	0.000	0.005	0.005	0.069	0.000
FINAL	7522011.	2.033	0.451	0.207	0.604	0.256	3.551	4.569	61.389	29.986

Licking County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	3142957.	0.861	0.112	0.090	0.253	0.108	1.424	2.296	30.283	10.458
ART	3653987.	0.988	0.268	0.098	0.292	0.124	1.769	2.046	27.560	16.245
TOT	6796944.	1.849	0.380	0.189	0.545	0.231	3.194	4.342	57.843	26.702
INTRA	2120.	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.019	0.000
FINAL	6799064.	1.850	0.380	0.189	0.545	0.231	3.195	4.343	57.862	26.702

Fairfield County:

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	503622.	0.138	0.020	0.014	0.041	0.017	0.230	0.364	4.808	1.612
ART	2038655.	0.482	0.129	0.048	0.163	0.069	0.892	0.996	13.444	7.791
TOT	2542277.	0.620	0.149	0.063	0.204	0.087	1.122	1.360	18.252	9.404
INTRA	8949.	0.003	0.001	0.000	0.001	0.000	0.005	0.006	0.080	0.000
FINAL	2551226.	0.623	0.150	0.063	0.205	0.087	1.127	1.366	18.332	9.404

Madison County:

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	791068.	0.216	0.026	0.023	0.064	0.027	0.356	0.590	7.730	2.895
ART	601005.	0.165	0.040	0.017	0.048	0.020	0.290	0.351	4.757	2.539
TOT	1392073.	0.381	0.066	0.039	0.112	0.047	0.646	0.940	12.487	5.434
INTRA	1383.	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.012	0.000
FINAL	1393456.	0.382	0.066	0.039	0.112	0.047	0.647	0.941	12.499	5.434

2020 PM2.5 & NOx (for PM2.5 analysis)

Franklin County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	19098646.	5.676	0.597	0.452	1.138	0.527	8.389	14.180	214.391	0.316
ART	18549118.	6.033	1.435	0.439	1.102	0.510	9.519	11.052	175.444	0.305
TOT	37647824.	11.709	2.032	0.891	2.240	1.037	17.909	25.233	389.833	0.621
INTRA	27678.	0.010	0.003	0.001	0.002	0.000	0.016	0.017	0.246	0.000
FINAL	37675500.	11.719	2.035	0.892	2.242	1.037	17.925	25.250	390.079	0.621

Delaware County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	1718981.	0.509	0.048	0.041	0.102	0.047	0.747	1.320	19.719	0.028
ART	5240743.	1.496	0.254	0.117	0.310	0.144	2.322	3.009	48.409	0.081
TOT	6959724.	2.006	0.302	0.158	0.413	0.191	3.069	4.329	68.128	0.110
INTRA	65969.	0.024	0.007	0.002	0.004	0.001	0.039	0.041	0.586	0.001
FINAL	7025693.	2.030	0.309	0.160	0.417	0.192	3.108	4.370	68.714	0.111

Licking County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	2910060.	0.859	0.077	0.069	0.173	0.080	1.258	2.235	33.413	0.048
ART	3381517.	0.972	0.178	0.075	0.200	0.092	1.517	1.918	30.751	0.052
TOT	6291577.	1.831	0.255	0.144	0.373	0.173	2.775	4.153	64.164	0.100
INTRA	2120.	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.019	0.000
FINAL	6293697.	1.832	0.255	0.144	0.373	0.173	2.776	4.154	64.183	0.100

Fairfield County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	466093.	0.138	0.013	0.011	0.028	0.013	0.202	0.356	5.331	0.008
ART	1888940.	0.474	0.086	0.037	0.112	0.052	0.760	0.936	15.040	0.025
TOT	2355033.	0.612	0.099	0.048	0.140	0.065	0.963	1.292	20.371	0.033

INTRA	8949.	0.003	0.001	0.000	0.001	0.000	0.005	0.006	0.080	0.000
FINAL	2363982.	0.615	0.100	0.048	0.141	0.065	0.968	1.298	20.451	0.033

2030 VOC & NOx (for Ozone analysis)

Franklin County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	22760642.	5.771	1.035	0.453	1.532	0.653	9.444	10.795	203.098	72.319
ART	22239488.	6.304	2.510	0.445	1.493	0.636	11.389	9.609	168.116	137.332
TOT	45000192.	12.076	3.545	0.898	3.025	1.289	20.833	20.404	371.214	209.651
INTRA	29763.	0.010	0.003	0.001	0.002	0.000	0.016	0.013	0.252	0.000
FINAL	45029956.	12.086	3.548	0.899	3.027	1.289	20.849	20.417	371.466	209.651

Delaware County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	2165698.	0.544	0.080	0.043	0.146	0.062	0.875	1.055	19.920	7.509
ART	7120442.	1.744	0.484	0.134	0.477	0.203	3.042	2.867	51.796	29.854
TOT	9286140.	2.288	0.564	0.177	0.623	0.265	3.917	3.922	71.716	37.364
INTRA	10680.	0.004	0.001	0.000	0.001	0.000	0.006	0.005	0.091	0.000
FINAL	9296820.	2.292	0.565	0.177	0.624	0.265	3.923	3.927	71.807	37.364

Licking County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	3683772.	0.921	0.126	0.073	0.248	0.106	1.473	1.805	34.103	12.714
ART	4151018.	1.029	0.299	0.078	0.277	0.118	1.801	1.677	30.111	18.476
TOT	7834790.	1.950	0.424	0.151	0.525	0.224	3.275	3.482	64.214	31.191
INTRA	2587.	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.022	0.000
FINAL	7837377.	1.951	0.424	0.151	0.525	0.224	3.276	3.483	64.236	31.191

Fairfield County:

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	583838.	0.148	0.027	0.012	0.039	0.017	0.243	0.277	5.195	1.892
ART	2360347.	0.520	0.152	0.039	0.158	0.067	0.937	0.844	15.149	9.294
TOT	2944185.	0.668	0.180	0.051	0.197	0.084	1.180	1.121	20.344	11.186
INTRA	11892.	0.004	0.001	0.000	0.001	0.000	0.006	0.005	0.101	0.000
FINAL	2956077.	0.672	0.181	0.051	0.198	0.084	1.186	1.126	20.445	11.186

Madison County:

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	924496.	0.231	0.030	0.018	0.062	0.027	0.368	0.457	8.622	3.305
ART	750631.	0.188	0.049	0.015	0.050	0.021	0.323	0.313	5.686	3.176
TOT	1675127.	0.419	0.079	0.033	0.112	0.048	0.691	0.770	14.308	6.481
INTRA	1838.	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.016	0.000
FINAL	1676965.	0.420	0.079	0.033	0.112	0.048	0.692	0.771	14.324	6.481

2030 PM2.5 & NOx (for PM2.5 analysis)

Franklin County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	21074958.	5.681	0.665	0.331	1.069	0.488	8.235	9.996	224.965	0.325
ART	20590024.	6.064	1.581	0.325	1.042	0.476	9.488	8.504	185.799	0.315
TOT	41664976.	11.745	2.246	0.656	2.112	0.964	17.723	18.500	410.762	0.641
INTRA	29763.	0.010	0.003	0.001	0.002	0.000	0.016	0.013	0.252	0.000
FINAL	41694740.	11.755	2.249	0.657	2.114	0.964	17.739	18.513	411.014	0.641

Delaware County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	2004641.	0.538	0.054	0.032	0.102	0.046	0.772	0.978	21.929	0.031
ART	6593185.	1.701	0.320	0.098	0.333	0.152	2.604	2.586	57.739	0.095
TOT	8597826.	2.239	0.374	0.129	0.435	0.198	3.376	3.564	79.667	0.126
INTRA	10680.	0.004	0.001	0.000	0.001	0.000	0.006	0.005	0.091	0.000
FINAL	8608506.	2.243	0.375	0.129	0.436	0.198	3.382	3.569	79.758	0.126

Licking County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	3411453.	0.912	0.087	0.054	0.173	0.079	1.304	1.673	37.479	0.053
ART	3844499.	1.005	0.198	0.057	0.194	0.088	1.543	1.512	33.611	0.056
TOT	7255952.	1.917	0.285	0.111	0.367	0.167	2.847	3.185	71.090	0.108
INTRA	2587.	0.001	0.000	0.000	0.000	0.000	0.001	0.001	0.022	0.000
FINAL	7258539.	1.918	0.285	0.111	0.367	0.167	2.848	3.186	71.112	0.108

Fairfield County

AIR QUALITY, EMISSIONS SUMMARY REPORT

FACTYPE	VMT	HC EX	HC RUN	HC REST	HC EVAP	HC REF	HC TOT	NOX	CO	PM2.5
FWY	540646.	0.145	0.017	0.009	0.027	0.013	0.210	0.258	5.801	0.008
ART	2186910.	0.507	0.100	0.029	0.110	0.050	0.797	0.760	16.914	0.028
TOT	2727556.	0.653	0.117	0.037	0.138	0.063	1.008	1.018	22.714	0.036
INTRA	11892.	0.004	0.001	0.000	0.001	0.000	0.006	0.005	0.101	0.000
FINAL	2739448.	0.657	0.118	0.037	0.139	0.063	1.014	1.023	22.815	0.036

HPMS Tables

Madison County

2012

	MADISON COUNTY FUNCTIONAL CLASSIFICATION	2012 HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2012 VMT	2012 VOC EF GM/MI	VOC POLLUTANT BURDEN TONS/DAY	2012 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/DAY
	RURAL							
1	INTERSTATE	1183330	1.023	1296010	0.669	0.954	1.440	2.053
2	PRINCIPAL ARTERIAL	0	1.015	0	0.682	0.000	1.146	0.000
6	MINOR ARTERIAL	210330	1.001	211173	0.682	0.158	1.146	0.266
7	MAJOR ARTERIAL	306410	1.005	312584	0.716	0.246	1.040	0.358
8	MINOR COLLECTOR	18020	1.006	18456	0.716	0.015	1.040	0.021
9	LOCAL	57880	1.003	58578	0.716	0.046	1.040	0.067
	URBAN							
11	INTERSTATE	17790	1.022	19408	0.669	0.014	1.440	0.031
12	FREEWAY/EXPRESSWAY	0	1.010	0	0.669	0.000	1.440	0.000
14	PRINCIPAL ARTERIAL	45780	1.000	45780	0.799	0.040	1.016	0.051
16	MINOR ARTERIAL	33250	1.005	33920	0.799	0.030	1.016	0.038
17	COLLECTOR	25240	1.007	25954	0.800	0.023	1.017	0.029
19	LOCAL	30710	1.003	31080	0.860	0.029	1.062	0.036
	TOTAL	1928740		2052943		1.556		2.950

2020

	MADISON COUNTY	2020						
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2020 VMT	2020 VOC EF GM/MI	VOC POLLUTANT BURDEN TONS/DAY	2020 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/DAY
	RURAL							
1	INTERSTATE	1183330	1.023	1554581	0.425	0.727	0.642	1.098
2	PRINCIPAL ARTERIAL	0	1.015	0	0.431	0.000	0.537	0.000
6	MINOR ARTERIAL	210330	1.001	212868	0.431	0.101	0.537	0.126
7	MAJOR ARTERIAL	306410	1.005	325309	0.453	0.162	0.495	0.177
8	MINOR COLLECTOR	18020	1.006	19361	0.453	0.010	0.495	0.011
9	LOCAL	57880	1.003	59998	0.453	0.030	0.495	0.033
	URBAN							
11	INTERSTATE	17790	1.022	23099	0.425	0.011	0.642	0.016
12	FREEWAY/EXPRESSWAY	0	1.010	0	0.425	0.000	0.642	0.000
14	PRINCIPAL ARTERIAL	45780	1.000	45780	0.509	0.026	0.488	0.025
16	MINOR ARTERIAL	33250	1.005	35301	0.509	0.020	0.488	0.019
17	COLLECTOR	25240	1.007	27444	0.510	0.015	0.488	0.015
19	LOCAL	30710	1.003	31834	0.551	0.019	0.510	0.018
	TOTAL	1928740		2335575		1.120		1.536

2030

	MADISON COUNTY	2030				VOC		NOX
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2030 VMT	2030 VOC EF GM/MI	POLLUTANT BURDEN TONS/DAY	2030 NOX EF GM/MI	POLLUTANT BURDEN TONS/DAY
	RURAL							
1	INTERSTATE	1183330	1.023	1951506	0.375	0.805	0.424	0.910
2	PRINCIPAL ARTERIAL	0	1.015	0	0.381	0.000	0.381	0.000
6	MINOR ARTERIAL	210330	1.001	215006	0.381	0.090	0.381	0.090
7	MAJOR ARTERIAL	306410	1.005	341945	0.402	0.151	0.358	0.135
8	MINOR COLLECTOR	18020	1.006	20555	0.402	0.009	0.358	0.008
9	LOCAL	57880	1.003	61823	0.402	0.027	0.358	0.024
	URBAN							
11	INTERSTATE	17790	1.022	28714	0.375	0.012	0.424	0.013
12	FREEWAY/EXPRESSWAY	0	1.010	0	0.375	0.000	0.424	0.000
14	PRINCIPAL ARTERIAL	45780	1.000	45780	0.455	0.023	0.356	0.018
16	MINOR ARTERIAL	33250	1.005	37106	0.455	0.019	0.356	0.015
17	COLLECTOR	25240	1.007	29426	0.455	0.015	0.356	0.012
19	LOCAL	30710	1.003	32802	0.494	0.018	0.373	0.013
	TOTAL	1928740		2764663		1.169		1.238

Fairfield County
(VOC & NOx)

2012

	FAIRFIELD COUNTY	2012						
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2012 VMT	2012 VOC EF GM/MI	VOC POLLUTANT BURDEN TONS/DAY	2012 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/DAY
	RURAL							
1	INTERSTATE	0	1.023	0	0.646	0.000	1.413	0.000
2	PRINCIPAL ARTERIAL	425850	1.015	451982	0.658	0.327	1.123	0.558
6	MINOR ARTERIAL	169060	1.001	169737	0.658	0.123	1.123	0.210
7	MAJOR ARTERIAL	407840	1.005	416058	0.691	0.316	1.018	0.466
8	MINOR COLLECTOR	116150	1.006	118963	0.691	0.090	1.018	0.133
9	LOCAL	278880	1.003	282242	0.691	0.215	1.018	0.316
	URBAN							
11	INTERSTATE	190590	1.022	207924	0.646	0.148	1.413	0.323
12	FREEWAY/EXPRESSWAY	45060	1.010	46890	0.646	0.033	1.413	0.073
14	PRINCIPAL ARTERIAL	172110	1.000	172110	0.771	0.146	0.994	0.188
16	MINOR ARTERIAL	293270	1.005	299180	0.771	0.254	0.994	0.327
17	COLLECTOR	455660	1.007	468553	0.771	0.397	0.995	0.513
19	LOCAL	281120	1.003	284509	0.830	0.260	1.039	0.325
	TOTAL	2835590		2918146		2.309		3.433

2020

	FAIRFIELD COUNTY	2020						
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2020 VMT	2020 VOC EF GM/MI	VOC POLLUTANT BURDEN TONS/DAY	2020 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/DAY
	RURAL							
1	INTERSTATE	0	1.023	0	0.413	0.000	0.628	0.000
2	PRINCIPAL ARTERIAL	425850	1.015	509154	0.419	0.235	0.524	0.293
6	MINOR ARTERIAL	169060	1.001	171100	0.419	0.079	0.524	0.099
7	MAJOR ARTERIAL	407840	1.005	432995	0.440	0.210	0.483	0.230
8	MINOR COLLECTOR	116150	1.006	124794	0.440	0.060	0.483	0.066
9	LOCAL	278880	1.003	289087	0.440	0.140	0.483	0.154
	URBAN							
11	INTERSTATE	190590	1.022	247463	0.413	0.112	0.628	0.171
12	FREEWAY/EXPRESSWAY	45060	1.010	50775	0.413	0.023	0.628	0.035
14	PRINCIPAL ARTERIAL	172110	1.000	172110	0.495	0.094	0.475	0.090
16	MINOR ARTERIAL	293270	1.005	311358	0.495	0.170	0.475	0.163
17	COLLECTOR	455660	1.007	495444	0.496	0.270	0.476	0.259
19	LOCAL	281120	1.003	291409	0.536	0.172	0.498	0.160
	TOTAL	2835590		3095689		1.564		1.720

2030

	FAIRFIELD COUNTY	2030						
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2030 VMT	2030 VOC EF GM/MI	VOC POLLUTANT BURDEN TONS/DAY	2030 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/DAY
	RURAL							
1	INTERSTATE	0	1.023	0	0.367	0.000	0.416	0.000
2	PRINCIPAL ARTERIAL	425850	1.015	590894	0.372	0.242	0.373	0.242
6	MINOR ARTERIAL	169060	1.001	172819	0.372	0.071	0.373	0.071
7	MAJOR ARTERIAL	407840	1.005	455138	0.392	0.196	0.351	0.176
8	MINOR COLLECTOR	116150	1.006	132487	0.392	0.057	0.351	0.051
9	LOCAL	278880	1.003	297878	0.392	0.128	0.351	0.115
	URBAN							
11	INTERSTATE	190590	1.022	307624	0.367	0.124	0.416	0.141
12	FREEWAY/EXPRESSWAY	45060	1.010	56087	0.367	0.023	0.416	0.026
14	PRINCIPAL ARTERIAL	172110	1.000	172110	0.444	0.084	0.348	0.066
16	MINOR ARTERIAL	293270	1.005	327281	0.444	0.160	0.348	0.125
17	COLLECTOR	455660	1.007	531238	0.445	0.260	0.348	0.203
19	LOCAL	281120	1.003	300270	0.483	0.160	0.365	0.121
	TOTAL	2835590		3343826		1.505		1.337

Fairfield County
(PM2.5)

2002

	FAIRFIELD COUNTY	2002						
	FUNCTIONAL CLASSIFICATION	HPMS 2002 VMT	ANNUAL GROWTH FACTOR	HPMS 2002 VMT	2002 PM2.5 EF GM/MI	PM2.5 POLLUTANT BURDEN TONS/YEAR	2002 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/YEAR
	RURAL							
1	INTERSTATE	0	1.000	0	0.052	0.000	3.480	0.000
2	PRINCIPAL ARTERIAL	484020	1.000	484020	0.052	10.105	2.653	515.568
6	MINOR ARTERIAL	172310	1.000	172310	0.052	3.597	2.557	176.900
7	MAJOR ARTERIAL	333490	1.000	333490	0.052	6.963	2.512	336.347
8	MINOR COLLECTOR	126360	1.000	126360	0.052	2.638	2.526	128.153
9	LOCAL	318520	1.000	318520	0.052	6.650	2.555	326.748
	URBAN							
11	INTERSTATE	175400	1.000	175400	0.052	3.662	2.980	209.861
12	FREEWAY/EXPRESSWAY	52770	1.000	52770	0.052	1.102	2.904	61.527
14	PRINCIPAL ARTERIAL	278350	1.000	278350	0.053	5.923	2.777	310.351
16	MINOR ARTERIAL	240520	1.000	240520	0.053	5.118	2.751	265.661
17	COLLECTOR	165030	1.000	165030	0.053	3.512	2.751	182.280
19	LOCAL	254960	1.000	254960	0.053	5.425	2.751	281.610
	TOTAL	2601730		2601730		54.696		2795.006
						0.1499	tons/day	7.6576

2012

	FAIRFIELD COUNTY	2012				PM2.5		NOX
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2012 VMT	2012 PM2.5 EF GM/MI	POLLUTANT BURDEN TONS/YEAR	2012 NOX EF GM/MI	POLLUTANT BURDEN TONS/YEAR
	RURAL							
1	INTERSTATE	0	1.023	0	0.023	0.000	1.337	0.000
2	PRINCIPAL ARTERIAL	425850	1.015	451982	0.023	4.174	1.058	191.996
6	MINOR ARTERIAL	169060	1.001	169737	0.023	1.567	1.017	69.308
7	MAJOR ARTERIAL	407840	1.005	416058	0.023	3.842	0.997	166.546
8	MINOR COLLECTOR	116150	1.006	118963	0.023	1.099	1.004	47.955
9	LOCAL	278880	1.003	282242	0.023	2.606	1.017	115.246
	URBAN							
11	INTERSTATE	190590	1.022	207924	0.023	1.920	1.125	93.916
12	FREEWAY/EXPRESSWAY	45060	1.010	46890	0.023	0.433	1.092	20.558
14	PRINCIPAL ARTERIAL	172110	1.000	172110	0.023	1.589	1.115	77.049
16	MINOR ARTERIAL	293270	1.005	299180	0.023	2.763	1.103	132.493
17	COLLECTOR	455660	1.007	468553	0.023	4.327	1.103	207.501
19	LOCAL	281120	1.003	284509	0.023	2.627	1.103	125.996
	TOTAL	2835590		2918146		26.948		1248.565

2020

	FAIRFIELD COUNTY	2020						
	FUNCTIONAL CLASSIFICATION	HPMS 2006 VMT	ANNUAL GROWTH FACTOR	HPMS 2020 VMT	2020 PM2.5 EF GM/MI	PM2.5 POLLUTANT BURDEN TONS/YEAR	2020 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/YEAR
	RURAL							
1	INTERSTATE	0	1.023	0	0.015	0.000	0.587	0.000
2	PRINCIPAL ARTERIAL	425850	1.015	524543	0.015	3.159	0.486	102.354
6	MINOR ARTERIAL	169060	1.001	171442	0.015	1.033	0.469	32.283
7	MAJOR ARTERIAL	407840	1.005	437335	0.015	2.634	0.460	80.771
8	MINOR COLLECTOR	116150	1.006	126296	0.015	0.761	0.464	23.529
9	LOCAL	278880	1.003	290824	0.015	1.751	0.470	54.880
	URBAN							
11	INTERSTATE	190590	1.022	258471	0.015	1.557	0.508	52.718
12	FREEWAY/EXPRESSWAY	45060	1.010	51795	0.015	0.312	0.495	10.294
14	PRINCIPAL ARTERIAL	172110	1.000	172110	0.015	1.037	0.515	35.588
16	MINOR ARTERIAL	293270	1.005	314480	0.015	1.894	0.510	64.394
17	COLLECTOR	455660	1.007	502404	0.015	3.026	0.510	102.875
19	LOCAL	281120	1.003	293160	0.015	1.766	0.510	60.029
	TOTAL	2835590		3142862		18.928		619.715

2030

	FAIRFIELD COUNTY	2030				PM2.5		NOX
	FUNCTIONAL CLASSIFICATION	HPMS 2006 VMT	ANNUAL GROWTH FACTOR	HPMS 2030 VMT	2030 PM2.5 EF GM/MI	POLLUTANT BURDEN TONS/YEAR	2030 NOX EF GM/MI	POLLUTANT BURDEN TONS/YEAR
	RURAL							
1	INTERSTATE	0	1.023	0	0.014	0.000	0.394	0.000
2	PRINCIPAL ARTERIAL	425850	1.015	608754	0.014	3.422	0.346	84.567
6	MINOR ARTERIAL	169060	1.001	173164	0.014	0.973	0.336	23.361
7	MAJOR ARTERIAL	407840	1.005	459701	0.014	2.584	0.330	60.908
8	MINOR COLLECTOR	116150	1.006	134082	0.014	0.754	0.333	17.927
9	LOCAL	278880	1.003	299668	0.014	1.684	0.338	40.667
	URBAN							
11	INTERSTATE	190590	1.022	321308	0.029	3.741	0.355	45.797
12	FREEWAY/EXPRESSWAY	45060	1.010	57214	0.014	0.322	0.347	7.971
14	PRINCIPAL ARTERIAL	172110	1.000	172110	0.014	0.967	0.370	25.568
16	MINOR ARTERIAL	293270	1.005	330562	0.014	1.858	0.366	48.576
17	COLLECTOR	455660	1.007	538702	0.014	3.028	0.366	79.162
19	LOCAL	281120	1.003	302075	0.014	1.698	0.366	44.390
	TOTAL	2835590		3397339		21.032		478.893

Knox County
(VOC & NOx)
2012

	KNOX COUNTY	2012						
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2012 VMT	2012 VOC EF GM/MI	VOC POLLUTANT BURDEN TONS/DAY	2012 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/DAY
	RURAL							
1	INTERSTATE	0	1.023	0	0.741	0.000	1.507	0.000
2	PRINCIPAL ARTERIAL	103220	1.015	109554	0.756	0.091	1.205	0.145
6	MINOR ARTERIAL	205840	1.001	206665	0.756	0.172	1.205	0.274
7	MAJOR ARTERIAL	256440	1.005	261607	0.795	0.229	1.095	0.315
8	MINOR COLLECTOR	68920	1.006	70589	0.795	0.062	1.095	0.085
9	LOCAL	141640	1.003	143347	0.795	0.125	1.095	0.173
	URBAN							
11	INTERSTATE	0	1.022	0	0.741	0.000	1.507	0.000
12	FREEWAY/EXPRESSWAY	0	1.010	0	0.741	0.000	1.507	0.000
14	PRINCIPAL ARTERIAL	151500	1.000	151500	0.885	0.147	1.071	0.178
16	MINOR ARTERIAL	45590	1.005	46509	0.885	0.045	1.071	0.055
17	COLLECTOR	35640	1.007	36648	0.886	0.036	1.072	0.043
19	LOCAL	78660	1.003	79608	0.951	0.083	1.119	0.098
	TOTAL	1087450		1106028		0.991		1.366

2020

	KNOX COUNTY	2020						
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2020 VMT	2020 VOC EF GM/MI	VOC POLLUTANT BURDEN TONS/DAY	2020 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/DAY
	RURAL							
1	INTERSTATE	0	1.023	0	0.461	0.000	0.677	0.000
2	PRINCIPAL ARTERIAL	103220	1.015	123412	0.468	0.064	0.569	0.077
6	MINOR ARTERIAL	205840	1.001	208324	0.468	0.107	0.569	0.130
7	MAJOR ARTERIAL	256440	1.005	272257	0.492	0.147	0.526	0.158
8	MINOR COLLECTOR	68920	1.006	74049	0.492	0.040	0.526	0.043
9	LOCAL	141640	1.003	146824	0.492	0.079	0.526	0.085
	URBAN							
11	INTERSTATE	0	1.022	0	0.461	0.000	0.677	0.000
12	FREEWAY/EXPRESSWAY	0	1.010	0	0.461	0.000	0.677	0.000
14	PRINCIPAL ARTERIAL	151500	1.000	151500	0.552	0.092	0.518	0.086
16	MINOR ARTERIAL	45590	1.005	48402	0.552	0.029	0.518	0.028
17	COLLECTOR	35640	1.007	38752	0.552	0.024	0.518	0.022
19	LOCAL	78660	1.003	81539	0.596	0.053	0.542	0.049
	TOTAL	1087450		1145058		0.636		0.678

2030

	KNOX COUNTY	2030						
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2030 VMT	2030 VOC EF GM/MI	VOC POLLUTANT BURDEN TONS/DAY	2030 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/DAY
	RURAL							
1	INTERSTATE	0	1.023	0	0.398	0.000	0.444	0.000
2	PRINCIPAL ARTERIAL	103220	1.015	143224	0.405	0.064	0.399	0.063
6	MINOR ARTERIAL	205840	1.001	210416	0.405	0.094	0.399	0.092
7	MAJOR ARTERIAL	256440	1.005	286180	0.427	0.134	0.376	0.118
8	MINOR COLLECTOR	68920	1.006	78614	0.427	0.037	0.376	0.033
9	LOCAL	141640	1.003	151289	0.398	0.066	0.376	0.063
	URBAN							
11	INTERSTATE	0	1.022	0	0.398	0.000	0.444	0.000
12	FREEWAY/EXPRESSWAY	0	1.010	0	0.398	0.000	0.444	0.000
14	PRINCIPAL ARTERIAL	151500	1.000	151500	0.483	0.080	0.373	0.062
16	MINOR ARTERIAL	45590	1.005	50877	0.483	0.027	0.373	0.021
17	COLLECTOR	35640	1.007	41551	0.484	0.022	0.374	0.017
19	LOCAL	78660	1.003	84018	0.524	0.048	0.392	0.036
	TOTAL	1087450		1197670		0.573		0.505

Franklin Township, Coshocton County:

	COSHOCTON COUNTY	2002							FRANKLIN TOWNSHIP		
	FUNCTIONAL CLASSIFICATION	HPMS 2002 VMT	ANNUAL GROWTH FACTOR	HPMS 2002 VMT	2002 PM2.5 EF GM/MI	PM2.5 POLLUTANT BURDEN TONS/YEAR	2002 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/YEAR	% IN FRA TWP	PM2.5 BURDEN TONS/YEAR	NOX BURDEN TONS/YEAR
	RURAL										
1	INTERSTATE	0	1.000	0	0.055	0.000	3.701	0.000	0.00%	0.000	0.000
2	PRINCIPAL ARTERIAL	200350	1.000	200350	0.055	4.424	2.835	228.049	15.26%	0.675	34.800
6	MINOR ARTERIAL	112890	1.000	112890	0.055	2.493	2.736	124.010	0.00%	0.000	0.000
7	MAJOR ARTERIAL	151700	1.000	151700	0.055	3.350	2.690	163.841	6.64%	0.222	10.879
8	MINOR COLLECTOR	66370	1.000	66370	0.055	1.466	2.705	72.082	1.69%	0.025	1.218
9	LOCAL	219450	1.000	219450	0.055	4.846	2.735	240.979	4.27%	0.207	10.290
	URBAN										
11	INTERSTATE	0	1.000	0	0.055	0.000	3.178	0.000	0.00%	0.000	0.000
12	FREEWAY/EXPRESSWAY	0	1.000	0	0.055	0.000	3.098	0.000	0.00%	0.000	0.000
14	PRINCIPAL ARTERIAL	65200	1.000	65200	0.056	1.466	2.967	77.670	0.00%	0.000	0.000
16	MINOR ARTERIAL	34160	1.000	34160	0.056	0.768	2.941	40.337	0.00%	0.000	0.000
17	COLLECTOR	18860	1.000	18860	0.056	0.424	2.941	22.270	0.00%	0.000	0.000
19	LOCAL	95830	1.000	95830	0.056	2.155	2.941	113.157	0.00%	0.000	0.000
	TOTAL	964810		964810		21.391		1082.394		1.129	57.187
						0.059	tons/day	2.965		0.003	0.157

	COSHOCTON COUNTY	2012							FRANKLIN TOWNSHIP		
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2012 VMT	2012 PM2.5 EF GM/MI	PM2.5 POLLUTANT BURDEN TONS/YEAR	2012 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/YEAR	% IN FRA TWP	PM2.5 BURDEN TONS/YEAR	NOX BURDEN TONS/YEAR
	RURAL										
1	INTERSTATE	0	1.023	0	0.023	0.000	1.493	0.000	0.00%	0.000	0.000
2	PRINCIPAL ARTERIAL	196360	1.015	208409	0.023	1.925	1.195	99.993	15.26%	0.294	15.259
6	MINOR ARTERIAL	93790	1.001	94166	0.023	0.870	1.150	43.479	0.00%	0.000	0.000
7	MAJOR ARTERIAL	131460	1.005	134109	0.023	1.238	1.129	60.791	6.64%	0.082	4.037
8	MINOR COLLECTOR	130670	1.006	133834	0.023	1.236	1.137	61.096	1.69%	0.021	1.033
9	LOCAL	192140	1.003	194456	0.023	1.796	1.151	89.863	4.27%	0.077	3.837
	URBAN										
11	INTERSTATE	0	1.022	0	0.023	0.000	1.266	0.000	0.00%	0.000	0.000
12	FREEWAY/EXPRESSWAY	0	1.010	0	0.023	0.000	1.231	0.000	0.00%	0.000	0.000
14	PRINCIPAL ARTERIAL	34710	1.000	34710	0.023	0.321	1.259	17.546	0.00%	0.000	0.000
16	MINOR ARTERIAL	34530	1.005	35226	0.023	0.325	1.247	17.637	0.00%	0.000	0.000
17	COLLECTOR	38570	1.007	39661	0.023	0.366	1.247	19.857	0.00%	0.000	0.000
19	LOCAL	104840	1.003	106104	0.023	0.980	1.247	53.123	0.00%	0.000	0.000
	TOTAL	957070		980675		9.056		463.384		0.473	24.165

	COSHOCTON COUNTY	2020							FRANKLIN TOWNSHIP		
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2020 VMT	2020 PM2.5 EF GM/MI	PM2.5 POLLUTANT BURDEN TONS/YEAR	2020 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/YEAR	% IN FRA TWP	PM2.5 BURDEN TONS/YEAR	NOX BURDEN TONS/YEAR
	RURAL										
1	INTERSTATE	0	1.023	0	0.015	0.000	0.671	0.000	0.00%	0.000	0.000
2	PRINCIPAL ARTERIAL	196360	1.015	234772	0.015	1.414	0.563	53.069	15.26%	0.216	8.098
6	MINOR ARTERIAL	93790	1.001	94922	0.015	0.572	0.544	20.732	0.00%	0.000	0.000
7	MAJOR ARTERIAL	131460	1.005	139568	0.015	0.841	0.535	29.980	6.64%	0.056	1.991
8	MINOR COLLECTOR	130670	1.006	140395	0.015	0.846	0.539	30.383	1.69%	0.014	0.513
9	LOCAL	192140	1.003	199172	0.015	1.200	0.546	43.662	4.27%	0.051	1.864
	URBAN										
11	INTERSTATE	0	1.022	0	0.015	0.000	0.587	0.000	0.00%	0.000	0.000
12	FREEWAY/EXPRESSWAY	0	1.010	0	0.015	0.000	0.573	0.000	0.00%	0.000	0.000
14	PRINCIPAL ARTERIAL	34710	1.000	34710	0.015	0.209	0.596	8.306	0.00%	0.000	0.000
16	MINOR ARTERIAL	34530	1.005	36660	0.015	0.221	0.590	8.684	0.00%	0.000	0.000
17	COLLECTOR	38570	1.007	41938	0.015	0.253	0.590	9.934	0.00%	0.000	0.000
19	LOCAL	104840	1.003	108677	0.015	0.655	0.590	25.744	0.00%	0.000	0.000
	TOTAL	957070		1030813		6.208		230.494		0.337	12.467

	COSHOCTON COUNTY	2030							FRANKLIN TOWNSHIP		
	FUNCTIONAL CLASSIFICATION	HPMS 2008 VMT	ANNUAL GROWTH FACTOR	HPMS 2030 VMT	2030 PM2.5 EF GM/MI	PM2.5 POLLUTANT BURDEN TONS/YEAR	2030 NOX EF GM/MI	NOX POLLUTANT BURDEN TONS/YEAR	% IN FRA TWP	PM2.5 BURDEN TONS/YEAR	NOX BURDEN TONS/YEAR
	RURAL										
1	INTERSTATE	0	1.023	0	0.014	0.000	0.440	0.000	0.00%	0.000	0.000
2	PRINCIPAL ARTERIAL	196360	1.015	272462	0.014	1.532	0.389	42.554	15.26%	0.234	6.494
6	MINOR ARTERIAL	93790	1.001	95875	0.014	0.539	0.378	14.551	0.00%	0.000	0.000
7	MAJOR ARTERIAL	131460	1.005	146706	0.014	0.825	0.372	21.912	6.64%	0.055	1.455
8	MINOR COLLECTOR	130670	1.006	149050	0.014	0.838	0.375	22.441	1.69%	0.014	0.379
9	LOCAL	192140	1.003	205229	0.014	1.154	0.380	31.312	4.27%	0.049	1.337
	URBAN										
11	INTERSTATE	0	1.022	0	0.014	0.000	0.398	0.000	0.00%	0.000	0.000
12	FREEWAY/EXPRESSWAY	0	1.010	0	0.014	0.000	0.390	0.000	0.00%	0.000	0.000
14	PRINCIPAL ARTERIAL	34710	1.000	34710	0.014	0.195	0.416	5.797	0.00%	0.000	0.000
16	MINOR ARTERIAL	34530	1.005	38535	0.014	0.217	0.412	6.374	0.00%	0.000	0.000
17	COLLECTOR	38570	1.007	44967	0.014	0.253	0.412	7.438	0.00%	0.000	0.000
19	LOCAL	104840	1.003	111982	0.014	0.629	0.412	18.524	0.00%	0.000	0.000
	TOTAL	957070		1099515		6.180		170.903		0.352	9.665

Attachment B

Consultation Correspondence

Franklin, Delaware, Licking, Fairfield, Madison and Knox County Ozone Non-Attainment Area

and the

Franklin, Delaware, Licking, Fairfield, and Coshocton (Franklin Twp) County PM2.5 Non-Attainment Area

RE: 2012-2015 TIP/STIP Conformity Interagency Consultation

Monday, March 28, 2011
9:51 AM

Subject	**RE: 2012-2015 TIP/STIP Conformity Interagency Consultation**
From	Nick Gill
To	Dave.Moore1@dot.state.oh.us; SMapel@lcounty.com
Cc	Chandra Parasa
Sent	Monday, December 27, 2010 12:41 PM
Attachments	Cols conformity sum.doc

Dave,

One slight correction. For PM2.5, 2018 is not an analysis year. It was in your list but not in the table. The 2018 year was removed in the attachment.

Thanks
Nick

From: Dave.Moore1@dot.state.oh.us [mailto:Dave.Moore1@dot.state.oh.us]
Sent: Monday, December 27, 2010 12:32 PM
To: Nick Gill; SMapel@lcounty.com
Subject: RE: 2012-2015 TIP/STIP Conformity Interagency Consultation

Nick,

Please review attachment. Then we'll forward for interagency consultation to confirm conformity pollutants, tests, and analysis years.

Thanks
DM

Nick Gill
<NGILL@morpc.org>
12/27/2010 10:45 AM

To "Dave.Moore1@dot.state.oh.us" <Dave.Moore1@dot.state.oh.us>, "Leigh.Oesterling@fhwa.dot.gov" <Leigh.Oesterling@fhwa.dot.gov>, "morris.patricia@epamail.epa.gov" <morris.patricia@epamail.epa.gov>

cc "SMapel@lcounty.com" <SMapel@lcounty.com>, "Hill, Matt" <mhill@lcounty.com>, Chandra Parasa <cparasa@morpc.org>

Subject RE: 2012-2015 TIP/STIP Conformity Interagency Consultation

Dave,

For the Columbus area we will need to do a new conformity analysis. There are new capacity projects in the MORPC area that will require a Transportation Plan amendment as well.

Thanks
Nick

From: Dave.Moore1@dot.state.oh.us [mailto:Dave.Moore1@dot.state.oh.us]
Sent: Wednesday, December 15, 2010 1:24 PM
To: Leigh.Oesterling@fhwa.dot.gov; morris.patricia@epamail.epa.gov
Cc: Nick Gill; SMapel@lcounty.com
Subject: 2012-2015 TIP/STIP Conformity Interagency Consultation

Leigh/Pat,

The table below identifies the approach the respective Ohio MPOs intend to follow to demonstrate conformity for the upcoming 2012-2015 TIPs - new analyses or reliance on previous emissions analyses. The principle purpose for sending this table to you, today, is to effect interagency consultation regarding the MPOs proposing to rely on previous emissions analyses. Please provide the federal agencies' concurrence or comments on this matter.

Interagency consultation for the areas where new analyses will be conducted has been initiated under separate cover. We have confirmed pollutants, analysis years, and applicable conformity tests for these areas.

Note, the Columbus/Newark area MPOs are still assessing the project mixes for the new TIPs to determine whether conformity will be demonstrated via new or previous analyses.

Thanks
DM

Columbus & Newark MPOs 2012-2015 Transportation Improvement Program
Conformity Analysis Summary

Note, A MORPC Transportation Plan amendment to address new regional capacity projects will accompany TIP development.

Ozone

Attainment status: 8-Hour ozone maintenance area (Federal Register Notice Final Rule 9/15/09).
8-Hour Geography: DEL, FAI, FRA, KNO, LIC, MAD Counties, OH
Conformity Tests: 8-Hour budget tests of MORPC & LCATS Plan/TIP analysis year networks & rural county STIP networks
Analysis Years: 2012 8-Hour budget year
2020 8-Hour budget year
2030 Plan(s) horizon year

Ozone (tons / day)	2012 Budget	2012 Emissions	2020 Budget	2020 Emissions	2030 Emissions
Model geography					
VOC					
NOx					
Non-model geography					
VOC					
NOx					
Totals					
VOC	54.86		36.60		
NOx	91.64		46.61		

$PM_{2.5}$

Attainment status: $PM_{2.5}$ nonattainment area
Geography: DEL, FAI, FRA, LIC Counties, & Franklin Township, COS County, OH
Conformity Tests: 2002 baseline interim budget tests of MORPC & LCATS Plan/TIP analysis year networks & rural counties/township STIP networks
Analysis Years: 2012 1st Analysis year (within 5 years of conformity determination year §93.119(g)(1))
2020 Interim year
2030 Plan(s) horizon year

$PM_{2.5}$ (tons / yr.)	2002 Baseline	2012 Emissions	2020 Emissions	2030 Emissions
Model geography				
Direct PM				
NOx Precursor				
Non-model geography.				
Direct PM				
NOx Precursor				
Totals				
Direct PM				
NOx Precursor				

Columbus & Newark MPOs Transportation Plan Update
Conformity Analysis Summary

3-C Passenger Rail Start-up Service – MPO Transportation Plan and Air Quality Conformity Interagency Consultation

September 8, 2009 Conference Call Notes

Participants:

Rebekah Anderson – ODOT	Greg Giaimo - ODOT	Leigh Oesterling - FHWA
Curtis Baker - AMATS	Nick Gill - MORPC	Mark Policinski – OKI
Nino Brunello – ODOT	Mandy Kisling- ODOT	Andy Reser - OKI
Mark Byram – ODOT	John Hosek – NOACA	Jason Segedy – AMATS
Mark Cheskey – PB	Bob Koehler – OKI	Don Spang - MVRPC
Alice XXX – PB	Dave Moore - ODOT	Jennifer Townley – ODOT
Bill Davis – NOACA	Pat Morris – US EPA	Marcus Wilner - FHWA

Project description and fiscal strategy

- ODOT staff is available to attend MPO Committee meetings to present 3-C Passenger Rail Start-up project and request the MPOs add the project to their 2030 Transportation Plans and Conformity Determinations.
- ODOT will provide MPOs additional information regarding fiscal strategy "MPO place holder" and "local commitments" line items. Conference call discussion regarding fiscal constraint established that the 3-C Start-up Service is essentially revenue neutral to the MPOs. The "MPO place hold" line item (i.e. new money) will be directed to financing of local stations. Funding requests for MPO participation in station development will be initiated consistent with existing MPO project solicitation and selection procedures.
- The fiscal strategy for this project reflects Ohio being awarded $400m in FRA High Speed Interstate Passenger Rail (HSIP) ARRA funds. Discussion focused whether this expected HSIP award could be treated similar to a traditional surface transportation program earmark project, for demonstrating MPO T-Plan fiscal constraint. FHWA determined that with service start-up scheduled for the year 2012-2013 time frame, use of the HSIP to establish T-Plan fiscal constraint is acceptable approach because 2012-2013 is outside the planning regulations "available and committed funding" regulations. Also noted is that MPO plan and TIP amendment processes will likely conclude after FRA HSIP project selection and funding announcements. Following this discussion, the MPOs are satisfied they can initiate 3-C Passenger Rail Start-up project Transportation Plan amendments with the MPO Committees.

Transportation Conformity Coordination

- FHWA and US EPA confirmation that 3-C Passenger Rail project needs amended into MPO T-Plans and Conformity Determinations.

- Confirmation that PB is concurrently working on 3-C Passenger Rail Start-up Service NEPA Environmental Assessment (EA) document for submission to FRA. Acknowledgment that EA review and approval process is not clear. Discussion whether 3-C rail project needs amended in to MPO T-Plan/AQ Conformity for an FRA NEPA approval. ODOT advocates T-Plan/AQ Conformity amendments needed to position project for Title 23 funding. ODOT continues to pursue CMAQ eligibility for 3-C 3-yr operating and capital funding. MPOs generally agree to advance T-Plan/AQ Conformity amendments with MPO committees.
- Agreement that locomotive emissions are not needed for regional conformity analyses, as locomotive "off-road" emissions are inventoried as area sources, and therefore not part of the mobile source budgets. Locomotive emissions could be considered in general conformity, however it is expected that the emissions levels would be below the de minimis threshold.
- MPOs to provide ODOT with T-Plan amendment schedules.

Emissions Calculations

- ODOT Modeling staff provided an overview of "off model" methodology for establishing project level emissions. Project level missions will be added to the MPOs' existing T-Plan conformity results and associated budget tests. Interagency consensus for employing this approach.
- MPOs to forward conformity analysis years to ODOT. ODOT will provide 3-C Rail project level emissions to MPOs for respective analysis years.
- Established consensus that rail stations vehicle trip attractions are not regionally significant and accordingly do not need included in emissions analysis.
- ODOT to provide 3-C Rail emissions results by 1st week of October 2009, assuming AECOM provides the ridership forecast on September 15 and assuming that PB contract can be modified and model results provided by end of September.
- PB confirmed EA document will address potential for diesel $PM_{2.5}$ hot spots.

Subject	**Interagency Consultation-Columbus Specific Conformity**
From	Nick Gill
To	Dave.Moore1@dot.state.oh.us; Robert Lawler; Leigh.Oesterling@fhwa.dot.gov; Noel.Mehlo@fhwa.dot.gov; morris.patricia@epamail.epa.gov; Mapel, Sandie
Cc	Mark.Byram@dot.state.oh.us; Rebekah.Anderson@dot.state.oh.us; Nino.Brunello@dot.state.oh.us; Greg.Giaimo@dot.state.oh.us; Chandra Parasa; Hill, Matt; Zhuojun Jiang
Sent	Monday, September 21, 2009 9:58 AM

All,

In the May 20, 2009 Federal Register it was announced that effective June 4 the Columbus area had new VOC and NOx budgets for ozone conformity. This triggered the 18 month clock to redo conformity for the Transportation Plan (The September 15, 2009 FR notice now redesignated the Columbus area to attainment also).

Adding on to the 3C rail conformity activity, MORPC plans use this process to comply with the requirement to update conformity to the new ozone budgets. Thus, as opposed to the simple add on of the 3C rail off model process to our existing conformity analysis, there will be need to be changes to our analysis years also.

Our current AQ analysis is for the years, 2009, 2018, 2020 & 2030.

The new budgets are for 2012 and 2020.

Thus, we believe the new AQ conformity analysis for ozone is just needed for years 2012, 2020 & 2030.

Finally, for consistency sake, we also plan to redo the PM2.5 conformity analysis for the same years (2012, 2020,& 2030). There are no budgets yet established for PM2.5 conformity. Thus, this is still just the no greater than 2002 test.

Through this email, we would like to get interagency consultation confirmation for us to proceed as describe and specifically that 2012, 2020 & 2030 are the analysis years. We do not believe 2009 is needed for any reason, but please respond to confirm that as well.

Our schedule is to complete all of the analysis by the first of October and incorporate the 3C rail info when we get it. We will initiate our public involvement requirements in early October and take it to our committees during the November cycle with adoption by our Policy committee on November 12th.

Thanks
Nick

Nicholas T. Gill, PE

Assistant Director, Transportation
Mid-Ohio Regional Planning Commission
111 Liberty Street
Suite 100
Columbus, OH 43215
Phone: 614-233-4151
Fax: 614-233-4251

From: Dave.Moore1@dot.state.oh.us [mailto:Dave.Moore1@dot.state.oh.us]
Sent: Monday, September 14, 2009 8:25 AM
To: rkoehler@oki.org; areser@oki.org; bdavis@mpo.noaca.org; jhosek@mpo.noaca.org; Robert Lawler; Nick Gill; dspang@mvrpc.org; Leigh.Oesterling@fhwa.dot.gov; Noel.Mehlo@fhwa.dot.gov; morris.patricia@epamail.epa.gov
Cc: SegedJa@ci.akron.oh.us; Tim.Hill@dot.state.oh.us; Jennifer.Gallagher@dot.state.oh.us; Cheskey@pbworld.com; Mark.Byram@dot.state.oh.us; Rebekah.Anderson@dot.state.oh.us; Nino.Brunello@dot.state.oh.us; Greg.Giaimo@dot.state.oh.us; Mandy.Bishop@dot.state.oh.us
Subject: Fw: 3-C Rail Interagency Consultation 9/8/09 Notes

All,
Final meeting notes revised consistent with comments received.

Thanks
DM
----- Forwarded by Dave Moore/SysPlanProgMgmt/CEN/ODOT on 09/14/2009 08:21 AM -----

Nick Gill <NGILL@morpc.org>
09/09/2009 02:25 PM

To "Dave.Moore1@dot.state.oh.us" <Dave.Moore1@dot.state.oh.us>

cc

Subject RE: 3-C Rail Interagency Consultation 9/8/09 Notes

I'm good with it, including OKI's and NOACA's comments

From: Dave.Moore1@dot.state.oh.us [mailto:Dave.Moore1@dot.state.oh.us]
Sent: Wednesday, September 09, 2009 7:10 AM
To: rkoehler@oki.org; areser@oki.org; bdavis@mpo.noaca.org; jhosek@mpo.noaca.org; Robert Lawler; Nick Gill; dspang@mvrpc.org; Leigh.Oesterling@fhwa.dot.gov; Noel.Mehlo@fhwa.dot.gov; morris.patricia@epamail.epa.gov; aramirez@mvrpc.org; twalsh@clarkcountyohio.gov
Cc: SegedJa@ci.akron.oh.us; Tim.Hill@dot.state.oh.us; Cheskey@pbworld.com; Mark.Byram@dot.state.oh.us; Rebekah.Anderson@dot.state.oh.us; Nino.Brunello@dot.state.oh.us; Greg.Giaimo@dot.state.oh.us; Mandy.Bishop@dot.state.oh.us; Jennifer.Townley@dot.state.oh.us
Subject: 3-C Rail Interagency Consultation 9/8/09 Notes

All,

Please review the attached notes from the 9/8/09 3-C Passenger Rail Start-up Interagency Consultation conference call. Edits welcome.
Thanks
DM

From: Mapel, Sandie [mailto:SMapel@lcounty.com]
Sent: Tuesday, September 29, 2009 11:49 AM
To: Nick Gill
Cc: Hill, Matt
Subject: RE: Interagency Consultation-Columbus Specific Conformity

LCATS concurs-- please coordinate with Matthew Hill about any potential projects in the LCATS area that may need assigned to a specific year for the new analysis years.

Also, please copy us in your public involvement and we will advertise for our area at the same time.

Thanks--
Sandie

Subject	**Re: Interagency Consultation-Columubus Specific Conformity**
From	Morris.Patricia@epamail.epa.gov
To	Nick Gill
Cc	Chandra Parasa; Dave.Moore1@dot.state.oh.us; Greg.Giaimo@dot.state.oh.us; Leigh.Oesterling@fhwa.dot.gov; Mark.Byram@dot.state.oh.us; Hill, Matt; Nino.Brunello@dot.state.oh.us; Noel.Mehlo@fhwa.dot.gov; Rebekah.Anderson@dot.state.oh.us; Robert Lawler; Mapel, Sandie; Zhuojun Jiang
Sent	Tuesday, September 29, 2009 10:08 AM

Nick,

I concur that the analysis years of 2012, 2020 and 2030 are appropriate and that the 2009 year is not required as an analysis year.
It seems appropriate that this is a good time to demonstrate conformity to the newly approved VOC and NOx budgets.

Pat

Patricia Morris
Environmental Scientist
USEPA Region 5
(312) 353-8656
morris.patricia@epa.gov

Subject	**RE: Interagency Consultation-Columubus Specific Conformity**
From	Leigh.Oesterling@dot.gov
To	Morris.Patricia@epamail.epa.gov; Nick Gill
Cc	Chandra Parasa; Dave.Moore1@dot.state.oh.us; Greg.Giaimo@dot.state.oh.us; Mark.Byram@dot.state.oh.us; mhill@lcounty.com; Nino.Brunello@dot.state.oh.us; Noel.Mehlo@dot.gov; Rebekah.Anderson@dot.state.oh.us; Robert Lawler; SMapel@lcounty.com; Zhuojun Jiang
Sent	Tuesday, September 29, 2009 10:36 AM

FHWA also concurs with the proposed analysis years (2012, 2020, 2030).

Leigh A. Oesterling, Air Quality Specialist Federal Highway Administration - Ohio Division 200 N. High Street, Room 328 Columbus, OH 43215
(614) 280-6837
leigh.oesterling@fhwa.dot.gov

Subject	**Re: FW: Interagency Consultation-Columubus Specific Conformity**
From	Jennifer Hunter
To	Nick Gill
Cc	Chandra Parasa; Dave.Moore1@; Paul Braun
Sent	Tuesday, September 29, 2009 2:37 PM

Thanks for passing it on. I am cc'ing Paul Braun who is handling conformity issues right now. Please let us know if you need anything.
Thanks, Jen

>>> Nick Gill <NGILL@morpc.org> 9/29/2009 1:36 PM >>>
Jennifer,

We had inadvertently left OEPA out of the loop on some interagency consultation issues with updating some conformity analysis. With regard to Columbus two things are happening.

We are amending our Transportation Plan to add the 3C rail project. This requires updating the conformity analysis to include this project
Because of the new mobile source budgets associated with the ozone redesignation to attainment, we must redo conformity to the new budget years.

We are doing both of these activities at the same time. See below email stream on info on #2. I have also attached a couple emails that are regarding #1.

Please let me know if you have any questions, comments or concerns.

Thanks

Nick

From: Dave.Moore1@dot.state.oh.us [mailto:Dave.Moore1@dot.state.oh.us]
Sent: Thursday, September 03, 2009 9:51 AM
To: rkoehler@oki.org; areser@oki.org; bdavis@mpo.noaca.org; jhosek@mpo.noaca.org; Robert Lawler; Nick Gill; dspang@mvrpc.org; Leigh.Oesterling@fhwa.dot.gov; Noel.Mehlo@fhwa.dot.gov; morris.patricia@epamail.epa.gov; aramirez@mvrpc.org; twalsh@clarkcountyohio.gov
Cc: SegedJa@ci.akron.oh.us; Tim.Hill@dot.state.oh.us; Jennifer.Gallagher@dot.state.oh.us; Cheskey@pbworld.com; Mark.Byram@dot.state.oh.us; Rebekah.Anderson@dot.state.oh.us; Nino.Brunello@dot.state.oh.us; Greg.Giaimo@dot.state.oh.us; Mandy.Bishop@dot.state.oh.us; Jennifer.Townley@dot.state.oh.us
Subject: Fw: 3-C Passenger Rail Project Interagency Consultation Conference Call

All,

See attached documentation for **September 8, 2009, 8:00 AM** interagency consultation conference call regarding ODOT's request for the Cleveland, Columbus, Springfield, Dayton, and Cincinnati MPOs to add the 3-C Passenger Rail Start-up Service project to the MPOs' Transportation Plans and Air Quality Conformity analyses/determinations.

1. Interagency consultation record to date and agenda for conference call. Hit <Review/Final Showing Markup/Final> for clean version of document
2. 3-C Passenger Rail Project Description
3. 3-C Passenger Rail T-Plan 20 Yr Fiscal Strategy
4. Statewide Model Run Work Description for PB

See also call in directions below.

Thanks
DM

----- Forwarded by Dave Moore/SysPlanProgMgmt/CEN/ODOT on 09/03/2009 09:31 AM -----

Dave Moore/SysPlanProgMgmt/CEN/ODOT

08/27/2009 12:32 PM

To Cincinnati-Koehler, Andy Reser Cincinnati, Bill Davis Cleveland, John Hosek Cleveland, Bob Lawler Columbus, Nick Gill Columbus, Don Spang Dayton, Leigh Oesterling FHWA, Noel Mehlo FHWA, Pat Morris US EPA, Ana Ramirez Dayton, Thea Walsh Springfield

cc SegedJa@ci.akron.oh.us, Tim Hill/Environmental/CEN/ODOT@ODOT, Jennifer Gallagher/Traffic/CEN/ODOT@ODOT, Cheskey@pbworld.com, Mark Byram/TechServices/CEN/ODOT@ODOT, Rebekah Anderson/TechServices/CEN/ODOT@ODOT, Nino Brunello/TechServices/CEN/ODOT@ODOT, Greg Giaimo/TechServices/CEN/ODOT@ODOT, Mandy Bishop/Planning/CEN/ODOT@ODOT, Jennifer Townley/SysPlanProgMgmt/CEN/ODOT@ODOT

Subject 3-C Passenger Rail Project Interagency Consultation Conference Call

All,

See below, call in information for a **September 8, 2009, 8:00 AM** interagency consultation conference call regarding the Ohio 3-C Corridor Passenger Rail project. Sorry, there just was not a time where all

parties were parties were available, the 8th is the earliest date where most all of the interagency participants are available. Please place this conference call on you schedules.

Early, next week the following updated documents regarding this project will be provided for review:

3-C Passenger Rail project description
3-C Passenger Rail fiscal strategy
Revised 3-C Passenger Rail conformity process interagency consultation comments record
Revised emissions calculations methodology

Thanks
DM

Motor vehicle emissions budgets (MVEBs) for volatile organic compounds (VOC) and oxides of nitrogen (NO_X) in the Columbus, Ohio area, for use in transportation conformity determinations:

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov*. To facilitate electronic service, persons with Internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically should submit an original and 14 copies of the intervention or protest to the Federal Energy Regulatory Commission, 888 First St., NE., Washington, DC 20426.

The filings in the above proceedings are accessible in the Commission's eLibrary system by clicking on the appropriate link in the above list. They are also available for review in the Commission's Public Reference Room in Washington, DC. There is an eSubscription link on the Web site that enables subscribers to receive e-mail notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please e-mail *FERCOnlineSupport@ferc.gov*. or call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. E9–11668 Filed 5–19–09; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–R05–OAR–2009–0221, EPA–R05–OAR–2009–0220; FRL–8907–2]

Adequacy Status of the Cleveland/Akron, Ohio and the Columbus, Ohio Submitted 8-Hour Ozone Redesignation and Maintenance Plans for Transportation Conformity Purposes

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of adequacy.

SUMMARY: In this notice, EPA is notifying the public that we have found that the motor vehicle emissions budgets (MVEBs) for volatile organic compounds (VOC) and oxides of nitrogen (NO_X) in the Cleveland/Akron, Ohio area and the Columbus, Ohio area are adequate for use in transportation conformity determinations. Ohio submitted the Cleveland/Akron area budgets with an 8-hour ozone redesignation and maintenance plan on March 17, 2009. Ohio submitted the Columbus area budgets with an 8-hour ozone redesignation and maintenance plan on March 17, 2009. As a result of our finding, the Cleveland/Akron, Ohio area and the Columbus, Ohio area must use the MVEBs from the submitted 8-hour ozone maintenance plan for future transportation conformity determinations.

DATES: This finding is effective June 4, 2009.

FOR FURTHER INFORMATION CONTACT: Anthony Maietta, Life Scientist, Criteria Pollutant Section (AR–18J), Air Programs Branch, Air and Radiation Division, United States Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–8777, *Maietta.anthony@epa.gov*.

SUPPLEMENTARY INFORMATION: Throughout this document, whenever ''we,'' ''us'' or ''our'' is used, we mean EPA.

Background

Today's notice is simply an announcement of a finding that we have already made. On March 30, 2009, EPA Region 5 sent a letter to the Ohio Environmental Protection Agency stating that the 2010 and 2020 MVEBs for the Cleveland/Akron area, and also for the Columbus area, which were submitted with the state's 8-hour ozone redesignation and maintenance plan, are adequate. Receipt of these MVEBs was announced on EPA's transportation conformity website, and no comments were submitted. The finding is available at EPA's conformity Web site: *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm*.

The adequate 2010 and 2020 MVEBs, in tons per day (tpd), for VOC and NO_X for the Cleveland/Akron area are as follows:

	2012 MVEB (tpd)	2020 MVEB (tpd)
VOC	46.64	31.48
NO_X	95.89	42.75

The adequate 2010 and 2020 MVEBs, in tons per day (tpd), for VOC and NO_X for the Columbus area are as follows:

	2012 MVEB (tpd)	2020 MVEB (tpd)
VOC	54.86	36.60
NO_X	91.64	46.61

Please note that the March 30, 2009, letter to the state had the budgets in the wrong columns and this has been corrected in this notice.

Transportation conformity is required by section 176(c) of the Clean Air Act. EPA's conformity rule requires that transportation plans, programs, and projects conform to state air quality implementation plans and establishes the criteria and procedures for determining whether or not they do conform. Conformity to a State Implementation Plan (SIP) means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the national ambient air quality standards.

The criteria by which we determine whether a SIP's motor vehicle emission budgets are adequate for transportation conformity purposes are outlined in 40 CFR 93.118(e)(4). We have described our process for determining the adequacy of submitted SIP budgets in our July 1, 2004, preamble starting at 69 FR 40038, and we used the information in these resources while making our adequacy determination. Please note that an adequacy review is separate from EPA's completeness review, and it also should not be used to prejudge EPA's ultimate approval of the SIP. Even if we find a budget adequate, the SIP could later be disapproved.

The finding and the response to comments are available at EPA's transportation conformity web site: *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm*.

Authority: 42 U.S.C. 7401–7671q.

Dated: May 7, 2009.

Walter W. Kovalick Jr,

Acting Regional Administrator, Region 5.

[FR Doc. E9–11639 Filed 5–19–09; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPP–2008–0722; FRL–8412-8]

Amendments to Terminate Certain Pesticide Uses

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: This notice announces EPA's order for the amendments to terminate certain uses, voluntarily requested by the registrants and accepted by the Agency, of certain pesticide products, pursuant to section 6(f)(1) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended. This cancellation order follows an October 8, 2008, **Federal Register** Notice of Receipt of Requests from registrants to voluntarily amend their registrations of

Columbus & Newark MPOs Transportation Plan Update
Conformity Analysis Summary

Ozone

Attainment status: 8-hour ozone basic nonattainment area
8-Hour Geography: DEL, FAI, FRA, KNO, LIC, MAD Counties, OH
A/Q Status: 8-Hour Budget Adequacy finding May 1, 2007
Conformity Tests: 8-Hour budget tests of MORPC & LCATS Plan/TIP analysis year networks & rural county STIP networks
Analysis Years: 2009 8-Hour budget year
2018 8-Hour budget year
2020 Interim year
2030 Plan(s) horizon year

Ozone (tons / day)	2009 Budget	2009 Emissions	2018 Budget	2018 Emissions	2020 Emissions	2030 Emissions
Model geography						
VOC						
NOx						
Non-model geography						
VOC						
NOx						
Totals						
VOC	72.16		41.50			
NOx	125.43		56.30			

$PM_{2.5}$

Attainment status: $PM_{2.5}$ nonattainment area
Geography: DEL, FAI, FRA, LIC Counties, & Franklin Township, COS County, OH
Conformity Tests: 2002 baseline interim budget tests of MORPC & LCATS Plan/TIP analysis year networks & rural counties/township STIP networks
Analysis Years: 2009 1st Analysis year (within 5 years of conformity determination year §93.119(g)(1))
2018 Interim year
2020 Interim year
2030 Plan(s) horizon year

$PM_{2.5}$ (tons / yr.)	2002 Baseline	2009 Emissions	2018 Emissions	2020 Emissions	2030 Emissions
Model geography					
Direct PM					
NOx Precursor					
Non-model geography.					
Direct PM					
NOx Precursor					
Totals					
Direct PM	825.2				
NOx Precursor	49,659				

Interagency Consultation Agenda
Columbus and Newark, Ohio MPOs 2008 Transportation Plan Updates
Transportation Air Quality Conformity

Agenda

1. Schedule
   A. Current Plan and Conformity lapse date 8/2/08
   B. Draft Plans to review agencies? MORPC-Early March
   C. Plan Update MPO Board approval? MORPC-May 8
   D. Final Plan and Conformity documentation to Federal review agencies? MORPC-end of May

2. Review conformity summary document
   A. Ozone – 2009 and 2018 budget tests - May 1, 2007 adequacy findings
   B. $PM_{2.5}$ - ≤ 2002 Interim budget tests
   C. Analysis years – 2009, 2018, 2020, 2030

3. Conformity Criteria – Review as needed
   A. Latest planning assumptions
   B. Latest emission modeling
   C. SIP TCM funding status – no regional SIP TCMs
   D. Interagency consultation
   E. Conformity data/information included in T-Plan update PI processes

4. Process to result in new MPO and US DOT conformity determinations for MPO 2030 Transportation Plans and current 2008-2011 Transportation Improvement Programs and 2008-2011 Ohio STIP (Fairfield, Knox, & Madison Counties, and Franklin Township, Coshocton County). US DOT conformity determination needed on or before August 2, 2008.

RE: T-Plan Update Interagency Conformity Consultation

Subject	**RE: T-Plan Update Interagency Conformity Consultation**
From	Nick Gill
To	Morris.Patricia@epamail.epa.gov; mhill@lcounty.com; SMapel@lcounty.com; frank.burkett@fhwa.dot.gov; Rebekah.Anderson@dot.state.oh.us; Lee Burkleca; Carolina Prado
Cc	Dave.Moore1@dot.state.oh.us; Chandra Parasa
Sent	Tuesday, March 25, 2008 11:48 AM

Thanks Pat.

Also, per the discussion on the email thread started by Dave on PM2.5, MOPRC will switch the methodology for PM2.5 to a one season approach. This will be reflected in the AQ conformity appendix included with the final T-Plan in May.

Thanks
Nick

-----Original Message-----
From: Morris.Patricia@epamail.epa.gov [mailto:Morris.Patricia@epamail.epa.gov]
Sent: Monday, March 17, 2008 10:24 AM
To: Nick Gill
Cc: Dave.Moore1@dot.state.oh.us
Subject: RE: T-Plan Update Interagency Conformity Consultation

Thanks for sending the draft conformity documentation for review.
I only have one minor comment. The approved budgets have only 2 decimal
places, while the budgets listed in the tables have an extra zero at the
end.
I suggest taking off the extra zero.
Pat

Patricia Morris
Environmental Scientist
USEPA Region 5
(312) 353-8656
morris.patricia@epa.gov

Subject	**RE: T-Plan Update Interagency Conformity Consultation**
From	Nick Gill
To	Dave.Moore1@dot.state.oh.us; Chandra Parasa; morris.patricia@epamail.epa.gov; sam.macdonald@epa.state.oh.us; SMapel@lcounty.com; mhill@lcounty.com; frank.burkett@fhwa.dot.gov; Rebekah.Anderson@dot.state.oh.us; lee.burkleca@epa.state.oh.us
Sent	Tuesday, March 11, 2008 1:24 PM

All,

The draft AQ conformity documentation for the Columbus nonattainment areas (ozone & PM2.5) for the draft MORPC and LCATS transportations is now available for review on the MORPC Transportation Plan website at

http://www.morpc.org/transportation/capitalways/capitalways.asp

See the Air Quality Appendix.

Our public review period runs through April 11th. We would appreciate comments by then. We (MORPC and LCATS) will be adopting the final Plans in May and will be submitting the final Plans, AQ documentation, etc. in late May/early June.

Thanks All,

Nick

Nicholas T. Gill, PE
Assistant Director, Transportation
Mid-Ohio Regional Planning Commission
111 Liberty Street
Suite 100
Columbus, OH 43215
Phone: 614-233-4151
Fax: 614-233-4251

From: Dave.Moore1@dot.state.oh.us [mailto:Dave.Moore1@dot.state.oh.us]
Sent: Tuesday, February 19, 2008 10:01 AM
To: Nick Gill; Chandra Parasa; morris.patricia@epamail.epa.gov; sam.macdonald@epa.state.oh.us; SMapel@lcounty.com; mhill@lcounty.com; frank.burkett@fhwa.dot.gov; Rebekah.Anderson@dot.state.oh.us
Subject: T-Plan Update Interagency Conformity Consultation

All,

See attached 2/14/08 interagency consultation conference call notes. Please review and add clarification/corrections as needed.

Thanks
DM

Interagency Consultation Conference Call Notes
February 14, 2008

Participants:

Rebekah Anderson, ODOT Sam MacDonald, OEPA

Nick Gill, MORPC
Chandra Parasa, MORPC
Matt Hill, LCATS
Sandra Mapel, LCATS
Dave Moore, ODOT
Pat Morris, US EPA

Conference call participants reviewed the attached Columbus and Newark MPO quadrennial Transportation Plan Updates conformity summary page. All agreed that conformity will be established based on the Ozone SIP Maintenance Plan 2009 and 2018 budget tests and on $PM_{25.}$interim 2002 baseline tests. Analysis years will be 2009, 2018, 2020, and 2030 (both Plans' horizon year). A new US DOT conformity determination for the Plans' is due by August 2, 2008.

> Subsequent to the conference call MORPC provided the following clarification regarding the Ozone budgets' adequacy finging:
>
> Ohio EPA submitted an ozone redesignation package to U.S. EPA in January 2007. The redesignation package included new on-road mobile source budgets for the six county nonattainment area for the years 2009 and 2018 as shown in Table 1. The package is currently under review by U.S. EPA. The May1, 2007 Federal Register included a notice that the budgets included in the redesignation request are adequate for transportation conformity purposes.

Methodology for establishing the $PM_{2.5}$ direct and NO_x emissions was also reviewed. Past practice has been to employ the two season approach. ODOT asked if this was still the preferred approach. US EPA suggested that it would be good to consider this matter consistent with work toward preparing the April 08 $PM_{2.5}$ Attainment demonstrations.

> Subsequent discussion with OEPA staff determined that no seasonally dependent mobile source emission reduction strategies are currently being considered for the April 08 $PM_{2.5}$ Attainment demonstrations. As a result, the two season approach may no longer be needed. At a future date, Ohio may work with its interagency consultation partners to conduct annual $PM_{2.5}$ conformity analyses using the single season approach.

MORPC staff confirmed their preference for developing the $PM_{2.5}$ emissions using the two season approach, since the modeling routines are in place.

The schedule of Plan update and conformity activities was reviewed, as follows:

- Draft Plans – late February, early March – Draft Plan and AQ conformity documentation will be emailed to interagency consultation group.
- MORPC preparing conformity runs – MORPC in receipt of LCATS project lists
- Plan public involvement processes will include conformity data and results
- Plans adopted by MPO Boards – MORPC, May 8 – LCATS, May 13
- Final Plan documentation will be submitted to federal review agencies in July, 2008

The final discussion item was to confirm that the Plan Updates and emissions modeling is being developed using latest planning assumptions (land use and socio-economic data) and emissions modeling (emission inputs current with latest data from OEPA).

From: Dave.Moore1@dot.state.oh.us [mailto:Dave.Moore1@dot.state.oh.us]
Sent: Thursday, November 19, 2009 9:31 AM
To: Nick Gill; twalsh@clarkcountyohio.gov; aramirez@mvrpc.org; rkoehler@oki.org; bdavis@mpo.noaca.org
Cc: leigh.oesterling@dot.gov; morris.patricia@epamail.epa.gov; Mark.Byram@dot.state.oh.us
Subject: 3-C Rail Plan Amendments

All,

Please remind me the of the meeting dates when your MPO will be approving the 3-C Rail T-Plan/Conformity amendment. I need to forward these dates to Pat Morris, US EPA. She will schedule US EPA's conformity comment letter around these dates. Please also provide Pat copies of documentation (email links) to committee and public involvement materials you have prepared regarding the Plan amendments and air quality analyses.

On a related matter, Pat is getting ready to finalize adequacy findings for the annual $PM_{2.5}$ SIP budgets. Confirming the Plan amendment dates above, will help assure the adequacy findings are finalized after the 3-C Rail Plan amendments conformity determinations.

Thanks
DM

Motor vehicle emissions budgets (MVEBs) for volatile organic compounds (VOC) and oxides of nitrogen (NO_X) in the Columbus, Ohio area, for use in transportation conformity determinations:

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov*. To facilitate electronic service, persons with Internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

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Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. E9–11668 Filed 5–19–09; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–R05–OAR–2009–0221, EPA–R05–OAR–2009–0220; FRL–8907–2]

Adequacy Status of the Cleveland/Akron, Ohio and the Columbus, Ohio Submitted 8-Hour Ozone Redesignation and Maintenance Plans for Transportation Conformity Purposes

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of adequacy.

SUMMARY: In this notice, EPA is notifying the public that we have found that the motor vehicle emissions budgets (MVEBs) for volatile organic compounds (VOC) and oxides of nitrogen (NO_X) in the Cleveland/Akron, Ohio area and the Columbus, Ohio area are adequate for use in transportation conformity determinations. Ohio submitted the Cleveland/Akron area budgets with an 8-hour ozone redesignation and maintenance plan on March 17, 2009. Ohio submitted the Columbus area budgets with an 8-hour ozone redesignation and maintenance plan on March 17, 2009. As a result of our finding, the Cleveland/Akron, Ohio area and the Columbus, Ohio area must use the MVEBs from the submitted 8-hour ozone maintenance plan for future transportation conformity determinations.

DATES: This finding is effective June 4, 2009.

FOR FURTHER INFORMATION CONTACT: Anthony Maietta, Life Scientist, Criteria Pollutant Section (AR–18J), Air Programs Branch, Air and Radiation Division, United States Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–8777, *Maietta.anthony@epa.gov*.

SUPPLEMENTARY INFORMATION: Throughout this document, whenever ''we,'' ''us'' or ''our'' is used, we mean EPA.

Background

Today's notice is simply an announcement of a finding that we have already made. On March 30, 2009, EPA Region 5 sent a letter to the Ohio Environmental Protection Agency stating that the 2010 and 2020 MVEBs for the Cleveland/Akron area, and also for the Columbus area, which were submitted with the state's 8-hour ozone redesignation and maintenance plan, are adequate. Receipt of these MVEBs was announced on EPA's transportation conformity website, and no comments were submitted. The finding is available at EPA's conformity Web site: *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm*.

The adequate 2010 and 2020 MVEBs, in tons per day (tpd), for VOC and NO_X for the Cleveland/Akron area are as follows:

	2012 MVEB (tpd)	2020 MVEB (tpd)
VOC	46.64	31.48
NO_X	95.89	42.75

The adequate 2010 and 2020 MVEBs, in tons per day (tpd), for VOC and NO_X for the Columbus area are as follows:

	2012 MVEB (tpd)	2020 MVEB (tpd)
VOC	54.86	36.60
NO_X	91.64	46.61

Please note that the March 30, 2009, letter to the state had the budgets in the wrong columns and this has been corrected in this notice.

Transportation conformity is required by section 176(c) of the Clean Air Act. EPA's conformity rule requires that transportation plans, programs, and projects conform to state air quality implementation plans and establishes the criteria and procedures for determining whether or not they do conform. Conformity to a State Implementation Plan (SIP) means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the national ambient air quality standards.

The criteria by which we determine whether a SIP's motor vehicle emission budgets are adequate for transportation conformity purposes are outlined in 40 CFR 93.118(e)(4). We have described our process for determining the adequacy of submitted SIP budgets in our July 1, 2004, preamble starting at 69 FR 40038, and we used the information in these resources while making our adequacy determination. Please note that an adequacy review is separate from EPA's completeness review, and it also should not be used to prejudge EPA's ultimate approval of the SIP. Even if we find a budget adequate, the SIP could later be disapproved.

The finding and the response to comments are available at EPA's transportation conformity web site: *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm*.

Authority: 42 U.S.C. 7401–7671q.

Dated: May 7, 2009.

Walter W. Kovalick Jr,

Acting Regional Administrator, Region 5.

[FR Doc. E9–11639 Filed 5–19–09; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPP–2008–0722; FRL–8412-8]

Amendments to Terminate Certain Pesticide Uses

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: This notice announces EPA's order for the amendments to terminate certain uses, voluntarily requested by the registrants and accepted by the Agency, of certain pesticide products, pursuant to section 6(f)(1) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended. This cancellation order follows an October 8, 2008, **Federal Register** Notice of Receipt of Requests from registrants to voluntarily amend their registrations of

of the Applicant specified in the particular application.

o. Agency Comments—Federal, state, and local agencies are invited to file comments on the described application. A copy of the application may be obtained by agencies directly from the Applicant. If an agency does not file comments within the time specified for filling comments, it will be assumed to have no comments. One copy of an agency's comments must also be sent to the Applicant's representatives.

Kimberly D. Bose,

Secretary.

[FR Doc. E7–8216 Filed 4–30–07; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[OH–167–1; FRL–8307–9]

Adequacy Status of the Columbus and Toledo, OH, Submitted 8-Hour Ozone Redesignation and Maintenance Plans for Transportation Conformity Purposes

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of adequacy.

SUMMARY: In this notice, EPA is notifying the public that we have found that the motor vehicle emissions budgets (MVEBs) for volatile organic compounds (VOC) and oxides of nitrogen (NO_X) in the Columbus, Ohio area (Delaware, Fairfield, Franklin, Knox, Licking, and Madison Counties) and the Toledo, Ohio area (Lucas and Wood Counties) are adequate for use in transportation conformity determinations. Ohio submitted the Columbus budgets with an 8-hour ozone redesignation request and maintenance plan on December 28, 2006, January 10, 2007, and March 9, 2007. Ohio submitted the Toledo budgets with an 8-hour ozone redesignation request and maintenance plan on December 22, 2006, and March 9, 2007. As a result of our finding, Columbus and Toledo, Ohio must use the MVEBs from the submitted 8-hour ozone redesignation and maintenance plan for future transportation conformity determinations.

DATES: This finding is effective May 16, 2007.

FOR FURTHER INFORMATION CONTACT: Anthony Maietta, Life Scientist, Criteria Pollutant Section (AR–18J), Air Programs Branch, Air and Radiation Division, United States Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–8777, *Maietta.anthony@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document, whenever "we", "us" or "our" is used, we mean EPA.

Background

Today's notice is simply an announcement of a finding that we have already made. On April 5, 2007, EPA Region 5 sent a letter to the Ohio Environmental Protection Agency stating that the 2009 and 2018 MVEBs for the Columbus and Toledo areas, which were submitted with the 8-hour ozone redesignation request and maintenance plans, are adequate. Receipt of these MVEBs was announced on EPA's transportation conformity website, and no comments were submitted. The finding is available at EPA's conformity Web site: *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm.*

The adequate 2009 and 2018 MVEBs, in tons per day (tpd), for VOC for Columbus and Toledo are as follows:

	2009 MVEB (tpd)	2018 MVEB (tpd)
Columbus	72.16	41.50
Toledo	18.99	11.20

The adequate 2009 and 2018 MVEBs, in tons per day (tpd), for NO_X for Columbus and Toledo are as follows:

	2009 MVEB (tpd)	2018 MVEB (tpd)
Columbus	125.43	56.30
Toledo	33.75	14.11

Transportation conformity is required by section 176(c) of the Clean Air Act. EPA's conformity rule requires that transportation plans, programs, and projects conform to state air quality implementation plans and establishes the criteria and procedures for determining whether or not they do. Conformity to a State Implementation Plan (SIP) means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the national ambient air quality standards.

The criteria by which we determine whether a SIP's motor vehicle emission budgets are adequate for transportation conformity purposes are outlined in 40 CFR 93.118(e)(4). We have described our process for determining the adequacy of submitted SIP budgets in our July 1, 2004, preamble starting at 69 FR 40038, and we used the information in these resources while making our adequacy determination. Please note that an adequacy review is separate from EPA's completeness review, and it also should not be used to prejudge EPA's ultimate approval of the SIP. Even if we find a budget adequate, the SIP could later be disapproved.

The finding and the response to comments are available at EPA's transportation conformity Web site: *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm.*

Authority: 42 U.S.C. 7401–7671 q.

Dated: April 19, 2007.

Bharat Mathur,

Acting Regional Administrator, Region 5.

[FR Doc. E7–8278 Filed 4–30–07; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–ORD–2007–0363; FRL–8307–8]

Board of Scientific Counselors, Executive Committee Meeting—May 2007

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of meeting.

SUMMARY: Pursuant to the Federal Advisory Committee Act, Public Law 92–463, the Environmental Protection Agency, Office of Research and Development (ORD), gives notice of one meeting of the Board of Scientific Counselors (BOSC) Executive Committee.

DATES: The meeting will be held on Thursday, May 24, 2007 from 8 a.m. to 5 p.m. and Friday, May 25, 2007 from 8:30 a.m. to 12:45 p.m. All times noted are eastern time. The meeting may adjourn early if all business is finished. Requests for the draft agenda or for making oral presentations at the meeting will be accepted up to 1 business day before the meeting.

ADDRESSES: The meeting will be held at the Newport Harbor Hotel and Marina, 49 America's Cup Avenue, Newport, Rhode Island 02840. Submit your comments, identified by Docket ID No. EPA–HQ–ORD–2007–0363, by one of the following methods:

- *www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *E-mail:* Send comments by electronic mail (e-mail) to: *ORD.Docket@epa.gov*, Attention Docket ID No. EPA–HQ–ORD–2007–0363.

of the Applicant specified in the particular application.

o. Agency Comments—Federal, state, and local agencies are invited to file comments on the described application. A copy of the application may be obtained by agencies directly from the Applicant. If an agency does not file comments within the time specified for filling comments, it will be assumed to have no comments. One copy of an agency's comments must also be sent to the Applicant's representatives.

Kimberly D. Bose,

Secretary.

[FR Doc. E7–8216 Filed 4–30–07; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[OH–167–1; FRL–8307–9]

Adequacy Status of the Columbus and Toledo, OH, Submitted 8-Hour Ozone Redesignation and Maintenance Plans for Transportation Conformity Purposes

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of adequacy.

SUMMARY: In this notice, EPA is notifying the public that we have found that the motor vehicle emissions budgets (MVEBs) for volatile organic compounds (VOC) and oxides of nitrogen (NO_X) in the Columbus, Ohio area (Delaware, Fairfield, Franklin, Knox, Licking, and Madison Counties) and the Toledo, Ohio area (Lucas and Wood Counties) are adequate for use in transportation conformity determinations. Ohio submitted the Columbus budgets with an 8-hour ozone redesignation request and maintenance plan on December 28, 2006, January 10, 2007, and March 9, 2007. Ohio submitted the Toledo budgets with an 8-hour ozone redesignation request and maintenance plan on December 22, 2006, and March 9, 2007. As a result of our finding, Columbus and Toledo, Ohio must use the MVEBs from the submitted 8-hour ozone redesignation and maintenance plan for future transportation conformity determinations.

DATES: This finding is effective May 16, 2007.

FOR FURTHER INFORMATION CONTACT: Anthony Maietta, Life Scientist, Criteria Pollutant Section (AR–18J), Air Programs Branch, Air and Radiation Division, United States Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–8777, *Maietta.anthony@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document, whenever "we", "us" or "our" is used, we mean EPA.

Background

Today's notice is simply an announcement of a finding that we have already made. On April 5, 2007, EPA Region 5 sent a letter to the Ohio Environmental Protection Agency stating that the 2009 and 2018 MVEBs for the Columbus and Toledo areas, which were submitted with the 8-hour ozone redesignation request and maintenance plans, are adequate. Receipt of these MVEBs was announced on EPA's transportation conformity website, and no comments were submitted. The finding is available at EPA's conformity Web site: *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm.*

The adequate 2009 and 2018 MVEBs, in tons per day (tpd), for VOC for Columbus and Toledo are as follows:

	2009 MVEB (tpd)	2018 MVEB (tpd)
Columbus	72.16	41.50
Toledo	18.99	11.20

The adequate 2009 and 2018 MVEBs, in tons per day (tpd), for NO_X for Columbus and Toledo are as follows:

	2009 MVEB (tpd)	2018 MVEB (tpd)
Columbus	125.43	56.30
Toledo	33.75	14.11

Transportation conformity is required by section 176(c) of the Clean Air Act. EPA's conformity rule requires that transportation plans, programs, and projects conform to state air quality implementation plans and establishes the criteria and procedures for determining whether or not they do. Conformity to a State Implementation Plan (SIP) means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the national ambient air quality standards.

The criteria by which we determine whether a SIP's motor vehicle emission budgets are adequate for transportation conformity purposes are outlined in 40 CFR 93.118(e)(4). We have described our process for determining the adequacy of submitted SIP budgets in our July 1, 2004, preamble starting at 69 FR 40038, and we used the information in these resources while making our adequacy determination. Please note that an adequacy review is separate from EPA's completeness review, and it also should not be used to prejudge EPA's ultimate approval of the SIP. Even if we find a budget adequate, the SIP could later be disapproved.

The finding and the response to comments are available at EPA's transportation conformity Web site: *http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm.*

Authority: 42 U.S.C. 7401–7671 q.

Dated: April 19, 2007.

Bharat Mathur,

Acting Regional Administrator, Region 5.

[FR Doc. E7–8278 Filed 4–30–07; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–ORD–2007–0363; FRL–8307–8]

Board of Scientific Counselors, Executive Committee Meeting—May 2007

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of meeting.

SUMMARY: Pursuant to the Federal Advisory Committee Act, Public Law 92–463, the Environmental Protection Agency, Office of Research and Development (ORD), gives notice of one meeting of the Board of Scientific Counselors (BOSC) Executive Committee.

DATES: The meeting will be held on Thursday, May 24, 2007 from 8 a.m. to 5 p.m. and Friday, May 25, 2007 from 8:30 a.m. to 12:45 p.m. All times noted are eastern time. The meeting may adjourn early if all business is finished. Requests for the draft agenda or for making oral presentations at the meeting will be accepted up to 1 business day before the meeting.

ADDRESSES: The meeting will be held at the Newport Harbor Hotel and Marina, 49 America's Cup Avenue, Newport, Rhode Island 02840. Submit your comments, identified by Docket ID No. EPA–HQ–ORD–2007–0363, by one of the following methods:

- *www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *E-mail:* Send comments by electronic mail (e-mail) to: *ORD.Docket@epa.gov*, Attention Docket ID No. EPA–HQ–ORD–2007–0363.