2019 Air Quality Conformity Determination Report

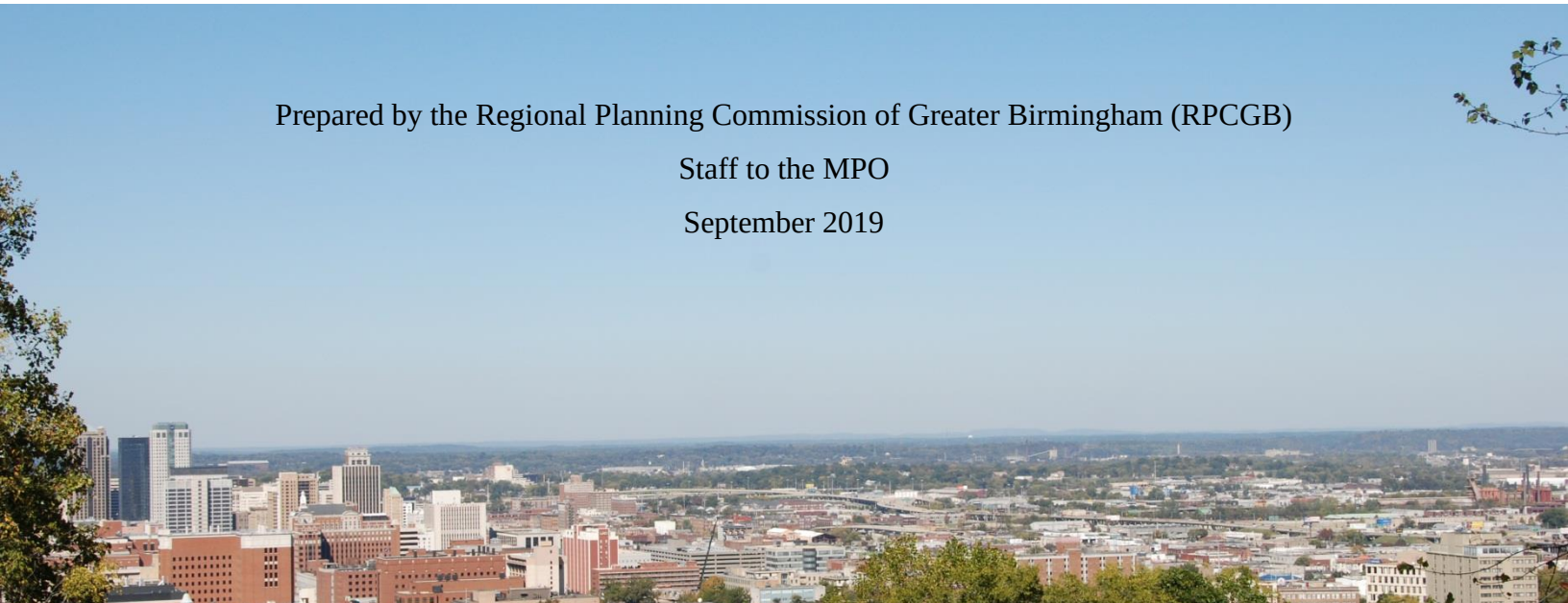
for the 2045 Regional Transportation Plan and the FY2020-2023 Transportation Improvement Program

This document contains conformity documentation for the Ground-Level Ozone Standards for Jefferson and Shelby Counties and the Annual/24-hour $PM_{2.5}$ Standards for Jefferson and Shelby Counties and a portion of Walker County in Alabama

Prepared by the Regional Planning Commission of Greater Birmingham (RPCGB)

Staff to the MPO

September 2019



BIRMINGHAM METROPOLITAN PLANNING ORGANIZATION (MPO)

2019 Air Quality Conformity Determination Report

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http://www.rpcgb.org/transportation-planning/air-quality-conformity/

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This document was prepared as a cooperative effort of the U.S. Department of Transportation, the Federal Highway Administration-Alabama Division, the Federal Transit Administration, the Alabama Department of Transportation, the Environmental Protection Agency, and the local governments in partial fulfillment of requirements of Title 23 USC 134 and 135, amended in FAST Sections 1201 and 1202, December 4, 2015. The Contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.

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RESOLUTION 2019-3
2019 AIR QUALITY CONFORMITY DETERMINATION REPORT

WHEREAS, the Birmingham Metropolitan Planning Organization has been designated by the Governor of Alabama as the agency authorized, together with the State of Alabama, to conduct the continuing, cooperative, and comprehensive planning process for the Birmingham Urban Area in accordance with the applicable provisions of amended Title 23 USC 134 and 135 (FAST, Sections 1201 and 1202 December 4, 2015); 42 USC 2000d-1, 7401 et al; 49 USC 5303; 23 CFR 450 et al; 40 CFR Parts 51 and 93; and

WHEREAS, the U.S. Environmental Protection Agency (EPA) redesignated Jefferson and Shelby Counties as maintenance areas for ground-level ozone (O_3) on May 12, 2006; and

WHEREAS, the EPA redesignated Jefferson County, Shelby County and a portion of Walker County as maintenance areas for annual fine particulate matter ($PM_{2.5}$), effective February 21, 2013 according to the National Ambient Air Quality Standards (NAAQS) and 40 CFR Parts 52 and 81; and

WHEREAS, the EPA redesignated Jefferson County, Shelby County and a portion of Walker County as maintenance areas for 24-hour $PM_{2.5}$, effective February 25, 2013 according to the NAAQS and 40 CFR Parts 52 and 81; and

WHEREAS, the Regional Planning Commission of Greater Birmingham (RPCGB), as staff to the MPO, has conducted regional transportation conformity determination for the ground-level ozone standards for Jefferson and Shelby counties and for the annual $PM_{2.5}$ standard and the 24-hour $PM_{2.5}$ standard for Jefferson County, Shelby County, and a portion of Walker County and used the most recent motor vehicle emissions simulator (MOVES) model to prepare the quantitative emission analyses as required in 40 CFR Parts 81 and 93.111; and

WHEREAS, the MPO and RPCGB have participated in the Interagency Consultation process for Transportation, and Congestion Mitigation and Air Quality (CMAQ) plans and programs, and that conformity determination was made according to the established interagency consultation procedures for Birmingham; and

WHEREAS, the 2019 Air Quality Conformity Determination Report, as prepared by the RPCGB, demonstrates conformity in accordance with the applicable provisions of 40 CFR Parts 81 and 93 and the Motor Vehicle Emissions Budgets (MVEBs) test for the ground-level ozone standards for Jefferson and Shelby counties and for the annual $PM_{2.5}$ standard and the 24-hour $PM_{2.5}$ standard for Jefferson County, Shelby County, and a portion of Walker County; and

WHEREAS, the Birmingham MPO has determined that the 2019 Air Quality Conformity Determination Report for the FY 2020-2023 Transportation Improvement Program and the 2045 Regional Transportation Plan for the ground-level ozone maintenance areas, Jefferson and Shelby counties and for the Annual and 24-hour $PM_{2.5}$ maintenance areas, Jefferson County, Shelby County, and a portion of Walker County is in compliance with 23 and 49 USC Transportation Planning and Programming requirements as amended by the FAST Act; and

WHEREAS, the results of a public involvement meeting, held on May 15, 2019; in accordance with Birmingham MPO public involvement procedures, have been documented in a Public Involvement Report; and

WHEREAS, the Transportation Citizens Committee, Transportation Technical Committee, and Advisory Committee recommend adoption of the 2019 Air Quality Conformity Determination Report.

NOW THEREFORE, BE IT RESOLVED, that the Birmingham MPO adopts the 2019 Air Quality Conformity Determination Report for the FY 2020-2023 Transportation Improvement Program and the 2045 Regional Transportation Plan for the ground-level ozone standards for Jefferson and Shelby Counties and for the Annual and 24-hour $PM_{2.5}$ Standards for Jefferson County, Shelby County, and a portion of Walker County in Alabama.

Adopted this 11th day of September 2019.

Birmingham MPO Chair, Vice Chair, or Secretary

Charles Ball, Executive Director, RPCGB

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Air Quality Conformity Determination

1.0 Overview

1.1 Introduction

The Clean Air Act (Title 42 USC 7401 et seq.) requires the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for six pollutants, particulate matter (2.5 and 10), ground-level ozone, carbon monoxide, sulfur dioxides, nitrogen oxides, and lead, that are harmful to public health and the environment. Geographic regions that do not comply with these standards are classified as nonattainment areas and are required to perform transportation conformity. This conformity is used to implement pollution reduction strategies to ensure that transportation activities, due to the above, will not cause or contribute to new air quality violations, worsen existing violations, or delay timely attainment. Maintenance areas are those initially designated nonattainment for a certain criteria pollutant and subsequently redesignated to attainment after 1990.

The Clean Air Act and federal transportation planning provisions of Title 23 and Title 49 of the U.S. Code require integrated transportation and air quality planning to occur in nonattainment areas and maintenance areas. Collectively, these requirements are known as transportation conformity. Transportation plans and programs must demonstrate compliance with conformity requirements. Any capacity project changes in the current transportation plans and programs will require conformity compliance in nonattainment areas and maintenance areas.

Particulate Matter 2.5 standard refers to fine particles less than or equal to 2.5 micrometers in diameter, abbreviated $PM_{2.5}$. EPA revised the level of the 24-hour $PM_{2.5}$ standard from 65 micrograms per cubic meter ($\mu g/m^3$) to 35 $\mu g/m^3$ on September 21, 2006. The 24-hour $PM_{2.5}$ standard became effective on December 18, 2006, according to EPA and 40 CFR Part 50. On December 14, 2012, EPA reduced the 1997 annual $PM_{2.5}$ NAAQS from 15 ug/m^3 to 12 $\mu g/m^3$.

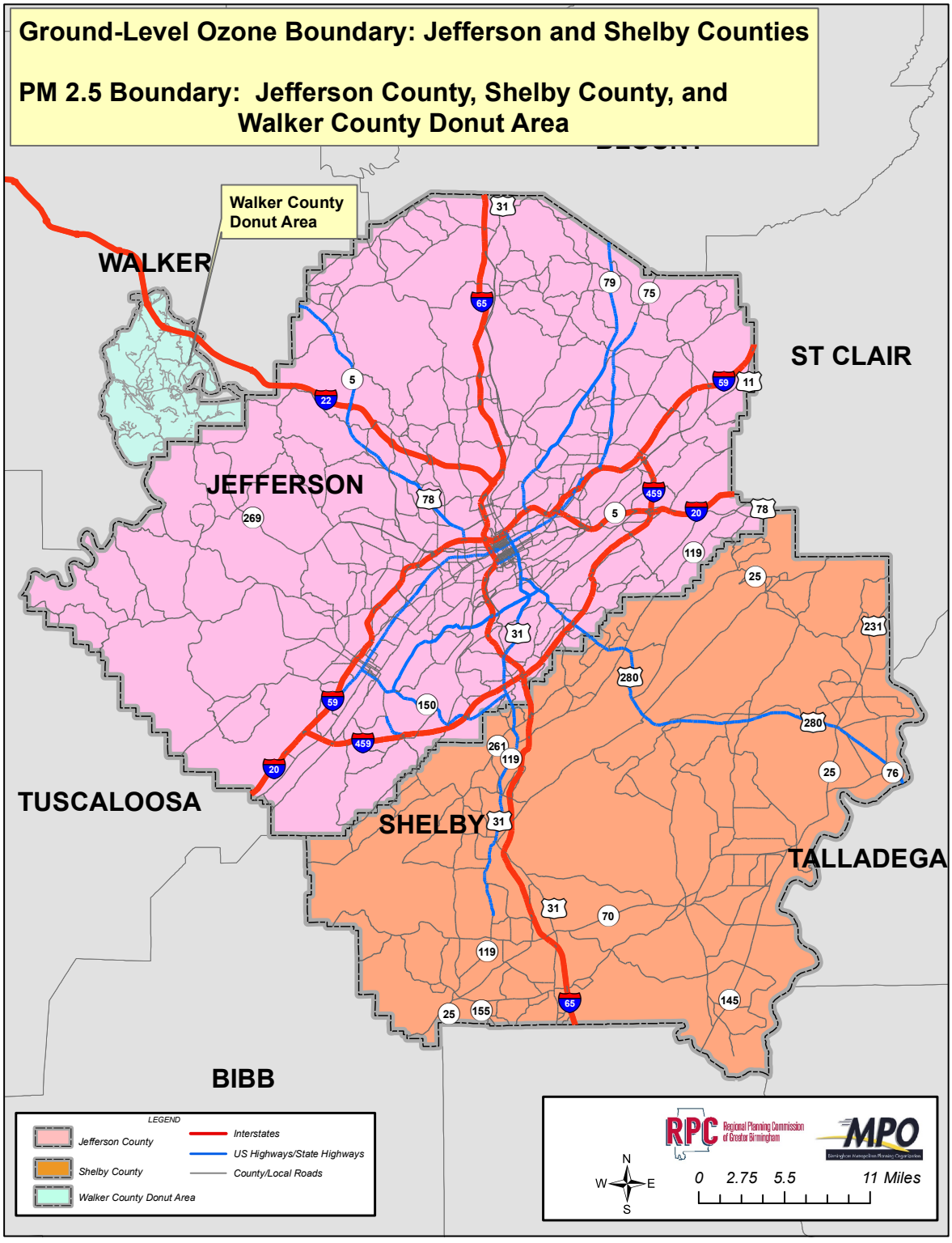
Jefferson and Shelby Counties and a small portion of Walker County are currently in attainment of the 1997 annual $PM_{2.5}$ NAAQS and the 24-hour $PM_{2.5}$ NAAQS. Jefferson and Shelby Counties and a small portion of Walker County were redesignated as attainment maintenance areas, that are effective on February 21, 2013 for the 1997 annual $PM_{2.5}$ NAAQS and effective on February 25, 2013 for the 2006 24-hour $PM_{2.5}$ NAAQS. These areas are officially considered as $PM_{2.5}$ standard maintenance areas respectively since then. Figure 1.1 illustrates the maintenance area boundaries for the $PM_{2.5}$ standards. Jefferson and Shelby Counties and portions of Blount and St. Clair Counties consist of the Birmingham Metropolitan Planning Area under the Birmingham Metropolitan Planning Organization (MPO), based on 2010 US Census Data.

The EPA originally classified Jefferson County as non-attainment for the one-hour ground-level ozone standard by the EPA on March 3, 1978 (43 FR 8962). The non-attainment area at the time of initial classification was geographically defined as Jefferson County but was later expanded to include Shelby County. The region attained the one-hour ground-level ozone standard and was re-designated as attainment on April 12, 2004.

On April 15, 2004, EPA issued new non-attainment area designations for the eight-hour ozone standard and again Jefferson and Shelby Counties were classified as non-attainment (69 FR 23858). This designation took effect June 15, 2004. EPA redesignated Jefferson and Shelby Counties as attainment maintenance areas for the 1997 8-hour ground-level ozone standard, effective since June 12, 2006. Currently, there is an active maintenance plan in place for the 1997 8-hour ground-level ozone standard. Transportation conformity for the 1997 8-hour ground-level ozone standard was revoked for transportation conformity purposes effective July 20, 2013. The Jefferson and Shelby Counties stay the same maintenance category in the EPA's 2008/2015 ground-level Ozone Standards. Jefferson and Shelby Counties are defined as the Birmingham Metropolitan Planning air quality conformity area for the ground-level Ozone standards. See Figure 1.1.

This report demonstrates, through the FY 2020-2023 Transportation Improvement Program (TIP) and the 2045 Regional Transportation Plan (RTP), which is the MPO's Long Range Transportation Plan (LRTP) with horizon planning year of 2045, that the Birmingham Metropolitan Planning Area meets the air quality conformity requirements for the 1997 ground-level Ozone standards (including 1-hour and 8-hour standards), the annual $PM_{2.5}$ standard, and the 24-hour $PM_{2.5}$ standard. The RTP has at least 20-year planning horizon. The TIP is a direct subset of the RTP and includes a four-year list of projects. Under the metropolitan planning requirements of Title 23 and 49 U.S.C., projects cannot be approved, funded, or advanced through the planning process or implemented unless those projects are in a fiscally constrained and conformed long range transportation plan and transportation improvement program.

Figure 1.1: Annual/24-hour $PM_{2.5}$ and Ground-Level Ozone Maintenance Areas



1.2 Applicable Pollutants

For the Birmingham ground-level ozone standard attainment maintenance area, volatile organic compounds (VOC) and oxides of nitrogen (NOx) are two pollutants emitted from automobiles. VOC and NOx react in the presence of heat and sunlight to produce ozone. Both emissions will be calculated daily for the whole year for the ground level Ozone standards.

In the Birmingham region, areas redesignated as attainment for the 1997 annual and the 2006 24-hour $PM_{2.5}$ standards include all of Jefferson and Shelby Counties and a small portion of southern Walker County that is called a donut area. A donut area, as defined by the Transportation Conformity Rule, is a geographic area that is within the nonattainment area but not within the boundary of the MPO. Mobile source emissions will be calculated separately for each county and the donut area.

Pollutants of concern for the Birmingham annual and 24-hour $PM_{2.5}$ standards include Oxides of Nitrogen (NOx), particulate matters with a diameter less than 2.5 microns ($PM_{2.5}$) from vehicle exhaust, brake wear, and tire wear, and Sulfur Dioxide (SO_2). Because the mobile source SO_2 contribution is insignificant, SO_2 is not included in the conformity determination.

For the Birmingham maintenance area transportation conformity determination, base pollutants for both $PM_{2.5}$ standards are categorized as direct $PM_{2.5}$ and NOx. The direct $PM_{2.5}$ includes vehicle exhaust $PM_{2.5}$, brake wear $PM_{2.5}$, and tire wear $PM_{2.5}$. NOx is a precursor of $PM_{2.5}$ emissions. Emissions for the annual $PM_{2.5}$ standard will be calculated based on the total emissions emitted for the whole year. Emissions for the 24-hour $PM_{2.5}$ standard will be daily based for the whole year.

1.3 Interagency Consultation

The interagency consultation requirements of the federal transportation conformity rule, 40 CFR Part 93.105, which are by necessity fairly general, are in effect for this conformity determination. As intended by the federal rule, specifics of the consultation process are worked out in consultation with planning partners.

The Interagency Consultation group (IAC) consists of representatives from the various state, federal, and local agencies listed below.

Alabama Department of Environmental Management (ADEM)
Alabama Department of Transportation (ALDOT)
Birmingham-Jefferson County Transit Authority (BJCTA)
Federal Highway Administration-Alabama Division (FHWA-AL)
Federal Transit Administration (FTA) Region 4
Jefferson County Department of Health (JCDH)
Regional Planning Commission of Greater Birmingham (RPCGB) for Birmingham MPO
U.S. Environmental Protection Agency (EPA) Region 4

The IAC holds conference calls on a regular basis to address the transportation and air quality issues in the MPO nonattainment and maintenance areas. The RPCGB coordinates its activities for this conformity analysis with the IAC and provides regular briefings to the Transportation Citizens Committee (TCC), the Transportation Technical Committee (TTC), and the MPO during the development of the FY 2020-2023 TIP and the 2045 RTP. The Birmingham MPO's RTP is now being updated with a new horizon year of 2045 and a base year 2015 which the conformity determination has been initialed. IAC meeting minutes for this effort are listed in Appendix C. Draft documents are distributed to the IAC for review in a 30-day comment period. The final draft documents are available to the MPO's committees, planning partners, and general public after the IAC's review in order to allow for time to comment prior to formal adoption or publication in accordance with 93.105(b)(2)(iii) of the Transportation Conformity Rule.

1.4 Motor Vehicle Emissions Budgets

The motor vehicle emissions budget (MVEB) is the maximum amount of emissions allowed from mobile sources. ADEM oversee the development of the State Implementation Plans (SIPs) for the ground level Ozone standards and the $PM_{2.5}$ standards which will include strategies for reducing emissions. The SIPs establish the acceptable emissions limits at certain years which are consistent with the SIP strategy for meeting national goals for cleaner and healthier air. These limits are defined as an emissions budget. To demonstrate conformity, emissions estimated to result from the RTP and TIP projects must be less than the emissions budget. EPA approval is required for all SIPs' proposed emissions budget.

Ground-level Ozone

The Birmingham 8-hour subpart 1 ground-level ozone maintenance plan in the 1997 ground-level Ozone Standard has MVEBs set in 2017 for both volatile organic compounds (VOC) and nitrogen oxides (NOx). For required regional emissions analysis years that involve the year 2017 and beyond, the applicable budget for the purpose of conducting transportation conformity analyses are 23 tons per day (tons/day) and 42 tons per day for VOC and NOx, respectively. For required regional emissions analysis years that involve the year 2015, the applicable budget for the purposes of conducting transportation conformity is the MVEBs from the Birmingham 1-hour ozone attainment demonstration and the 1-hour ozone maintenance plan for the 1997 ground-level Ozone Standard. The MVEBs from the Birmingham 1-hour ground-level maintenance plan are 23 tons per day for VOC and 41 tons per day for NOx in 2015. Table 1.4.1 illustrates the MVEBs. The years 2015 and 2017 are selected as conformity analysis years since these are the years with approved MVEBs for the 1997/2006 ground-level Ozone standards.

Table 1.4.1: The MVEB for Birmingham Areas 1997 Ozone Standards in US short tons/day

MVEBs for the 8-hour ground-level Ozone Standard	**2017**
Volatile Organic Compounds (VOC)	23 tons/day
Oxides of Nitrogen (NOx)	42 tons/day
MVEBs for the 1-hour ground-level Ozone Standard	**2015**

Volatile Organic Compounds (VOC)	23 tons/day
Oxides of Nitrogen (NOx)	41 tons/day

$PM_{2.5}$

The redesignations of both the annual and 24-hour $PM_{2.5}$ standards to attainment require maintenance plans to demonstrate that the Birmingham maintenance areas will continue to attain $PM_{2.5}$ standards through 2024. The emissions from mobile sources in 2024 and beyond must be no more than the 2024 MVEBs.

The MVEBs for the annual $PM_{2.5}$ standard have been approved for the year 2024. The 2024 conformity MVEBs are 442.07 short tons per year for $PM_{2.5}$ and 15,981.50 tons per year for NOx in 2024 and beyond; see Table 1.4.2 below.

Table 1.4.2: The 1997 Annual $PM_{2.5}$ Standard Budgets

Motor Vehicle Emissions Budget, 2024	Short Tons Per Year
$PM_{2.5}$	442.07
NOx	15,981.50

For the 2006 24-hour $PM_{2.5}$ standard, EPA approved a revision to the Alabama State Implementation Plan to include the maintenance plan for the Birmingham Area that contains the new 2024 MVEBs for $PM_{2.5}$ and NOx. The MVEBs are 1.21 short tons per day for $PM_{2.5}$ and 48.41 tons per day for NOx in 2024 and beyond; see Table 1.4.3 below.

Table 1.4.3: The 2006 24-hour $PM_{2.5}$ Standard Budgets

Motor Vehicle Emissions Budget, 2024	Short Tons Per Day
$PM_{2.5}$	1.21
NOx	48.41

The MVEBs above illustrate the maximum emissions of direct $PM_{2.5}$ and NOx allowed to maintain the 1997 annual and the 2006 24-hour $PM_{2.5}$ NAAQS for year 2024 and beyond.

According to EPA's analysis year selection criteria in 40 CFR 93.106(a)(1) and 40 CFR 93.118(2)(d)(2), a regional emissions analysis may be performed for any years in the timeframe of the conformity determination provided they are not more than ten years apart. ADEM has year 2024 as the last year of the maintenance plan with approved MVEBs for the annual and 24-hour $PM_{2.5}$ standards. Both 2024 and 2045 should be selected as analysis years since 2024 is the approved budget year and 2045 is the last year of the new 2045RTP. The years 2034 and 2040 are also selected as intermediate years between 2024 and 2045 so that analysis years are no more than ten years apart.

The years 2015, 2017, 2024, 2034, 2040, and 2045 are selected as analysis years for the 1997 ground-level Ozone 1-hour standard. The years 2017, 2024, 2034, 2040, and 2045 are selected as analysis years for the 1997/2006 ground-level Ozone 8-hour standard. The years 2024, 2034, 2040, and 2045 are selected as analysis years for the annual and 24-hour $PM_{2.5}$ standards. The

IAC has agreed that these analysis years are for the Birmingham MPO conformity determination analysis. These years satisfy the July 1, 2004 Transportation Conformity Rule requirements for the analysis years for transportation conformity determination.

2.0 Birmingham Maintenance Area Emissions Estimates for the ground-level Ozone standards and the Annual PM $_{2.5}$ Standard and the 24-hour PM $_{2.5}$ Standard

The methodology used for emissions estimation is a three-step process:

- Develop the latest planning assumptions based on the most recent demographic base and projections.
- Develop vehicle miles traveled (VMT) by roadway functional classification in the maintenance areas by analysis year based on the latest Planning Assumptions. VMT estimates from the travel demand model are adjusted based on Highway Performance Monitoring System (HPMS) VMT and local road VMT based on observed traffic counts.
- Set up input files for Motor Vehicle Emissions Simulator (the latest version, MOVES2014b, has been used to calculate emission inventory).

For the ground -level Ozone standards, the travel demand model is used to estimate VMT for years 2024, 2034, 2040, and 2045. HPMS VMTs in 2015 and 2017 are available to be used for base year 2015 and analysis year 2017 as the latest data sets. This section describes how the three steps of the general methodology are applied.

The annual and 24-hour $PM_{2.5}$ maintenance areas include Jefferson County, Shelby County, and the Walker County donut area. The travel demand model is used to estimate VMTs for years 2024, 2034, 2040 and 2045 for the Jefferson and Shelby Counties in the Birmingham Metropolitan Planning Area. An off-model analysis is used to estimate VMT for the Walker County donut area. This section describes how the three steps of the general methodology are applied to the Birmingham $PM_{2.5}$ maintenance area.

2.1 Latest Planning Assumptions

The conformity determination is prepared using the planning assumptions and methodologies as agreed to by the IAC. This regional emissions analysis is based on the latest planning assumptions derived from estimates of current and future population, employment, travel, and congestion.

The most recent demographics, including 2010 Census and projections to the year 2045, have been used. Occupied households, total and retail employments by place of work, school enrollments, and household median incomes of traffic analysis zone are included. The datasets compiled and developed by the RPCGB are summarized into the analysis years, 2015, 2017, 2024, 2034, 2040, and 2045.

The projections have been developed using a combination of secondary sources, historic trend data, and existing and planned developments. A variety of state and nationally based demographic and economic sources were used to compute the countywide

projections. The sub-county projections for planning districts and census tracts are developed by the RPCGB based predominantly upon historic trends and known/probable residential and commercial developments as identified by the public and private sector. The projections do not reflect any desired regional land development or land use policies.

The 2045 total employment and retail employment projections for Jefferson and Shelby Counties are compiled by county total, planning district, and census tract. The employment data for the base year 2015 was developed by the US Census Longitudinal Employment Household Dynamics program. The estimates and projections are developed for various levels of geography and are used as input to the regional traffic assignment model, which is used for the development of the TIP and the RTP.

Total and retail employment projections for years 2017, 2024, 2034, and 2040 have been calculated using the trend extrapolation method and applying data pertaining to known and probable commercial developments and planned or probable future developments.

The travel demand model has been used to estimate VMT. Project listings for analysis years, 2024, 2034, 2040, and 2045, are developed with the estimated date when projects open traffic. Non-exempt projects that increase general roadway capacity in the TIP and the RTP with an estimated completion data to open traffic are grouped into the four analysis years. These non-exempt projects and all other roadway improvement projects are coded to appropriate road networks of travel demand model for traffic forecast. Existing roadway of the base year 2015 and year 2017 are used for travel demand model traffic networks in years 2015 and 2017. VMT projected through travel demand model in base year 2015 and the VMT based on Highway Performance Monitoring System/local observed traffic in year 2015 are compared to make adjustments of model projections. All projects included in RTP are listed in Appendix F.

2.2 Vehicle Miles Traveled Estimates

For the Jefferson and Shelby Counties travel demand model, Cube Voyager has been used to estimate the VMT. For the Walker County donut area, an off-model methodology has been introduced to estimate the VMT for the donut area.

2.2.1 Vehicle Miles Traveled by Travel Demand Model for Jefferson and Shelby Counties

Mobile source VMTs are major contributors for emissions. Generally speaking, the more vehicles on the road, the higher the emissions results.

For Jefferson and Shelby Counties, the RPCGB utilized socioeconomic data, the transportation network, and the traffic forecast modeling software Cube Voyager and then compiled the transportation data to estimate and predict traffic assignments along roadways. Traffic assignments are multiplied by roadway length to obtain VMT.

Cube Voyager is a travel demand modeling software used to forecast travel demands along a defined transportation network. Travel demand forecasting is defined as the prediction of transportation travel requirements for a future timeframe based on a set of assumptions.

The transportation network is defined by road classification, number of links, distance of links, speed, number of lanes, and other roadway geometry. Speed data by link type and VMT are generated from the Voyager transportation model. Values for VMT are derived from the travel demand model reflecting the analysis years. The VMT by functional classification is further divided into County and Urban/Rural based on roadway locations in geographic area. The Table 2.2.1.1 illustrates the weekday VMT from the Voyager model results.

Table 2.2.1.1 VMT based on Model Assignments

County and Road Type	VMT Adjustment Factor between HPMS and Model (1)*	2015 Weekday VMT based on Modeling (2)	2024 Weekday VMT based on Modeling (3)	2034 Weekday VMT based on Modeling (4)	2040 Weekday VMT based on Modeling (5)	2045 Weekday VMT based on Modeling (6)
Jefferson County						
Freeway - rural restricted	1.02658	405,642	448,660	500,253	544,647	552,223
Arterial - rural unrestricted	0.84320	232,714	251,344	271,805	283,744	295,133
Collector/local road - rural unrestricted	0.94983	465,922	485,790	487,606	511,612	522,625
Ramp - rural restricted	1.37976	3,273	3,762	4,068	4,304	4,378
Freeway/Expressway - urban restricted	1.03756	10,472,405	11,437,963	12,258,535	12,875,495	13,159,000
Arterial - urban unrestricted	1.03036	6,802,597	6,846,862	7,035,299	7,138,098	7,211,540
Collector/local road - urban unrestricted	0.80814	3,172,977	3,281,285	3,456,890	3,522,282	3,605,669
Ramp - urban restricted	1.18298	771,885	883,703	907,906	939,867	961,435
Subtotal for Jefferson County	100.4%	**22,327,415**	**23,639,369**	**24,922,362**	**25,820,049**	**26,312,003**
Shelby County						
Freeway - rural restricted	1.00000	0	0	0	0	0
Arterial - rural unrestricted	1.00455	785,661	877,093	977,909	1,047,335	1,107,868
Collector/local road - rural unrestricted	0.71652	291,086	347,910	415,362	461,865	496,954
Ramp - rural restricted	1.00000	0	0	0	0	0
Freeway/Expressway - urban restricted	0.94516	1,714,869	2,006,763	2,267,319	2,423,311	2,563,572
Arterial - urban unrestricted	1.11529	2,117,904	2,320,009	2,577,391	2,716,689	2,820,226
Collector/local road - urban unrestricted	0.77856	861,350	975,663	1,119,107	1,206,508	1,276,525
Ramp - urban restricted	1.19579	50,578	58,464	64,173	67,111	69,629
Subtotal for Shelby County	98.1%	**5,821,448**	**6,585,902**	**7,421,261**	**7,922,819**	**8,334,774**
TOTAL for Both Counties	99.9%	***28,148,863***	***30,225,271***	***32,343,623***	***33,742,868***	***34,646,777***

*: VMT based on HPMS divided by VMT based on RPCGB's travel demand model projection.

U.S. EPA's VMT tracking guidance requires that the travel demand model output be consistent with traffic count data for the same roadways. To achieve this traffic count validation for Jefferson and Shelby Counties, the model output VMT has been adjusted based on class-specific VMT estimates using counts directly from the Federal Highway Administration's HPMS data for arterials, freeways, and interstates for the Birmingham Metropolitan Planning Area. Observed average daily traffic counts for local roads and collectors in 2015 have been used to calculate factors of lower classified roadways. The VMT adjustment factor is calculated based on HPMS' VMT or by taking observed VMT divided by Model VMT in 2015. Table 2.2.1.2 illustrates the VMT adjustment factors.

Table 2.2.1.2 VMT Adjustment Factors

County and Road Type	2015 Weekday VMT based on HPMS (A)	2015 Weekday VMT based on Modeling (B)	VMT Adjustment Factor between HPMS and Model (1)=(A)/(B)
Jefferson County			
Freeway - rural restricted	416,423	405,642	1.02658
Arterial - rural unrestricted	196,226	232,714	0.84320
Collector/local road - rural unrestricted	442,547	465,922	0.94983
Ramp -rural restricted	4,516	3,273	1.37976
Freeway/Expressway - urban restricted	10,865,779	10,472,405	1.03756
Arterial - urban unrestricted	7,009,102	6,802,597	1.03036
Collector/local road - urban unrestricted	2,564,204	3,172,977	0.80814
Ramp -urban restricted	913,125	771,885	1.18298
Sub-total for Jefferson County	22,411,921	22,327,415	100.4%
Shelby County			
Freeway - rural restricted	0	0	1.00000
Arterial - rural unrestricted	789,239	785,661	1.00455
Collector/local road - rural unrestricted	208,569	291,086	0.71652
Ramp -rural restricted	0	0	1.00000
Freeway/Expressway - urban restricted	1,620,818	1,714,869	0.94516
Arterial - urban unrestricted	2,362,079	2,117,904	1.11529
Collector/local road - urban unrestricted	670,613	861,350	0.77856
Ramp -urban restricted	60,480	50,578	1.19579
Sub-total for Shelby County	5,711,799	5,821,448	98.1%
TOTAL for both Counties	28,123,721	28,148,863	99.9%

VMT adjustment factors are applied for model VMT of all conformity analysis years. The adjusted weekday VMT is illustrated in Table 2.2.1.3.

Table 2.2.1.3 Adjusted Weekday VMT based on Model Assignments and HPMS

County and Road Type		Adjusted 2015 Model Weekday VMT based on HPMS 2015 (7)=(1)x(2)	Adjusted 2024 Model Weekday VMT based on HPMS 2015 (8)=(1)x(3)	Adjusted 2034 Model Weekday VMT based on HPMS 2015 (9)=(1)x(4)	Adjusted 2040 Model Weekday VMT based on HPMS 2015 (10)=(1)x(5)	Adjusted 2045 Model Weekday VMT based on HPMS 2015 (11)=(1)x(6)
Jefferson County						
Freeway - rural restricted		416,423	460,584	513,548	559,122	566,899
Arterial - rural unrestricted		196,226	211,934	229,187	239,254	248,858
Collector/local road - rural unrestricted		442,547	461,418	463,143	485,945	496,405
Ramp - rural restricted		4,516	5,191	5,613	5,938	6,041
Freeway/Expressway - urban restricted		10,865,779	11,867,606	12,719,001	13,359,136	13,653,290
Arterial - urban unrestricted		7,009,102	7,054,711	7,248,868	7,354,788	7,430,459
Collector/local road - urban unrestricted		2,564,204	2,651,732	2,793,645	2,846,491	2,913,879
Ramp - urban restricted		913,125	1,045,404	1,074,035	1,111,844	1,137,359
Subtotal for Jefferson County		**22,411,921**	**23,758,580**	**25,047,041**	**25,962,518**	**26,453,190**
Shelby County						
Freeway - rural restricted		0	0	0	0	0
Arterial - rural unrestricted		789,239	881,088	982,363	1,052,105	1,112,914
Collector/local road - rural unrestricted		208,569	249,285	297,615	330,936	356,078
Ramp - rural restricted		0	0	0	0	0
Freeway/Expressway - urban restricted		1,620,818	1,896,703	2,142,969	2,290,406	2,422,974
Arterial - urban unrestricted		2,362,079	2,587,485	2,874,541	3,029,899	3,145,373
Collector/local road - urban unrestricted		670,613	759,613	871,292	939,339	993,852
Ramp - urban restricted		60,480	69,910	76,737	80,250	83,261
Subtotal for Shelby County		**5,711,799**	**6,444,084**	**7,245,518**	**7,722,935**	**8,114,452**
TOTAL for Both Counties		***28,123,720***	***30,202,663***	***32,292,559***	***33,685,454***	***34,567,642***

HPMS provides with the VMT in 2015 and 2017. Table 2.2.1.4 illustrates the VMT by weekday and by County for years 2015 and 2017.

Table 2.2.1.4 VMT based on HPMS

County and Road Type	2015 Weekday VMT based on HPMS	2017 Weekday VMT based on HPMS
Jefferson County		
Freeway - rural restricted	416,423	464,005
Arterial - rural unrestricted	196,226	200,565
Collector/local road - rural unrestricted	442,547	426,918
Ramp -rural restricted	4,516	4,532
Freeway/Expressway - urban restricted	10,865,779	11,145,347
Arterial - urban unrestricted	7,009,102	7,155,207
Collector/local road - urban unrestricted	2,564,204	2,614,022
Ramp -urban restricted	913,125	902,260
Sub-total for Jefferson County	22,411,921	22,912,857
Shelby County		
Freeway - rural restricted	0	0
Arterial - rural unrestricted	789,239	625,932
Collector/local road - rural unrestricted	208,569	209,610
Ramp -rural restricted	0	0
Freeway/Expressway - urban restricted	1,620,818	1,774,405
Arterial - urban unrestricted	2,362,079	2,584,272
Collector/local road - urban unrestricted	670,613	688,335
Ramp -urban restricted	60,480	63,293
Sub-total for Shelby County	5,711,799	5,945,848
TOTAL for both Counties	28,123,721	28,858,705

2.2.2 Vehicle Miles Traveled by Off-Model Methodology for Walker County Donut Area

The portion of Walker County that is part of the $PM_{2.5}$ attainment maintenance areas is considered a donut area for the purpose of transportation air quality conformity. A donut area, as defined by the Transportation Conformity Rule, is a geographic area that is within the nonattainment areas but not within the boundary of the MPO. The Transportation Rule requires that emissions for the donut area be considered when the MPO in the area is determining air quality conformity for its TIP and the long range transportation plan. For the Walker County donut area, a small rural area, traffic counts in HPMS by ALDOT are used to estimate VMT.

For this conformity determination, ALDOT was consulted on the current and potential future transportation projects in the donut area. Corridor-X/Interstate 22 is the only regionally significant project constructed by ALDOT in 2007. Alabama Highway 269 and Interstate 22 are considered regionally significant facilities in the donut area. There is no travel demand model for the portion of Walker County that is part of the $PM_{2.5}$

nonattainment/maintenance area. An off-model analysis has been used to estimate and predict traffic in this donut area. Traffic counts are multiplied by the roadway length to calculate VMT.

Projected traffic is based on the traffic in the base year 2015 and ALDOT's growth rates for Interstate 22, ramps, Alabama Highway 269, county roads, and local roads.

Estimated traffic is multiplied by the highway length, in miles, to estimate vehicle miles traveled. They are grouped in two categories by facility type, freeway with ramp and all other roadways. Table 2.2.2.1 illustrates summary of the average annual daily vehicle miles traveled in the Walker County donut area. Table 2.2.2.2 illustrates the Annual VMT. Roadways in the donut area are classified as rural area. Documentation of estimating traffic and VMT in the donut area is provided in Appendix A.

Table 2.2.2.1 Annual Average Daily VMT in Walker County Donut Area

Roadway Type	Annaul Average Daily Vehicle Miles Traveled (VMT/Day)					
	VMT2015	VMT2017	VMT2024	VMT2034	VMT2040	VMT2045
Off_network	0	0	0	0	0	0
Freeway - rural	111,822	129,559	144,088	167,714	183,711	198,201
Arterial & Collector - rural	63,199	58,861	62,416	68,286	72,230	75,753
Ramp - rural	1,841	1,955	2,096	2,316	2,459	2,584
Freeway - urban	0	0	0	0	0	0
Arterial & Collector - urban	0	0	0	0	0	0
Ramp - urban	0	0	0	0	0	0
Total	176,862	190,375	208,600	238,316	258,400	276,539

Table 2.2.2.2 Annual VMT in Walker County Donut Area

Roadway Type	Road Type ID	Annaul Vehicle Miles Traveled (VMT/Year)					
		VMT2015	VMT2017	VMT2024*	VMT2034	VMT2040*	VMT2045
Off_network	1	0	0	0	0	0	0
Freeway & Ramp - rural	2	41,486,987	48,002,615	53,503,385	62,061,010	68,138,134	73,286,771
Arterial & Collector - rural	3	23,067,468	21,484,412	22,844,075	24,924,414	26,436,202	27,649,910
Freeway & Ramp - urban	4	0	0	0	0	0	0
Arterial & Collector - urban	5	0	0	0	0	0	0
Total		64,554,455	69,487,026	76,347,460	86,985,424	94,574,336	100,936,681
*: There are 366 days in 2024 and in 2040. Only 365 days for all other analysis years.							

2.3 Emissions Estimates by Motor Vehicle Emissions Simulator

Motor Vehicle Emissions Simulator (MOVES) is the latest EPA modeling tool for estimating air pollution emissions from mobile sources. The emissions estimates of this report use MOVES2014b, the version released in December 2018. For the Birmingham air quality maintenance areas for the ground-level Ozone standards and the annual & 24-hour $PM_{2.5}$ standards, the county level emissions inventory by hour is selected for the transportation conformity analysis. The aggregation level was set to hour for all months and weekdays/weekends for 24 hours. Each input file includes a data set for one county and one analysis year with the following types of data:

- Age Distribution – vehicle counts by age for each calendar year and vehicle type
- Average Speed Distribution – average speed data specific to vehicle type, road type, and time of day
- Fuel – the distribution fraction by fuel type, source type, model year, and engine technology; the fuel formulations used in the area; fuel's respective market share; fuel usage
- Meteorology Data – local temperature and humidity data for each county
- Ramp Fraction - based on ratio of Vehicle Hours Traveled on freeways and ramps, except for Jefferson and Shelby Counties, default for Walker County
- Source Type Population – motor vehicle registration from State Revenue Department by vehicle class for base year; calculates the distribution by vehicle class for projections
- Road Type Distribution – percentage based on the VMT by functional classification
- Vehicle Type VMT – through distribution percentage by vehicle type based on VMT by functional classification; weekday or daily VMT by functional classification must be converted to annual VMT as input file of MOVES2014b.

Fourteen run specs were developed representing analysis years, 2015 (baseline year), 2017, 2024, 2034, 2040, and 2045 for Jefferson, Shelby, and Walker counties respectively. The more detailed descriptions for input files and emissions outputs are included in Appendix A.

The emissions inventory of NOx and VOC by county and analysis years 2015, 2017, 2024, 2030, and 2040 from MOVES is illustrated in the Table 2.3.1. Emissions are summarized into US short tons per day (Tons/Day) for the ground-level Ozone standards.

Table 2.3.1. Daily Emissions for the Ground-level Ozone Standards

Year	Month	Code for Weekend/ Weekday	Jefferson County		Shelby County		Average Daily - Total of Both Counties		Maximum US Short Tons/day
			NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	
2015	1	2	21.71	12.64	6.23	3.34	27.94	15.98	
2015	1	5	27.69	15.33	8.30	4.09	35.99	19.43	Maximum NOx
2015	2	2	20.73	12.74	6.10	3.40	26.83	16.14	36.80
2015	2	5	28.35	15.74	8.45	4.19	36.80	19.93	
2015	3	2	22.93	12.61	6.56	3.26	29.49	15.88	
2015	3	5	28.09	15.04	8.40	3.95	36.49	19.00	Maximum VOC
2015	4	2	22.65	12.92	6.56	3.35	29.21	16.28	22.17
2015	4	5	27.28	15.17	8.21	3.99	35.49	19.16	
2015	5	2	22.80	14.00	6.52	3.65	29.31	17.65	
2015	5	5	27.81	16.43	8.23	4.32	36.04	20.75	
2015	6	2	22.45	14.91	6.25	3.82	28.70	18.73	
2015	6	5	27.04	17.35	7.77	4.50	34.81	21.85	
2015	7	2	21.60	15.14	6.13	3.89	27.73	19.03	
2015	7	5	25.99	17.60	7.65	4.57	33.64	22.17	
2015	8	2	21.66	14.63	6.19	3.81	27.85	18.44	
2015	8	5	26.36	17.13	7.84	4.50	34.21	21.63	
2015	9	2	21.09	13.81	6.12	3.62	27.20	17.44	
2015	9	5	26.66	16.47	7.98	4.35	34.65	20.81	
2015	10	2	22.95	13.01	6.67	3.38	29.62	16.39	
2015	10	5	28.04	15.39	8.45	4.05	36.49	19.43	
2015	11	2	22.15	12.51	6.37	3.25	28.53	15.76	
2015	11	5	27.43	14.97	8.28	3.94	35.71	18.91	
2015	12	2	21.48	12.25	6.26	3.21	27.74	15.47	
2015	12	5	27.71	14.86	8.34	3.92	36.05	18.78	

Table 2.3.1. Daily Emissions for the Ground-level Ozone Standards (Continued)

Year	Month	Code for Weekend/ Weekday	Jefferson County		Shelby County		Average Daily - Total of Both Counties		Maximum US Short Tons/day
			NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	
2017	1	2	15.48	9.79	5.22	2.99	20.70	12.78	
2017	1	5	19.53	11.96	6.92	3.66	26.45	15.62	Maximum NOx
2017	2	2	14.43	9.56	4.98	2.94	19.41	12.50	29.17
2017	2	5	19.51	11.95	6.86	3.63	26.37	15.58	
2017	3	2	17.22	10.31	5.81	3.11	23.03	13.42	
2017	3	5	20.90	12.42	7.40	3.77	28.30	16.19	Maximum VOC
2017	4	2	17.26	10.97	5.78	3.31	23.04	14.27	18.77
2017	4	5	20.59	12.99	7.20	3.92	27.79	16.91	
2017	5	2	16.84	11.29	5.65	3.42	22.50	14.70	
2017	5	5	20.42	13.44	7.12	4.07	27.54	17.51	
2017	6	2	16.26	11.68	5.43	3.53	21.69	15.21	
2017	6	5	19.50	13.85	6.75	4.18	26.25	18.03	
2017	7	2	15.97	12.21	5.32	3.70	21.30	15.91	
2017	7	5	19.11	14.40	6.62	4.37	25.73	18.77	
2017	8	2	15.82	11.88	5.21	3.59	21.04	15.47	
2017	8	5	19.14	14.10	6.58	4.27	25.72	18.37	
2017	9	2	15.85	11.30	5.30	3.44	21.15	14.73	
2017	9	5	19.88	13.60	6.89	4.13	26.77	17.72	
2017	10	2	16.97	10.63	5.74	3.21	22.70	13.84	
2017	10	5	20.55	12.75	7.24	3.85	27.80	16.60	
2017	11	2	16.76	10.28	5.63	3.10	22.39	13.39	
2017	11	5	20.55	12.44	7.28	3.78	27.83	16.22	
2017	12	2	16.87	10.30	5.75	3.14	22.62	13.43	
2017	12	5	21.56	12.66	7.61	3.84	29.17	16.50	

Table 2.3.1. Daily Emissions for the Ground-level Ozone Standards (Continued)

Year	Month	Code for Weekend/ Weekday	Jefferson County		Shelby County		Average Daily - Total of Both Counties		Maximum US Short Tons/day
			NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	
2024	1	2	7.92	5.72	2.46	1.85	10.38	7.57	
2024	1	5	9.89	6.83	3.22	2.21	13.11	9.03	Maximum NOx
2024	2	2	7.34	5.58	2.33	1.82	9.67	7.39	14.54
2024	2	5	9.86	6.79	3.18	2.18	13.04	8.98	
2024	3	2	8.78	5.95	2.71	1.91	11.48	7.87	
2024	3	5	10.54	7.03	3.41	2.26	13.96	9.29	Maximum VOC
2024	4	2	8.73	6.32	2.67	2.03	11.41	8.35	10.77
2024	4	5	10.33	7.35	3.31	2.36	13.63	9.71	
2024	5	2	8.55	6.56	2.63	2.12	11.18	8.68	
2024	5	5	10.28	7.68	3.29	2.47	13.56	10.15	
2024	6	2	8.24	6.75	2.53	2.17	10.77	8.92	
2024	6	5	9.79	7.86	3.11	2.52	12.89	10.38	
2024	7	2	8.07	7.02	2.48	2.27	10.55	9.30	
2024	7	5	9.55	8.14	3.05	2.63	12.60	10.77	
2024	8	2	8.01	6.86	2.43	2.21	10.44	9.06	
2024	8	5	9.59	7.99	3.04	2.57	12.62	10.57	
2024	9	2	8.04	6.57	2.47	2.13	10.50	8.70	
2024	9	5	9.99	7.75	3.18	2.50	13.17	10.25	
2024	10	2	8.65	6.16	2.67	1.98	11.32	8.14	
2024	10	5	10.37	7.25	3.34	2.33	13.71	9.58	
2024	11	2	8.58	5.96	2.63	1.91	11.21	7.87	
2024	11	5	10.38	7.05	3.37	2.27	13.74	9.32	
2024	12	2	8.65	6.00	2.72	1.94	11.37	7.94	
2024	12	5	10.98	7.22	3.55	2.32	14.54	9.54	

Table 2.3.1. Daily Emissions for the Ground-level Ozone Standards (Continued)

Year	Month	Code for Weekend/ Weekday	Jefferson County		Shelby County		Average Daily - Total of Both Counties		Maximum US Short Tons/day
			NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	
2034	1	2	4.31	2.99	1.14	1.04	5.45	4.03	
2034	1	5	5.36	3.52	1.49	1.23	6.85	4.75	Maximum NOx
2034	2	2	3.93	2.86	1.06	1.00	4.99	3.86	7.72
2034	2	5	5.32	3.44	1.46	1.19	6.78	4.64	
2034	3	2	4.75	3.05	1.23	1.06	5.98	4.11	
2034	3	5	5.68	3.56	1.56	1.23	7.24	4.79	Maximum VOC
2034	4	2	4.64	3.17	1.19	1.11	5.83	4.27	5.36
2034	4	5	5.47	3.64	1.48	1.27	6.95	4.92	
2034	5	2	4.54	3.26	1.17	1.14	5.71	4.40	
2034	5	5	5.45	3.78	1.48	1.32	6.93	5.10	
2034	6	2	4.35	3.34	1.12	1.16	5.47	4.50	
2034	6	5	5.14	3.84	1.38	1.33	6.53	5.17	
2034	7	2	4.23	3.47	1.09	1.22	5.32	4.69	
2034	7	5	4.97	3.97	1.35	1.39	6.32	5.36	
2034	8	2	4.20	3.39	1.07	1.18	5.27	4.57	
2034	8	5	5.01	3.90	1.35	1.36	6.36	5.27	
2034	9	2	4.24	3.26	1.09	1.14	5.33	4.40	
2034	9	5	5.27	3.80	1.42	1.33	6.69	5.13	
2034	10	2	4.66	3.12	1.20	1.08	5.85	4.20	
2034	10	5	5.55	3.63	1.51	1.26	7.06	4.89	
2034	11	2	4.67	3.08	1.20	1.07	5.88	4.15	
2034	11	5	5.60	3.60	1.55	1.25	7.15	4.85	
2034	12	2	4.75	3.25	1.28	1.13	6.03	4.38	
2034	12	5	6.05	3.87	1.67	1.33	7.72	5.19	

Table 2.3.1. Daily Emissions for the Ground-level Ozone Standards (Continued)

Year	Month	Code for Weekend/ Weekday	Jefferson County		Shelby County		Average Daily - Total of Both Counties		Maximum US Short Tons/day
			NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	
2040	1	2	4.04	2.81	1.04	0.98	5.08	3.79	
2040	1	5	5.04	3.31	1.37	1.15	6.41	4.47	Maximum NOx
2040	2	2	3.67	2.68	0.97	0.94	4.64	3.62	7.24
2040	2	5	4.99	3.23	1.33	1.12	6.33	4.35	
2040	3	2	4.46	2.86	1.12	0.99	5.57	3.85	
2040	3	5	5.33	3.34	1.43	1.16	6.76	4.50	Maximum VOC
2040	4	2	4.33	2.94	1.07	1.03	5.40	3.97	4.95
2040	4	5	5.11	3.39	1.35	1.19	6.45	4.58	
2040	5	2	4.23	3.00	1.06	1.05	5.28	4.06	
2040	5	5	5.08	3.49	1.34	1.22	6.42	4.71	
2040	6	2	4.04	3.07	1.00	1.07	5.05	4.15	
2040	6	5	4.78	3.54	1.25	1.23	6.03	4.77	
2040	7	2	3.92	3.20	0.98	1.12	4.89	4.32	
2040	7	5	4.61	3.66	1.22	1.29	5.82	4.95	
2040	8	2	3.90	3.12	0.96	1.09	4.85	4.21	
2040	8	5	4.65	3.60	1.22	1.26	5.86	4.86	
2040	9	2	3.94	3.00	0.98	1.05	4.92	4.05	
2040	9	5	4.91	3.51	1.28	1.23	6.19	4.73	
2040	10	2	4.36	2.90	1.08	1.01	5.44	3.91	
2040	10	5	5.19	3.38	1.38	1.18	6.57	4.56	
2040	11	2	4.39	2.89	1.09	1.00	5.49	3.89	
2040	11	5	5.26	3.38	1.42	1.18	6.68	4.56	
2040	12	2	4.47	3.08	1.17	1.06	5.64	4.14	
2040	12	5	5.70	3.66	1.54	1.26	7.24	4.92	

Table 2.3.1. Daily Emissions for the Ground-level Ozone Standards (Continued)

Year	Month	Code for Weekend/ Weekday	Jefferson County		Shelby County		Average Daily - Total of Both Counties		Maximum US Short Tons/day
			NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	NOx Tons/Day	VOC Tons/Day	
2045	1	2	4.08	2.84	1.06	0.99	5.14	3.82	
2045	1	5	5.09	3.34	1.42	1.17	6.50	4.51	Maximum NOx
2045	2	2	3.70	2.70	0.99	0.94	4.69	3.64	7.36
2045	2	5	5.05	3.26	1.38	1.13	6.42	4.39	
2045	3	2	4.49	2.88	1.14	0.99	5.64	3.87	
2045	3	5	5.38	3.36	1.47	1.17	6.86	4.54	Maximum VOC
2045	4	2	4.35	2.96	1.10	1.03	5.45	3.99	4.98
2045	4	5	5.15	3.41	1.39	1.20	6.54	4.61	
2045	5	2	4.25	3.01	1.08	1.05	5.33	4.06	
2045	5	5	5.12	3.49	1.38	1.23	6.50	4.72	
2045	6	2	4.06	3.08	1.03	1.07	5.09	4.15	
2045	6	5	4.81	3.54	1.29	1.24	6.10	4.79	
2045	7	2	3.93	3.20	1.00	1.12	4.93	4.33	
2045	7	5	4.63	3.67	1.25	1.30	5.89	4.97	
2045	8	2	3.91	3.13	0.98	1.09	4.89	4.21	
2045	8	5	4.68	3.60	1.25	1.27	5.93	4.87	
2045	9	2	3.96	3.00	1.00	1.05	4.96	4.05	
2045	9	5	4.94	3.51	1.32	1.23	6.26	4.75	
2045	10	2	4.39	2.92	1.11	1.01	5.50	3.93	
2045	10	5	5.24	3.40	1.42	1.19	6.66	4.59	
2045	11	2	4.43	2.92	1.12	1.00	5.55	3.92	
2045	11	5	5.31	3.41	1.46	1.19	6.78	4.60	
2045	12	2	4.51	3.11	1.20	1.07	5.72	4.19	
2045	12	5	5.77	3.70	1.59	1.28	7.36	4.98	

NOx, Primary Exhaust $PM_{2.5}$ Total, Brake wear $PM_{2.5}$, and Tire wear $PM_{2.5}$ are pollutants calculated in the MOVES2014b models for the annual and the 24-hour $PM_{2.5}$ standards. The direct $PM_{2.5}$ includes Primary Exhaust $PM_{2.5}$ Total, Brake wear $PM_{2.5}$, and Tire wear $PM_{2.5}$.

The emissions inventory of NOx and Direct $PM_{2.5}$ for $PM_{2.5}$ Standards by county and analysis year from MOVES2014b are illustrated in the Table 2.3.2. Emissions are summarized into US short tons per year for the annual $PM_{2.5}$ standard and US short tons per day (tpd) for the 24-hour $PM_{2.5}$ standard.

Table 2.3.2. Annual and Daily Emissions for $PM_{2.5}$ Standards

Year	Month	Code for Weekend/ Weekday	Jefferson County		Shelby County		Walker County		Average Daily - Total of Three Areas		Maximum US Short Tons/Day	Days in a month for weekends/ weekdays	Subtotal of Three Areas in Weekends or Weekdays	
			NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day			NOx Tons	Direct PM 2.5 Tons
2024	1	2	7.9239	0.2466	2.4599	0.0935	0.1596	0.0053	10.5434	0.3454	Maximum	8	84.3474	2.7630
2024	1	5	9.8928	0.3843	3.2198	0.1448	0.1926	0.0064	13.3052	0.5354	Daily NOx	23	306.0201	12.3145
2024	2	2	7.3364	0.2249	2.3306	0.0883	0.1467	0.0048	9.8137	0.3181	14.76	8	78.5098	2.5445
2024	2	5	9.8635	0.3788	3.1753	0.1420	0.1941	0.0064	13.2329	0.5272	Tons/Day	21	277.8901	11.0716
2024	3	2	8.7777	0.2673	2.7057	0.1026	0.1833	0.0060	11.6668	0.3759		10	116.6680	3.7588
2024	3	5	10.5428	0.4036	3.4137	0.1532	0.2103	0.0069	14.1669	0.5637		21	297.5045	11.8373
2024	4	2	8.7335	0.2691	2.6745	0.1054	0.1831	0.0061	11.5911	0.3806	Maximum	8	92.7289	3.0447
2024	4	5	10.3254	0.3999	3.3066	0.1532	0.2068	0.0069	13.8388	0.5600	Daily PM 2	22	304.4531	12.3197
2024	5	2	8.5504	0.2851	2.6309	0.1111	0.1769	0.0062	11.3582	0.4024	0.61	8	90.8654	3.2195
2024	5	5	10.2781	0.4268	3.2853	0.1622	0.2051	0.0072	13.7685	0.5962	Tons/Day	23	316.6750	13.7119
2024	6	2	8.2418	0.2883	2.5259	0.1125	0.1723	0.0064	10.9399	0.4073		10	109.3992	4.0732
2024	6	5	9.7857	0.4266	3.1084	0.1618	0.1923	0.0071	13.0865	0.5956		20	261.7302	11.9119
2024	7	2	8.0709	0.2871	2.4770	0.1116	0.1653	0.0063	10.7132	0.4050		8	85.7056	3.2401
2024	7	5	9.5503	0.4240	3.0514	0.1611	0.1857	0.0071	12.7873	0.5922		23	294.1088	13.6216
2024	8	2	8.0074	0.2832	2.4282	0.1097	0.1630	0.0062	10.5986	0.3991		9	95.3876	3.5921
2024	8	5	9.5860	0.4230	3.0369	0.1609	0.1876	0.0071	12.8105	0.5911		22	281.8304	13.0036
2024	9	2	8.0358	0.2693	2.4661	0.1048	0.1668	0.0059	10.6686	0.3800		9	96.0178	3.4203
2024	9	5	9.9884	0.4203	3.1776	0.1593	0.1974	0.0070	13.3634	0.5866		21	280.6321	12.3179
2024	10	2	8.6521	0.2725	2.6667	0.1066	0.1864	0.0064	11.5052	0.3854		8	92.0415	3.0833
2024	10	5	10.3673	0.4119	3.3385	0.1575	0.2062	0.0070	13.9120	0.5764		23	319.9769	13.2578
2024	11	2	8.5808	0.2656	2.6316	0.1014	0.1851	0.0061	11.3975	0.3732		9	102.5774	3.3584
2024	11	5	10.3794	0.4063	3.3654	0.1542	0.2032	0.0067	13.9480	0.5673		21	292.9080	11.9129
2024	12	2	8.6548	0.2847	2.7159	0.1079	0.1684	0.0056	11.5390	0.3982		9	103.8513	3.5837
2024	12	5	10.9845	0.4415	3.5516	0.1635	0.2191	0.0073	14.7552	0.6123		22	324.6142	13.4704
TOTAL											Total Tons/Year		**4,706.44**	**190.43**

Year	Month	Code for Weekend/ Weekday	Jefferson County		Shelby County		Walker County		Average Daily - Total of Three Areas		Maximum US Short Tons/Day	Days in a month for weekends/ weekdays	Subtotal of Three Areas in Weekends or Weekdays	
			NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day			NOx Tons	Direct PM 2.5 Tons
2034	1	2	4.3080	0.1720	1.1382	0.0600	0.1060	0.0034	5.5521	0.2353	Maximum	9	49.9693	2.1181
2034	1	5	5.3603	0.2798	1.4924	0.0979	0.1265	0.0040	6.9792	0.3817	Daily NOx	22	153.5429	8.3979
2034	2	2	3.9275	0.1594	1.0643	0.0573	0.0965	0.0031	5.0883	0.2198	7.86	8	40.7062	1.7585
2034	2	5	5.3208	0.2791	1.4568	0.0966	0.1278	0.0040	6.9054	0.3798	Tons/Day	20	138.1079	7.5952
2034	3	2	4.7509	0.1915	1.2282	0.0664	0.1219	0.0039	6.1010	0.2618		8	48.8076	2.0947
2034	3	5	5.6798	0.3010	1.5579	0.1049	0.1385	0.0044	7.3762	0.4103		23	169.6531	9.4378
2034	4	2	4.6407	0.1985	1.1894	0.0693	0.1212	0.0041	5.9513	0.2719	Maximum	10	59.5126	2.7187
2034	4	5	5.4697	0.3058	1.4819	0.1063	0.1357	0.0045	7.0873	0.4166	Daily PM 2.	20	141.7461	8.3328
2034	5	2	4.5404	0.2125	1.1737	0.0741	0.1167	0.0042	5.8307	0.2908	0.45	8	46.6456	2.3260
2034	5	5	5.4522	0.3287	1.4759	0.1137	0.1345	0.0047	7.0626	0.4471	Tons/Day	23	162.4405	10.2836
2034	6	2	4.3521	0.2154	1.1187	0.0752	0.1133	0.0043	5.5842	0.2949		8	44.6733	2.3592
2034	6	5	5.1423	0.3297	1.3828	0.1137	0.1257	0.0047	6.6509	0.4481		22	146.3194	9.8585
2034	7	2	4.2252	0.2142	1.0916	0.0744	0.1080	0.0043	5.4249	0.2929		10	54.2487	2.9292
2034	7	5	4.9699	0.3274	1.3489	0.1131	0.1205	0.0047	6.4393	0.4452		21	135.2252	9.3491
2034	8	2	4.2008	0.2113	1.0715	0.0732	0.1070	0.0042	5.3793	0.2887		8	43.0341	2.3093
2034	8	5	5.0094	0.3265	1.3461	0.1129	0.1221	0.0047	6.4775	0.4441		23	148.9830	10.2136
2034	9	2	4.2416	0.2007	1.0931	0.0700	0.1096	0.0040	5.4443	0.2747		9	48.9984	2.4720
2034	9	5	5.2724	0.3240	1.4187	0.1118	0.1292	0.0046	6.8204	0.4404		21	143.2276	9.2493
2034	10	2	4.6562	0.1997	1.1986	0.0697	0.1242	0.0042	5.9790	0.2736		9	53.8109	2.4621
2034	10	5	5.5494	0.3133	1.5115	0.1089	0.1361	0.0046	7.1970	0.4268		22	158.3332	9.3893
2034	11	2	4.6742	0.1885	1.2029	0.0652	0.1237	0.0040	6.0008	0.2578		8	48.0065	2.0620
2034	11	5	5.6016	0.3005	1.5456	0.1051	0.1337	0.0043	7.2809	0.4099		22	160.1791	9.0178
2034	12	2	4.7521	0.1934	1.2784	0.0686	0.1115	0.0035	6.1419	0.2655		10	61.4192	2.6549
2034	12	5	6.0461	0.3130	1.6707	0.1091	0.1444	0.0045	7.8612	0.4266		21	165.0862	8.9579
TOTAL											Total Tons/Year		**2,422.68**	**138.35**

Table 2.3.2. Annual and Daily Emissions for $PM_{2.5}$ Standards (Continued)

Year	Month	Code for Weekend/ Weekday	Jefferson County		Shelby County		Walker County		Average Daily - Total of Three Areas		Maximum US Short Tons/Day	Days in a month for weekends/ weekdays	Subtotal of Three Areas in Weekends or Weekdays	
			NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day			NOx Tons	Direct PM 2.5 Tons
2040	1	2	4.0448	0.1673	1.0370	0.0583	0.1082	0.0032	5.1900	0.2288	Maximum	9	46.7097	2.0593
2040	1	5	5.0356	0.2767	1.3702	0.0987	0.1287	0.0037	6.5345	0.3791	Daily NOx	22	143.7589	8.3405
2040	2	2	3.6723	0.1552	0.9655	0.0558	0.0983	0.0029	4.7361	0.2140	7.39	8	37.8890	1.7117
2040	2	5	4.9946	0.2764	1.3340	0.1024	0.1302	0.0038	6.4587	0.3826	Tons/Day	21	135.6335	8.0344
2040	3	2	4.4588	0.1869	1.1158	0.0729	0.1245	0.0036	5.6991	0.2635		9	51.2920	2.3716
2040	3	5	5.3305	0.2984	1.4267	0.1016	0.1410	0.0041	6.8982	0.4041		22	151.7611	8.8896
2040	4	2	4.3299	0.1938	1.0727	0.0610	0.1236	0.0038	5.5262	0.2586	Maximum	9	49.7357	2.3276
2040	4	5	5.1056	0.3034	1.3481	0.1131	0.1381	0.0042	6.5918	0.4207	Daily PM 2.5	21	138.4282	8.8342
2040	5	2	4.2258	0.2074	1.0565	0.0725	0.1189	0.0039	5.4012	0.2838	0.45	8	43.2097	2.2703
2040	5	5	5.0802	0.3258	1.3401	0.1151	0.1368	0.0044	6.5571	0.4453	Tons/Day	23	150.8136	10.2418
2040	6	2	4.0441	0.2104	1.0040	0.0827	0.1154	0.0040	5.1635	0.2971		9	46.4715	2.6743
2040	6	5	4.7785	0.3269	1.2506	0.1099	0.1278	0.0044	6.1569	0.4413		21	129.2956	9.2667
2040	7	2	3.9163	0.2091	0.9773	0.0655	0.1099	0.0040	5.0035	0.2786		9	45.0312	2.5078
2040	7	5	4.6056	0.3246	1.2165	0.1200	0.1223	0.0044	5.9443	0.4489		22	130.7757	9.8760
2040	8	2	3.8953	0.2062	0.9595	0.0716	0.1089	0.0039	4.9637	0.2817		8	39.7096	2.2538
2040	8	5	4.6468	0.3236	1.2154	0.1143	0.1239	0.0044	5.9860	0.4423		23	137.6790	10.1726
2040	9	2	3.9406	0.1959	0.9807	0.0760	0.1116	0.0037	5.0330	0.2756		10	50.3295	2.7563
2040	9	5	4.9059	0.3212	1.2849	0.1078	0.1314	0.0043	6.3222	0.4333		20	126.4435	8.6662
2040	10	2	4.3573	0.1948	1.0847	0.0605	0.1268	0.0039	5.5687	0.2593		8	44.5500	2.0744
2040	10	5	5.1917	0.3106	1.3793	0.1153	0.1386	0.0042	6.7096	0.4301		23	154.3207	9.8931
2040	11	2	4.3937	0.1839	1.0943	0.0636	0.1264	0.0037	5.6145	0.2512		8	44.9158	2.0097
2040	11	5	5.2584	0.2977	1.4172	0.1062	0.1361	0.0040	6.8118	0.4079		22	149.8587	8.9736
2040	12	2	4.4722	0.1877	1.1711	0.0666	0.1137	0.0033	5.7571	0.2576		10	57.5708	2.5756
2040	12	5	5.7034	0.3090	1.5412	0.1097	0.1472	0.0042	7.3918	0.4228		21	155.2271	8.8790
TOTAL											Total Tons/Year		**2,261.41**	**137.66**

Year	Month	Code for Weekend/ Weekday	Jefferson County		Shelby County		Walker County		Average Daily - Total of Three Areas		Maximum US Short Tons/Day	Days in a month for weekends/ weekdays	Subtotal of Three Areas in Weekends or Weekdays	
			NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day	NOx Tons/Day	Direct PM 2.5 Tons/Day			NOx Tons	Direct PM 2.5 Tons
2045	1	2	4.0803	0.1692	1.0626	0.0604	0.1177	0.0034	5.2606	0.2329	Maximum	9	47.3450	2.0963
2045	1	5	5.0892	0.2816	1.4155	0.1053	0.1399	0.0040	6.6446	0.3909	Daily NOx	22	146.1813	8.5988
2045	2	2	3.7019	0.1569	0.9884	0.0578	0.1069	0.0031	4.7972	0.2179	7.52	8	38.3774	1.7432
2045	2	5	5.0454	0.2815	1.3778	0.1041	0.1416	0.0040	6.5647	0.3896	Tons/Day	20	131.2946	7.7925
2045	3	2	4.4924	0.1891	1.1436	0.0673	0.1355	0.0039	5.7715	0.2603		8	46.1723	2.0827
2045	3	5	5.3818	0.3040	1.4742	0.1135	0.1533	0.0044	7.0094	0.4218		23	161.2153	9.7018
2045	4	2	4.3535	0.1963	1.0980	0.0705	0.1345	0.0041	5.5859	0.2709	Maximum	10	55.8592	2.7085
2045	4	5	5.1455	0.3093	1.3914	0.1153	0.1501	0.0045	6.6870	0.4291	Daily PM 2.	20	133.7402	8.5822
2045	5	2	4.2466	0.2098	1.0803	0.0752	0.1293	0.0042	5.4562	0.2892	0.46	8	43.6496	2.3137
2045	5	5	5.1173	0.3318	1.3818	0.1229	0.1486	0.0047	6.6478	0.4594	Tons/Day	23	152.8983	10.5655
2045	6	2	4.0625	0.2128	1.0260	0.0763	0.1255	0.0043	5.2139	0.2935		8	41.7114	2.3480
2045	6	5	4.8110	0.3329	1.2883	0.1230	0.1389	0.0047	6.2381	0.4607		22	137.2387	10.1347
2045	7	2	3.9325	0.2116	0.9978	0.0755	0.1194	0.0043	5.0497	0.2914		10	50.4975	2.9143
2045	7	5	4.6346	0.3305	1.2520	0.1223	0.1328	0.0047	6.0195	0.4575		21	126.4086	9.6080
2045	8	2	3.9120	0.2086	0.9797	0.0743	0.1184	0.0042	5.0102	0.2871		8	40.0814	2.2971
2045	8	5	4.6772	0.3296	1.2514	0.1221	0.1346	0.0047	6.0631	0.4563		23	139.4514	10.4955
2045	9	2	3.9591	0.1981	1.0019	0.0710	0.1214	0.0040	5.0825	0.2732		9	45.7422	2.4585
2045	9	5	4.9407	0.3271	1.3240	0.1209	0.1428	0.0046	6.4075	0.4526		21	134.5567	9.5041
2045	10	2	4.3851	0.1973	1.1112	0.0708	0.1380	0.0042	5.6342	0.2723		9	50.7080	2.4510
2045	10	5	5.2364	0.3166	1.4246	0.1180	0.1507	0.0045	6.8116	0.4392		22	149.8563	9.6626
2045	11	2	4.4290	0.1860	1.1218	0.0660	0.1376	0.0040	5.6884	0.2560		8	45.5069	2.0478
2045	11	5	5.3110	0.3031	1.4645	0.1135	0.1480	0.0043	6.9235	0.4208		22	152.3162	9.2585
2045	12	2	4.5147	0.1896	1.2014	0.0688	0.1237	0.0035	5.8397	0.2619		10	58.3973	2.6190
2045	12	5	5.7685	0.3142	1.5938	0.1168	0.1600	0.0045	7.5222	0.4355		21	157.9672	9.1450
TOTAL											Total Tons/Year		**2,287.17**	**141.13**

3.0 Other Conformity Requirements

3.1 Other Conformity Requirements

There are no transportation control measures (TCMs) for either the ground-level Ozone stands or the annual/the 24-hour $PM_{2.5}$ standards in the SIP for Birmingham maintenance areas. The adoption of the TIP and the RTP will in no way delay timely implementation of TCMs. Both the TIP and the RTP meet the fiscal constraint requirements of the U.S. Department of Transportation.

3.2 Quality Assurance and Interagency Consultation

The RPCGB achieves quality assurance through the interagency consultation process delineated in the Alabama Conformity SIP, 40 CFR 51 and 93, 23 CFR 450, and 49 CFR 613. The approved implementation plan revision required under §51.390 mandates the inclusion of procedures for interagency consultation, resolution of conflicts, and public consultation as described in this statute. Public consultation procedures are also required in 23 CFR Part 450. The Interagency Consultation Group discussion items are documented in the notes from the Interagency Consultation Meeting (see Appendix C). Additionally, the Interagency Consultation Group was provided a draft copy of this conformity determination report for review and comment.

4.0 Conformity Determination

The FY 2020-2023 TIP and the 2045 RTP have demonstrated conformity in the ground-level Ozone standards and the annual/the 24-hour $PM_{2.5}$ standards with the applicable federal requirements. Birmingham MPO has determined that the recommended projects in the FY 2020-2023 TIP and the 2045 RTP are consistent with the air quality goals of the SIP and the conformity requirements under the ground-level Ozone standards (including 1-hour and 8-hour standards) and the annual/the 24-hour $PM_{2.5}$ standards.

The resultant data from MOVES2014b is delineated below for each modeled year and for specific pollutants. For the ground-level Ozone standards, the modeled emissions for the Jefferson County and Shelby County are combined. The ozone-forming emissions of Volatile Organic Compounds (VOC) and Oxides of Nitrogen (NOx) in 2015, 2017, 2024, 2034, 2040, and 2045 are less than the MVEBs in 2015 and 2017 accordingly. For $PM_{2.5}$ standards, the modeled emissions for the Jefferson County, Shelby County, and Walker County Donut Area are combined. The emissions of $PM_{2.5}$ and NOx in 2024, 2034, 2040, and 2045 are less than the MVEBs in year 2024.

4.1 Conformity Determination for the Ground-Level Ozone Standards

According to 40 CFR 93.118 (b) (2), with the approved budgets for the ground-level Ozone standards, the budget conformity test is used with the MVEBs for Birmingham area. All emissions for those analysis years in the budget year and beyond must be no more than the MVEBs in that budget year.

4.1.1 Emissions Conformity Test for the 1997 1-Hour Ground-Level Ozone Standard

VOC and NOx in tons/day from MOVES2014b model outputs are two pollutants of concern for the ground-level Ozone Standard for Jefferson and Shelby Counties. The highest average daily VOC and NOx in all analysis years are 22.17 tons per day and 36.80 tons per day in 2015. They are no-greater-than budgets in 2015 since budgets are 23 tons per day for VOC and 41 tons per day for NOx for the 1-hour ground-level Ozone Standard. The same MVEBs are applied to all other years beyond 2015. Table 4.1.1 illustrates the emission budget test including emissions output from MOVES2014b model run, MVEBs, and test results. Figure 4.1.1.1 and 4.1.1.2 show the emissions vs. emission budgets.

Table 4.1.1: Emission Budget Test for The Ground-Level Ozone, 1-Hour Standard in tons/day

Emissions	2015*	2017	2024	2034	2040	2045
Output for VOC	**22.17**	**18.77**	**10.77**	**5.36**	**4.95**	**4.98**
Budget for VOC	23.00	23.00	23.00	23.00	23.00	23.00
Status for VOC	Pass	Pass	Pass	Pass	Pass	Pass
Output for NOx	**36.80**	**29.17**	**14.54**	**7.72**	**7.24**	**7.36**
Budget for NOx	41.00	41.00	41.00	41.00	41.00	41.00
Status for NOx	Pass	Pass	Pass	Pass	Pass	Pass
*: Budgets in 2015 for 1-hour Ground-Level Ozone Standard						

Figure 4.1.1.1: VOC Emissions vs. Budgets, 1-Hour Ground-Level Ozone Standard

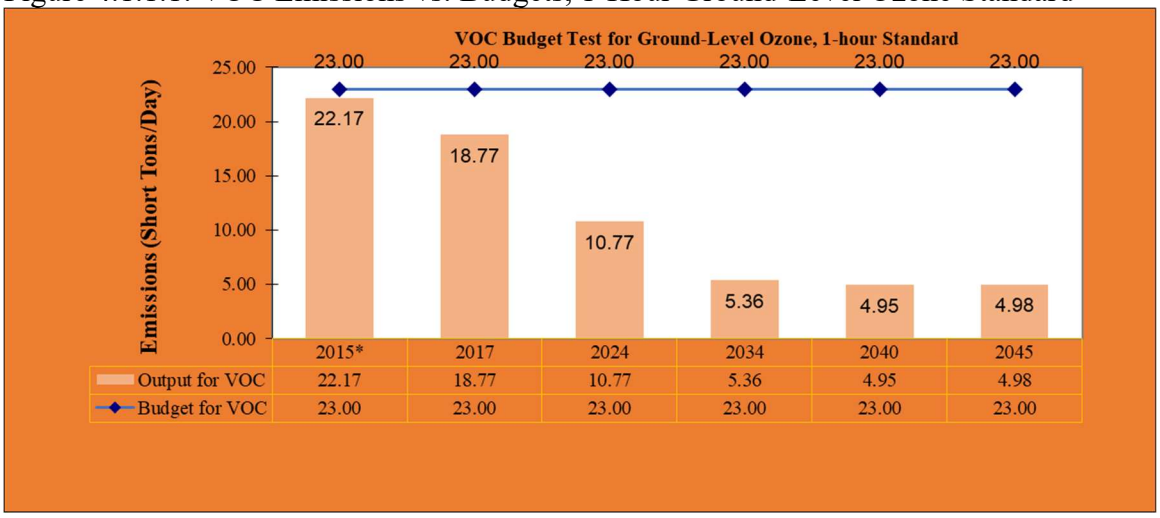
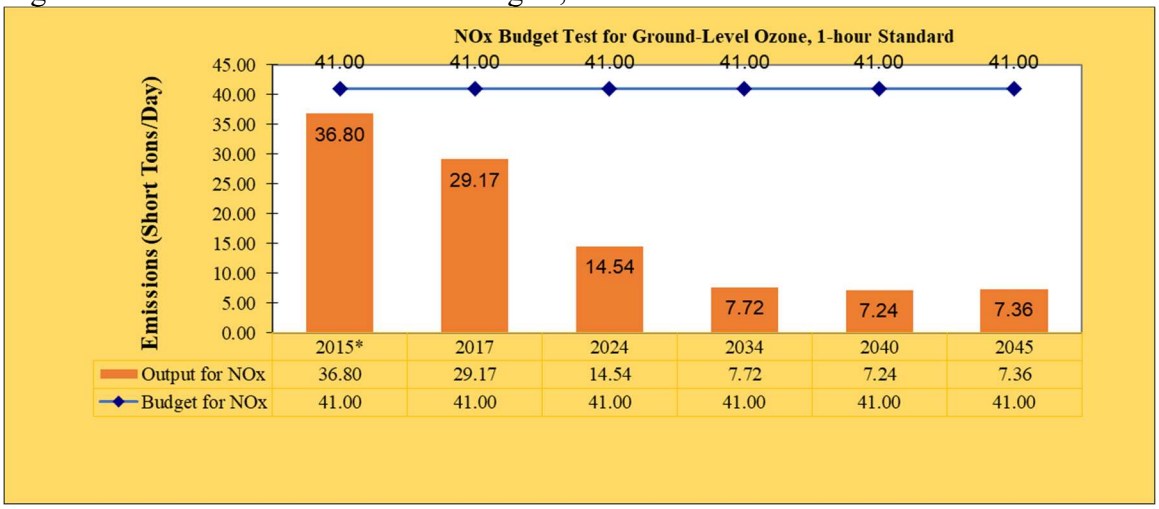


Figure 4.1.1.2: NOx Emissions vs. Budgets, 1-Hour Ground-Level Ozone Standard



4.1.2 Emissions Conformity Test for the 8-hour Ground-Level Ozone Standard

VOC and NOx in tons per day are two pollutants for the ground-level Ozone standard for Jefferson and Shelby Counties. The highest average daily VOC and NOx in all analysis years are 18.77 tons per day and 29.17 tons per day in 2017. They are no-greater-than budgets in 2017 since budgets are 23 tons per day for VOC and 42 tons per day for NOx for the 8-hour ground-level Ozone Standard. The same MVEBs are applied to all other years beyond 2017. Table 4.1.2 illustrates the emission budget test including emission output from MOVES2014b model run, MVEBs, and test results. Figure 4.1.2.1 and 4.1.2.2 show the emissions vs. emission budgets for the Ozone standards.

Table 4.1.2: Emission Budget Test for The Ground-Level Ozone, 8-hour Standard in tons/day

Emissions	2017*	2024	2034	2040	2045
Output for VOC	**18.77**	**10.77**	**5.36**	**4.95**	**4.98**
Budget for VOC	23.00	23.00	23.00	23.00	23.00
Status for VOC	Pass	Pass	Pass	Pass	Pass
Output for NOx	**29.17**	**14.54**	**7.72**	**7.24**	**7.36**
Budget for NOx	42.00	42.00	42.00	42.00	42.00
Status for NOx	Pass	Pass	Pass	Pass	Pass
*: Budgets in 2017 for 8-hour Ground-Level Ozone Standard					

Figure 4.1.2.1: VOC Emissions vs. Budgets, 8-Hour Ground-Level Ozone Standard

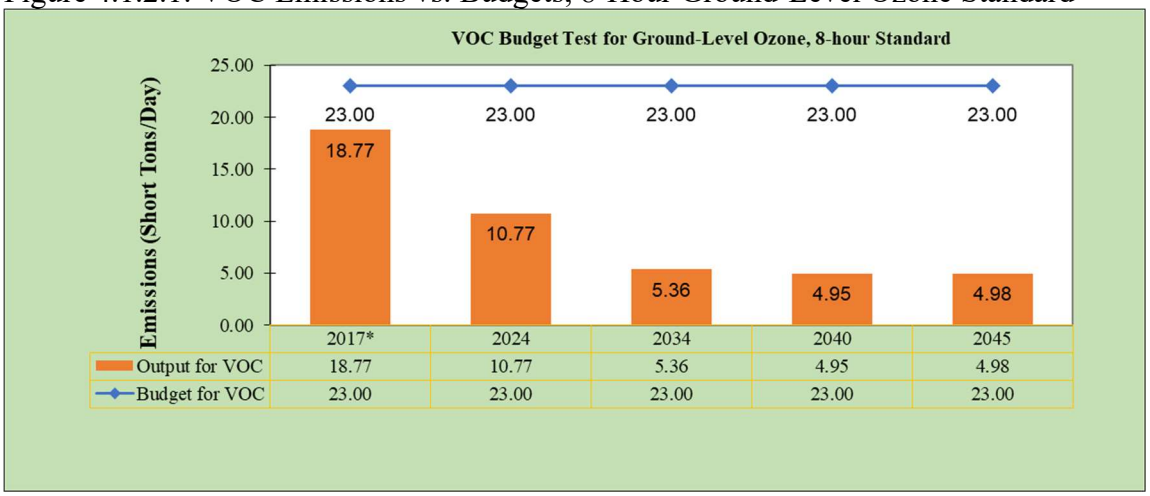
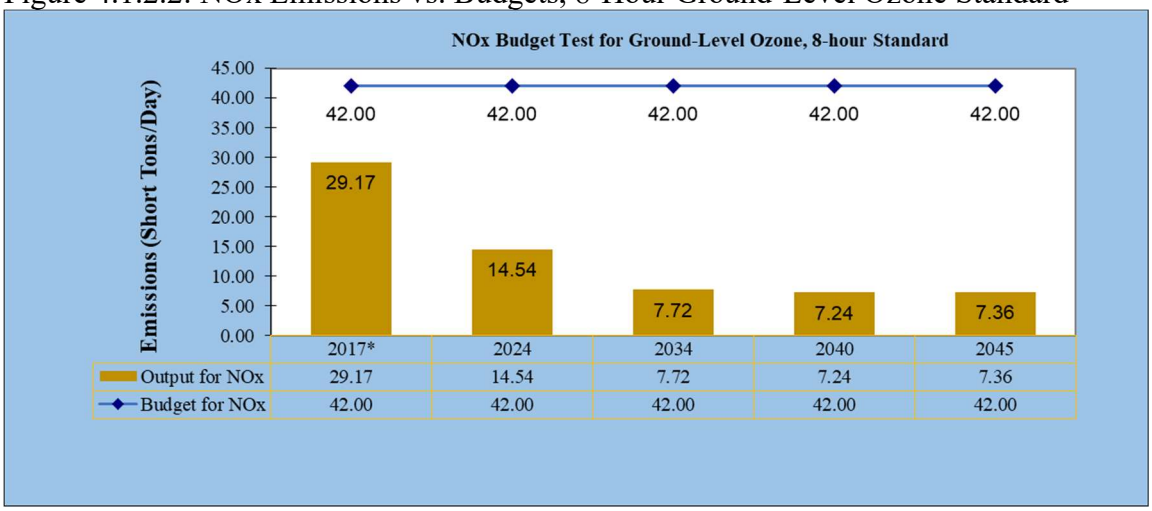


Figure 4.1.2.2: NOx Emissions vs. Budgets, 8-Hour Ground-Level Ozone Standard



4.2 Conformity Determination for the Annual $PM_{2.5}$ Standard

According to 40 CFR 93.118 (b) (2), with the approved budgets for the annual $PM_{2.5}$ standard, the budget conformity test is used with the 2024 MVEBs for Birmingham maintenance area for the annual $PM_{2.5}$ standard. All emissions for those analysis years in the budget year and beyond must be no more than the MVEBs in that budget year.

The highest $PM_{2.5}$ in 2024, 2034, 2040, and 2045 is 190.43 tons per year and fewer than 442.07 tons per year of the 2024 MVEB. The highest NOx in 2024, 2034, 2040, and 2045 is 4,706.44 tons per year and fewer than 15,981.50 tons per year of the 2024 MVEB.

Therefore, the TIP and RTP for Jefferson and Shelby Counties have passed the budget conformity test and have demonstrated conformity with the applicable federal requirements for Birmingham annual $PM_{2.5}$ attainment maintenance areas.

Table 4.2 shows the combined emissions, the emission budgets and test results for conformity determinations. Figure 4.2.1 illustrates the total $PM_{2.5}$ emissions by the conformity analysis years and emission budgets. Figure 4.2.2 is for the annual $PM_{2.5}$ standard NOx emissions by the conformity analysis years and emission budgets.

Table 4.2: Direct $PM_{2.5}$ and NOx for the Annual $PM_{2.5}$ Standard, short tons per year

Emissions	2024*	2034	2040	2045
$PM_{2.5}$	**190.43**	**138.35**	**137.66**	**141.13**
Budget for $PM_{2.5}$	442.07	442.07	442.07	442.07
Status for the Annual $PM_{2.5}$	Pass	Pass	Pass	Pass
NOx	**4,706.44**	**2,422.68**	**2,261.41**	**2,287.17**
Budget for NOx	15,981.50	15,981.50	15,981.50	15,981.50
Status for NOx	Pass	Pass	Pass	Pass
*: Budgets in 2024 for the Annual $PM_{2.5}$ Standard				

Figure 4.2.1: Annual Direct $PM_{2.5}$, short tons per year for the Annual $PM_{2.5}$ Standard

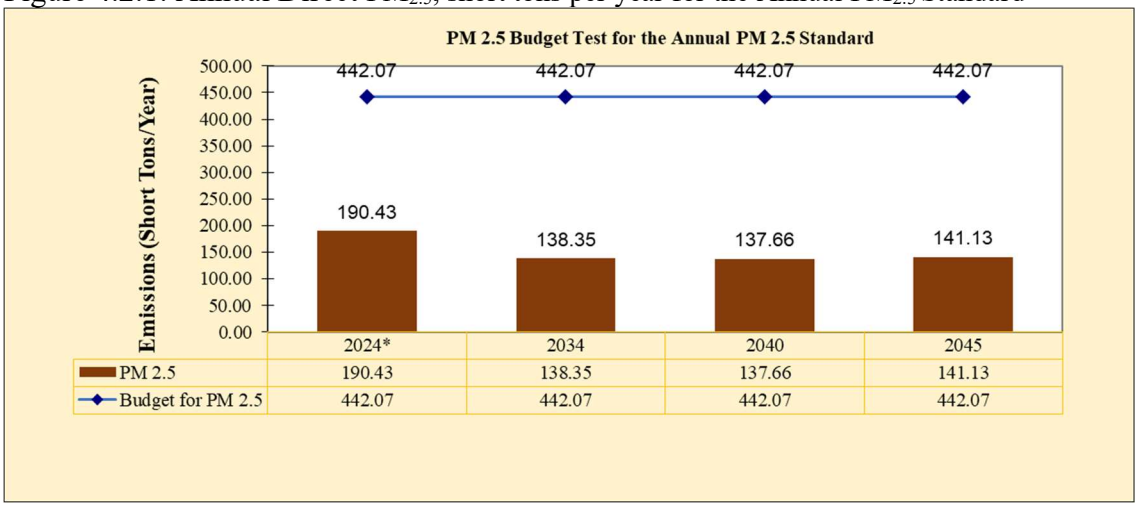
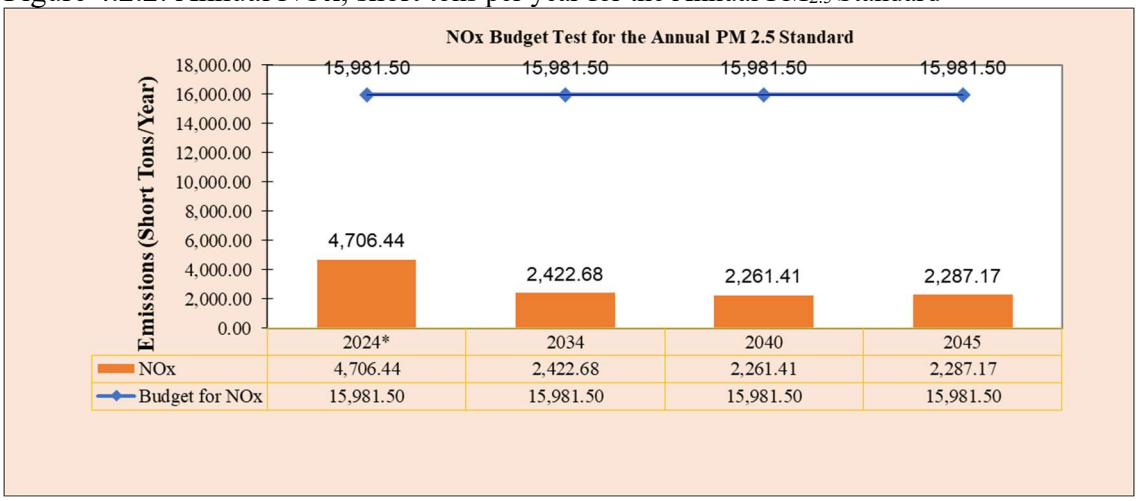


Figure 4.2.2: Annual NOx, short tons per year for the Annual $PM_{2.5}$ Standard



4.3 Conformity Determination for the 24-hour $PM_{2.5}$ Standard

According to 40 CFR 93.118 (b) (2), with the approved budgets for the 24-hour $PM_{2.5}$ standard, the budget conformity test is used. All emissions for those analysis years in the budget year and beyond must be no more than the MVEBs in that budget year.

The highest $PM_{2.5}$ in 2024, 2034, 2040, and 2045 is 0.61 tons per day and fewer than 1.21 tons per day of the 2024 MVEB. The highest NOx in 2024, 2034, 2040, and 2045 is 14.76 tons per day and fewer than 48.41 tons per day of the 2024 MVEB.

Therefore, the TIP and RTP for Jefferson and Shelby Counties have passed the budget conformity test and have demonstrated conformity with the applicable federal requirements for Birmingham 24-hour $PM_{2.5}$ attainment maintenance areas.

Table 4.3 shows the combined emissions, emission budgets and test results for the conformity determinations. Figure 4.3.1 illustrates the direct $PM_{2.5}$ by conformity analysis years and emission budgets. Figure 4.3.2 illustrates NOx for the 24-hour $PM_{2.5}$ standard by conformity analysis years and emission budgets.

Table 4.3: Direct $PM_{2.5}$ and NOx for the 24-hour $PM_{2.5}$ Standard, short tons per day

Emissions	2024*	2034	2040	2045
$PM_{2.5}$	**0.61**	**0.45**	**0.45**	**0.46**
Budget for $PM_{2.5}$	1.21	1.21	1.21	1.21
Status for the 24-hour $PM_{2.5}$	Pass	Pass	Pass	Pass
NOx	**14.76**	**7.86**	**7.39**	**7.52**
Budget for NOx	48.41	48.41	48.41	48.41
Status for NOx	Pass	Pass	Pass	Pass

*: Budgets in 2024 for the 24-hour $PM_{2.5}$ Standard

Figure 4.3.1: Direct $PM_{2.5}$, short tons per day for the 24-hour $PM_{2.5}$ Standard

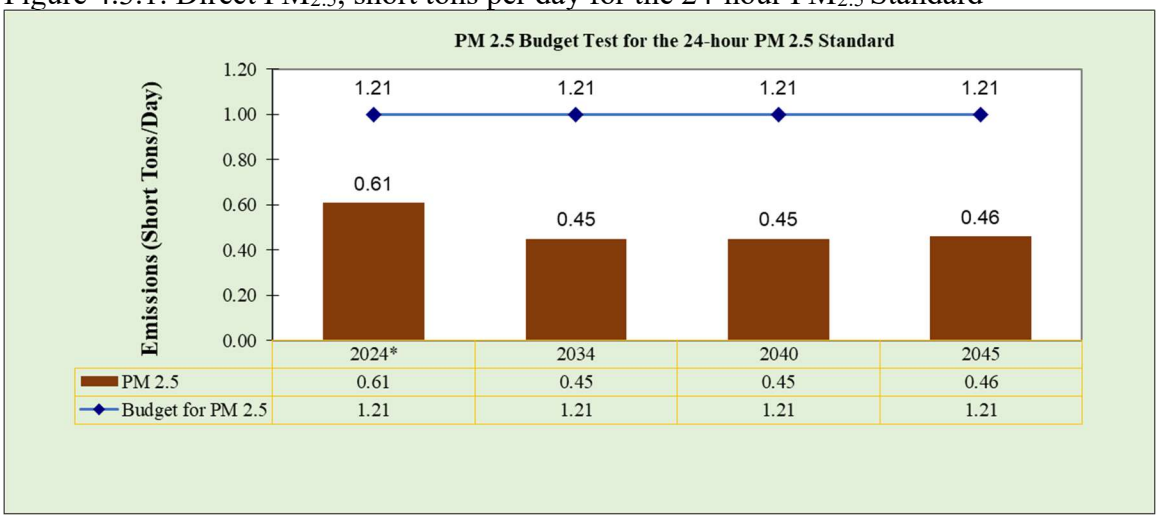
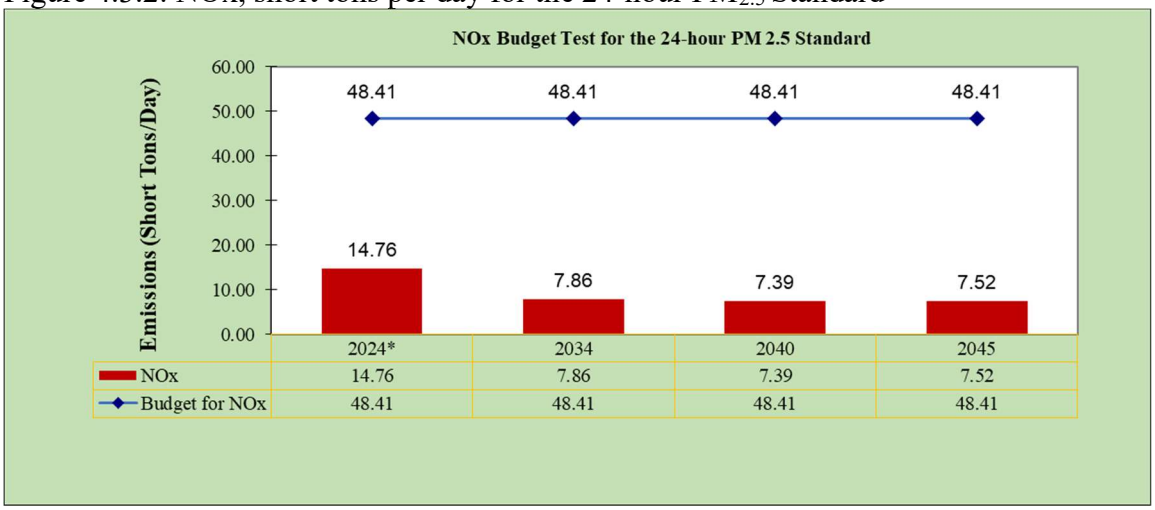


Figure 4.3.2: NOx, short tons per day for the 24-hour $PM_{2.5}$ Standard



5.0 Public Involvement

A Public Involvement Meeting on Air Quality Conformity Determination at the Birmingham annual and 24-hour $PM_{2.5}$ attainment maintenance areas for the FY 2020-2023 TIP and the 2045 RTP was held on May 15, 2019. The meeting marks the beginning of the 21-day comment period. A separate document titled, *Public Involvement Meeting Documentation Wednesday, May 15, 2019*, is published by the RPCGB and available at http://rpcgb.org/transportation-planning/public-involvement/. This document describes the outreach and notification procedures used to meet FAST public involvement requirements for the TIP, the RTP, and conformity determinations, as well as the materials distributed, presentations made, comments and questions raised, and RPCGB responded to comments and questions accordingly.

Appendix A

Technical Information

MOVES (Motor Vehicle Emissions Simulator) is a computer program designed by the US Environmental Protection Agency (EPA) to estimate air pollution emissions from mobile sources and is used for inventory development in State Implementation Plans (SIPs) and for regional emissions analysis for Transportation conformity determinations. The MOVES user Guide is available at www.epa.gov/otag/models/moves/index.htm.

All assumptions and input files are listed as followings for the ground-level Ozone, the annual $PM_{2.5}$, and the 24-hour $PM_{2.5}$ Air Quality Conformity Determinations for the 2045 Regional Transportation Plan (RTP, a long range transportation plan) and Birmingham MPO FY 2020-2023 Transportation Improvement Program (TIP). The analysis years for the air model are 2015, 2017, 2024, 2034, 2040, and 2045.

The latest MOVES, the version MOVES2014b released in December 2018 is used for all conformity emissions inventory analyses.

MOVES model for the Birmingham area includes three sections:

- A run specification file as MOVES INPUT PANELS. The information of year 2024 and Jefferson County is given as a sample for the run specification. The words underlined are those selections for input panels in bold.
- County Data Manager as local datasets under Geographic Bounds of MOVES INPUT PANELS, each dataset includes local inputs, estimates, defaults, or calculations.
- Emissions inventory, MOVES output tables

1. A Run Specification File for MOVES INPUT PANELS

Description
Brief sentences in Description box for each run specification.

Scale
County in the Domain/Scale box is selected for developing emission estimates for Transportation Plan and Transportation Improvement Program conformity determination
Inventory in the Calculation Type box is selected for regional estimates.

Time Spans
Hour in Time Aggregation Level box is selected for regional conformity analysis.
2024 in Years box is selected for calendar year of emissions analysis. Each analysis year will require a different run specification.
All months in Months box is selected to calculate average daily emissions for each month.
Weekends and Weekdays in Days box is selected because the annual $PM_{2.5}$ standard requires weekday and weekend emissions.
Start Time: 00:00-00:59 and End Hour: 23:00-23:59 in Hours box stands for 24 hour time span.

Geographic Bounds
County in Region box is selected.
Alabama - Jefferson County is selected. Alabama Shelby County and Walker County are selected in separated runs specific to each county.

Type localhost as server in Domain Input Database.
Create M14B2045RTP_Jeff2024_cdm_inventory_20190108 as database in Domain Input Database; this is a sample for Jefferson County

The County Data Manager, listed in Appendix A, page A-3, is created after creating the Domain Input Database.

Vehicles/Equipment: On Road Vehicle Equipment
The following fuel types and vehicles type are selected for Jefferson County (Shelby and Walker Counties without CNG-Transit Bus)
Compressed Natural Gas (CNG) – Transit Bus
Diesel Fuel – Combination Long-haul Truck
Diesel Fuel – Combination Short-haul Truck
Diesel Fuel – Intercity Bus
Diesel Fuel – Light Commercial Truck
Diesel Fuel – Motor Home
Diesel Fuel – Passenger Car
Diesel Fuel – Passenger Truck
Diesel Fuel – Refuse Truck
Diesel Fuel – School Bus
Diesel Fuel – Single Unit Long-haul Truck
Diesel Fuel – Single Unit Short-haul Truck
Diesel Fuel – Transit Bus
Ethanol (E85) – Light Commercial Truck
Ethanol (E85) – Passenger Car
Ethanol (E85) – Passenger Truck
Gasoline – Combination Short-haul Truck
Gasoline – Light Commercial Truck
Gasoline – Motor Home
Gasoline – Motorcycle
Gasoline – Passenger Car
Gasoline – Passenger Truck
Gasoline – Refuse Truck
Gasoline – School Bus
Gasoline – Single Unit Long-haul Truck
Gasoline – Single Unit Short-haul Truck
Gasoline – Transit Bus

Road Type
Selected Road Tapes are:
Off-Network
Rural Restricted Access
Rural Unrestricted Access
Urban Restricted Access
Urban Unrestricted Access

Pollutants and Processes
For ground-level Ozone standards and $PM_{2.5}$ standards, the following pollutants are checked.

Total Gaseous Hydrocarbons
Non-Methane Hydrocarbons
Volatile Organic Compounds
Oxides of Nitrogen(NOx)
Primary Exhaust $PM_{2.5}$ – Total
Primary Exhaust $PM_{2.5}$ – Species
Primary $PM_{2.5}$ – Brakewear Particulate
Primary $PM_{2.5}$ – Tirewear Particulate
(select prerequisites)

Manage Input data Sets
Not used for Regional conformity Analysis

Strategies
Not used for Birmingham maintenance area for Ozone and $PM_{2.5}$ standards

Output: General Output
Create M14B2045RTP_Jeff2024_Out_Inventory_20190107 as database in Output Database box
Select Grams, Joules, and Miles as units in Units box, The unit for summary table will be in US short tons, 1 kilograms = 0.001102293 US short tons
Select Distance Traveled and Population in Activity box

Output: Output Emissions Detail
Select Time: 24-Hour day, Location: COUNTY, and Pollutant in Always box
Check On Road/Off Road in On Road/Off Road box

Advanced Performance Features
Not used for regional conformity analysis

2. County Data Manager

County Data Manager (CDM) is under Geographic Bounds of MOVES input panel. CMD is a user interface developed to simplify importing specific local data for a single county and is required for regional conformity analysis. The interface window includes the following tabs.

-Age Distribution, local information collected through Alabama Revenue Department for year 2015 and 2016. Using MOVES age distribution projection tool to obtain the age distributions in year 2024. The following table is a sample of portion of the input file.

sourceTypeID	yearID	ageID	ageFractior
11	2024	0	0.070024
11	2024	1	0.069258
11	2024	2	0.066851
11	2024	3	0.061669
11	2024	4	0.057018
11	2024	5	0.0527
11	2024	6	0.049003
11	2024	7	0.007841
11	2024	8	0.022642
11	2024	9	0.024602
11	2024	10	0.021386
11	2024	11	0.022779
11	2024	12	0.022672
11	2024	13	0.014472
11	2024	14	0.013239
11	2024	15	0.031141
11	2024	16	0.031409
11	2024	17	0.043575
11	2024	18	0.04245
11	2024	19	0.040842
11	2024	20	0.030122
11	2024	21	0.032481
11	2024	22	0.027925
11	2024	23	0.021922
11	2024	24	0.016991
11	2024	25	0.013024
11	2024	26	0.010559
11	2024	27	0.008308
11	2024	28	0.008308
11	2024	29	0.005842
11	2024	30	0.058946

-I/M Programs, not applicable for Birmingham ground-level Ozone, the annual and 24-hour $PM_{2.5}$ maintenance areas

-Tools, default

-Starts, default

-Hoteling, not applicable

-Retrofit, not applicable

-Fuel, default/local datasets based on MOVES2014 database, see table below as sample of portion of the input file.

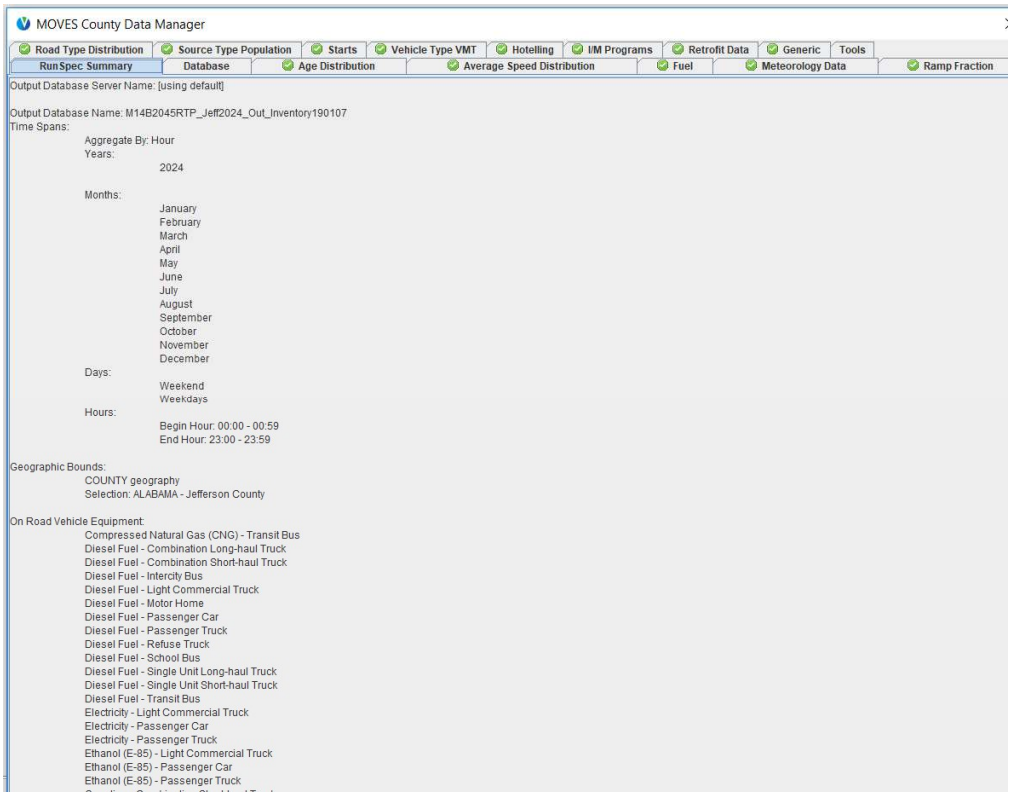
fuelRegionID	fuelYearID	monthGroupID	fuelFormulationID	marketShare	marketShareCV
170000000	2024	1	90	1	0.5
170000000	2024	1	4357	0.922415	0.5
170000000	2024	1	4359	0.0775851	0.5
170000000	2024	1	25005	1	0.5
170000000	2024	1	27001	1	0.5
170000000	2024	1	28001	1	0.5
170000000	2024	2	90	1	0.5
170000000	2024	2	4357	0.922415	0.5
170000000	2024	2	4359	0.0775851	0.5
170000000	2024	2	25005	1	0.5
170000000	2024	2	27001	1	0.5
170000000	2024	2	28001	1	0.5
170000000	2024	3	90	1	0.5
170000000	2024	3	4357	0.922415	0.5
170000000	2024	3	4359	0.0775851	0.5
170000000	2024	3	25005	1	0.5
170000000	2024	3	27001	1	0.5
170000000	2024	3	28001	1	0.5
170000000	2024	4	90	1	0.5
170000000	2024	4	4369	0.922415	0.5
170000000	2024	4	4370	0.0775851	0.5
170000000	2024	4	25005	1	0.5
170000000	2024	4	27002	1	0.5
170000000	2024	4	28001	1	0.5
170000000	2024	5	90	1	0.5
170000000	2024	5	4364	0.922415	0.5
170000000	2024	5	4366	0.0775851	0.5
170000000	2024	5	25005	1	0.5
170000000	2024	5	27002	1	0.5
170000000	2024	5	28001	1	0.5
170000000	2024	6	90	1	0.5
170000000	2024	6	4364	0.922415	0.5
170000000	2024	6	4366	0.0775851	0.5
170000000	2024	6	25005	1	0.5
170000000	2024	6	27002	1	0.5

FuelSupply | FuelFormulation | FuelUsageFraction | avft | County | EngineTech

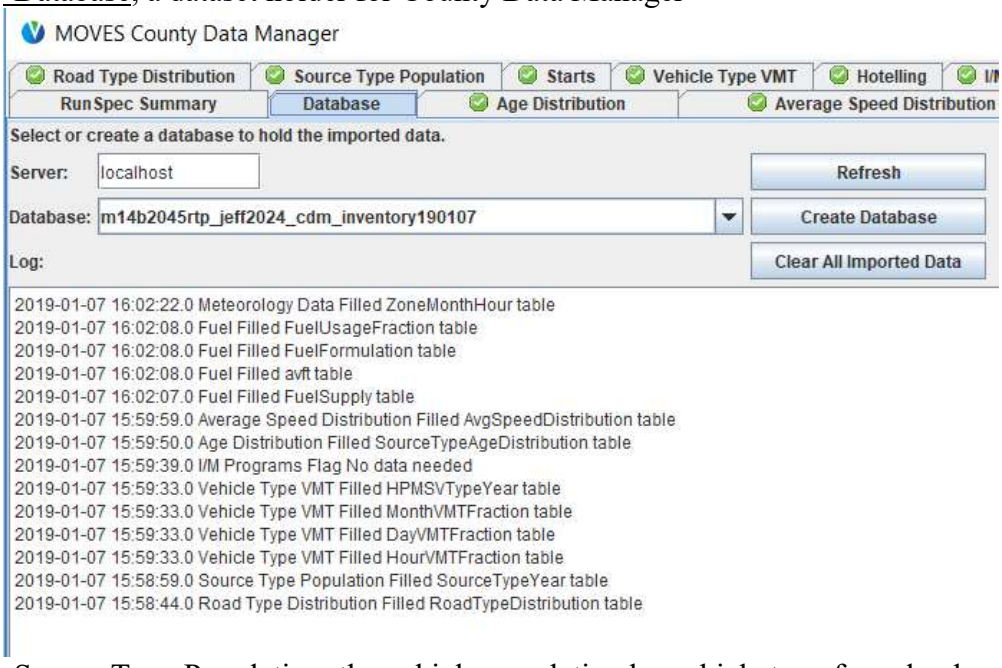
-Meteorology Data, local information collected through Alabama Department of Environmental Management for year 2015, 2016, and 2017. The datasets in 2017 have been used for year 2017 and beyond. The following table is the sample of portion of the input file.

monthID	zoneID	hourID	temperature	relHumidity
1	10730	1	49.81	79.68
1	10730	2	49.32	79.94
1	10730	3	48.84	81.35
1	10730	4	48.61	81.97
1	10730	5	48.29	81.81
1	10730	6	47.71	82.71
1	10730	7	47.52	82.06
1	10730	8	47.19	83.00
1	10730	9	48.55	80.90
1	10730	10	50.35	77.26
1	10730	11	52.71	70.52
1	10730	12	54.87	65.87
1	10730	13	57.06	61.35
1	10730	14	58.39	58.55
1	10730	15	59.29	56.03
1	10730	16	59.58	55.03
1	10730	17	58.94	56.06
1	10730	18	57.52	59.55
1	10730	19	55.29	64.65
1	10730	20	54.00	68.03
1	10730	21	52.84	71.45
1	10730	22	52.00	73.45
1	10730	23	51.32	75.10
1	10730	24	50.55	77.58
2	10730	1	53.36	71.71
2	10730	2	52.61	74.93
2	10730	3	51.96	76.64
2	10730	4	51.64	78.54
2	10730	5	50.04	81.11
2	10730	6	49.54	81.75
2	10730	7	49.21	82.79
2	10730	8	49.18	83.04
2	10730	9	51.46	77.07
2	10730	10	53.57	71.25
2	10730	11	56.07	66.54

-RunSpec Summary, a summary report for all inputs



-Database, a dataset holder for County Data Manager



-Source Type Population, the vehicle population by vehicle type for calendar year 2015 and 2017 based on County vehicle registration. The vehicle registration is obtained under Alabama Revenue Department. The source type population for vehicles in calendar year beyond 2017 was estimated based on 2015 data sets and projection methodologies provided by the MOVES. The school bus information in 2014 and 2018 is obtained from city/county school systems in the county from Alabama Department of Education. The following table is a sample of portion of the source type population input file in 2024 for Jefferson County.

yearID	sourceTypeID	sourceTypePopulation
2024	11	11243
2024	21	370215
2024	31	266171
2024	32	6149
2024	41	709
2024	42	129
2024	43	884
2024	51	234
2024	52	1901
2024	53	79
2024	54	1188
2024	61	2238
2024	62	2619

-Vehicle Type VMT, vehicle miles traveled distributed by vehicle type. The Birmingham Metropolitan Planning area consists of Jefferson and Shelby Counties and portions of Blount and St. Clair Counties. The highway network and all social demographic data for forecast modeling exists for these areas. Cube Voyager, a travel demand modeling program, has been used to estimate the VMT. For Jefferson and Shelby Counties, VMT can be obtained through the travel demand model. For the Walker County donut area, an off-model methodology has been introduced to estimate VMT. HPMS vehicle types are reclassified as Motorcycle (10), Light Duty Vehicle (25), Bus (40), Single Unit Truck (50), and Combination Truck (60) in the latest MOVES2014b model. All VMTs have been converted to HPMS vehicle types.

The daily VMTs in 2015 and 2017 for Jefferson and Shelby counties are obtained from HPMS as following table.

County and Road Type	2015 Daily VMT based on HPMS	2017 Daily VMT based on HPMS
County and Road Type		
Jefferson County	403,930	450,085
Freeway - rural restricted	184,452	188,531
Arterial - rural unrestricted	415,994	401,303
Collector/local road - rural unrestricted	4,245	4,260
Ramp -rural restricted	10,213,832	10,476,627
Freeway/Expressway - urban restricted	6,448,374	6,582,791
Arterial - urban unrestricted	2,359,068	2,404,900
Collector/local road - urban unrestricted	840,075	830,079
Ramp -urban restricted	20,869,970	21,338,576
Sub-total for Jefferson County		
Shelby County	0	0
Freeway - rural restricted	741,885	588,376
Arterial - rural unrestricted	196,055	197,033
Collector/local road - rural unrestricted	0	0
Ramp -rural restricted	1,523,569	1,667,941
Freeway/Expressway - urban restricted	2,173,113	2,377,531
Arterial - urban unrestricted	616,964	633,268
Collector/local road - urban unrestricted	55,642	58,230
Ramp -urban restricted	5,307,228	5,522,379
Sub-total for Shelby County	26,177,198	26,860,955

The HPMS VMT distributions by roadway type and HPMS vehicle type are listed in the following table based on the year 2015 HPMS data sets.

HPMS Vehicle Type % in Number for each Roadway Type	Motorcycle	Light Duty Vehicle	Bus	Single Unit Truck	Combination Truck	Total
	10	25=21+31+32	40=41+42+43	50=51+52+53+54	60=61+62	All
Freeway, rural, 2	0.0058	0.7562	0.0068	0.0548	0.1764	100%
Other Arterials, rural,	0.0093	0.8732	0.0065	0.0378	0.0732	100%
Local Road, rural, 33	0.0114	0.8989	0.0061	0.0406	0.043	100%
Freeway, urban, 4	0.004	0.872	0.0048	0.0341	0.0851	100%
Other Arterial, urban,	0.0074	0.9285	0.0027	0.0238	0.0376	100%
Local Road, urban, 55	0.0102	0.9242	0.0042	0.0343	0.0271	100%

The daily VMTs above by HPMS vehicle type are estimated through the following distribution factors.

VMT DISTRIBUTION BY HPMS VEHICLE TYPE	2015		2017	
	Jefferson	Shelby	Jefferson	Shelby
Motorcycles 10	0.005999	0.007136	0.005950	0.007145
Light-DutyVehicles 25	0.894009	0.902642	0.893279	0.902635
Buses 40	0.004153	0.004144	0.004176	0.004147
Single UnitTrucks 50	0.031451	0.030613	0.031562	0.030633
CombinationTrucks 60	0.064388	0.055465	0.065032	0.055441
TOTAL	100.00%	100.00%	100.00%	100.00%

The total annual VMTs are calculated by the distribution factors, daily VMTs, and 365 days/year in the following table for year 2015 and 2017 as the MOVES VMT input files.

ANNUAL VMT BY HPMS VEHICLE TYPE	2015		2017	
	Jefferson County	Shelby County	Jefferson County	Shelby County
Motorcycles 10	45,697,578	13,824,298	46,343,770	14,400,945
Light-DutyVehicles 25	6,810,147,421	1,748,542,461	6,957,378,081	1,819,412,245
Buses 40	31,633,360	8,026,585	32,527,872	8,359,280
Single UnitTrucks 50	239,580,809	59,300,821	245,826,096	61,746,172
CombinationTrucks 60	490,479,882	107,444,054	506,504,410	111,749,759
TOTAL	7,617,539,050	1,937,138,220	7,788,580,230	2,015,668,401

In order to validate the VMTs from the base year 2015 travel demand model and to fit to the 2015 HPMS VMTs, the daily HPMS VMT in the year 2015 are converted weekday VMTs based on road types as the following table.

County and Road Type	2015 Daily VMT based on HPMS (1)	Factor from AADT to AAWT (2)*	2015 Weekday VMT based on HPMS (3) =(1)/(2)
Jefferson County			
Freeway - rural restricted	403,930	0.97	416,423
Arterial - rural unrestricted	184,452	0.94	196,226
Collector/local road - rural unrestricted	415,994	0.94	442,547
Ramp -rural restricted	4,245	0.94	4,516
Freeway/Expressway - urban restricted	10,213,832	0.94	10,865,779
Arterial - urban unrestricted	6,448,374	0.92	7,009,102
Collector/local road - urban unrestricted	2,359,068	0.92	2,564,204
Ramp -urban restricted	840,075	0.92	913,125
Sub-total for Jefferson County	20,869,970		22,411,921
Shelby County			
Freeway - rural restricted	0	0.97	0
Arterial - rural unrestricted	741,885	0.94	789,239
Collector/local road - rural unrestricted	196,055	0.94	208,569
Ramp -rural restricted	0	0.94	0
Freeway/Expressway - urban restricted	1,523,569	0.94	1,620,818
Arterial - urban unrestricted	2,173,113	0.92	2,362,079
Collector/local road - urban unrestricted	616,964	0.92	670,613
Ramp -urban restricted	55,642	0.92	60,480
Sub-total for Shelby County	5,307,228		5,711,799
TOTAL for Both Counties	26,177,198		**28,123,721**

*:Weekday Factors based on 2015 Traffic counts on ALDOT Permanent Traffic Count Stations in Birmingham MPO area

The adjustment factors for HPMS VMTs over modeling VMTs are obtained in the table below based on the weekday VMTs. These factors are applied to all other years, 2024, 2034, 2040, and 2045.

County and Road Type	2015 Weekday VMT based on HPMS (A)	2015 Weekday VMT based on Modeling (B)	VMT Adjustment Factor between HPMS and Model (1)=(A)/(B)
Jefferson County			
Freeway - rural restricted	416,423	405,642	1.02658
Arterial - rural unrestricted	196,226	232,714	0.84320
Collector/local road - rural unrestricted	442,547	465,922	0.94983
Ramp -rural restricted	4,516	3,273	1.37976
Freeway/Expressway - urban restricted	10,865,779	10,472,405	1.03756
Arterial - urban unrestricted	7,009,102	6,802,597	1.03036
Collector/local road - urban unrestricted	2,564,204	3,172,977	0.80814
Ramp -urban restricted	913,125	771,885	1.18298
Sub-total for Jefferson County	22,411,921	22,327,415	100.4%
Shelby County			
Freeway - rural restricted	0	0	1.00000
Arterial - rural unrestricted	789,239	785,661	1.00455
Collector/local road - rural unrestricted	208,569	291,086	0.71652
Ramp -rural restricted	0	0	1.00000
Freeway/Expressway - urban restricted	1,620,818	1,714,869	0.94516
Arterial - urban unrestricted	2,362,079	2,117,904	1.11529
Collector/local road - urban unrestricted	670,613	861,350	0.77856
Ramp -urban restricted	60,480	50,578	1.19579
Sub-total for Shelby County	5,711,799	5,821,448	98.1%
TOTAL for both Counties	28,123,721	28,148,863	99.9%

The VMT of each roadway type can be estimated based on the RPCGB's travel demand model for Jefferson and Shelby Counties. The HPMS vehicle type VMT can be calculated by applying the distribution factors above. The subtotal of the each HPMS vehicle type is the weekday VMT for the vehicle type for each county.

County and Road Type	VMT Adjustment Factor between HPMS and Model (1)*	2015 Weekday VMT based on Modeling (2)	2024 Weekday VMT based on Modeling (3)	2034 Weekday VMT based on Modeling (4)	2040 Weekday VMT based on Modeling (5)	2045 Weekday VMT based on Modeling (6)
Jefferson County						
Freeway - rural restricted	1.02658	405,642	448,660	500,253	544,647	552,223
Arterial - rural unrestricted	0.84320	232,714	251,344	271,805	283,744	295,133
Collector/local road - rural unrestricted	0.94983	465,922	485,790	487,606	511,612	522,625
Ramp - rural restricted	1.37976	3,273	3,762	4,068	4,304	4,378
Freeway/Expressway - urban restricted	1.03756	10,472,405	11,437,963	12,258,535	12,875,495	13,159,000
Arterial - urban unrestricted	1.03036	6,802,597	6,846,862	7,035,299	7,138,098	7,211,540
Collector/local road - urban unrestricted	0.80814	3,172,977	3,281,285	3,456,890	3,522,282	3,605,669
Ramp - urban restricted	1.18298	771,885	883,703	907,906	939,867	961,435
Subtotal for Jefferson County	100.4%	**22,327,415**	**23,639,369**	**24,922,362**	**25,820,049**	**26,312,003**
Shelby County						
Freeway - rural restricted	1.00000	0	0	0	0	0
Arterial - rural unrestricted	1.00455	785,661	877,093	977,909	1,047,335	1,107,868
Collector/local road - rural unrestricted	0.71652	291,086	347,910	415,362	461,865	496,954
Ramp - rural restricted	1.00000	0	0	0	0	0
Freeway/Expressway - urban restricted	0.94516	1,714,869	2,006,763	2,267,319	2,423,311	2,563,572
Arterial - urban unrestricted	1.11529	2,117,904	2,320,009	2,577,391	2,716,689	2,820,226
Collector/local road - urban unrestricted	0.77856	861,350	975,663	1,119,107	1,206,508	1,276,525
Ramp - urban restricted	1.19579	50,578	58,464	64,173	67,111	69,629
Subtotal for Shelby County	98.1%	**5,821,448**	**6,585,902**	**7,421,261**	**7,922,819**	**8,334,774**
TOTAL for Both Counties	99.9%	***28,148,863***	***30,225,271***	***32,343,623***	***33,742,868***	***34,646,777***

*: VMT based on HPMS divided by VMT based on RPCGB's travel demand model projection.

County and Road Type		Adjusted 2015 Model Weekday VMT based on HPMS 2015 (7)=(1)x(2)	Adjusted 2024 Model Weekday VMT based on HPMS 2015 (8)=(1)x(3)	Adjusted 2034 Model Weekday VMT based on HPMS 2015 (9)=(1)x(4)	Adjusted 2040 Model Weekday VMT based on HPMS 2015 (10)=(1)x(5)	Adjusted 2045 Model Weekday VMT based on HPMS 2015 (11)=(1)x(6)
Jefferson County						
Freeway - rural restricted		416,423	460,584	513,548	559,122	566,899
Arterial - rural unrestricted		196,226	211,934	229,187	239,254	248,858
Collector/local road - rural unrestricted		442,547	461,418	463,143	485,945	496,405
Ramp - rural restricted		4,516	5,191	5,613	5,938	6,041
Freeway/Expressway - urban restricted		10,865,779	11,867,606	12,719,001	13,359,136	13,653,290
Arterial - urban unrestricted		7,009,102	7,054,711	7,248,868	7,354,788	7,430,459
Collector/local road - urban unrestricted		2,564,204	2,651,732	2,793,645	2,846,491	2,913,879
Ramp - urban restricted		913,125	1,045,404	1,074,035	1,111,844	1,137,359
Subtotal for Jefferson County		**22,411,921**	**23,758,580**	**25,047,041**	**25,962,518**	**26,453,190**
Shelby County						
Freeway - rural restricted		0	0	0	0	0
Arterial - rural unrestricted		789,239	881,088	982,363	1,052,105	1,112,914
Collector/local road - rural unrestricted		208,569	249,285	297,615	330,936	356,078
Ramp - rural restricted		0	0	0	0	0
Freeway/Expressway - urban restricted		1,620,818	1,896,703	2,142,969	2,290,406	2,422,974
Arterial - urban unrestricted		2,362,079	2,587,485	2,874,541	3,029,899	3,145,373
Collector/local road - urban unrestricted		670,613	759,613	871,292	939,339	993,852
Ramp - urban restricted		60,480	69,910	76,737	80,250	83,261
Subtotal for Shelby County		**5,711,799**	**6,444,084**	**7,245,518**	**7,722,935**	**8,114,452**
TOTAL for Both Counties		***28,123,720***	***30,202,663***	***32,292,559***	***33,685,454***	***34,567,642***

The following tables are weekday VMT by HPMS vehicle type for Jefferson and Shelby Counties.

WEEKDAY VMT BY HPMS VEHICLE TYPE (PER WEEKDAY)	Jefferson County			
	2024	2034	2040	2045
Motorcycles 10	140,837	147,731	152,386	155,166
Light-DutyVehicles 25	21,213,224	22,349,023	23,151,373	23,586,413
Buses 40	99,527	105,357	109,636	111,837
Single UnitTrucks 50	751,459	794,605	825,877	842,110
CombinationTrucks 60	1,553,534	1,650,324	1,723,246	1,757,664
TOTAL	23,758,581	25,047,040	25,962,518	26,453,190
WEEKDAY VMT BY HPMS VEHICLE TYPE (PER WEEKDAY)	**Shelby County**			
	2024	2034	2040	2045
Motorcycles 10	45,798	51,566	55,042	57,847
Light-DutyVehicles 25	5,812,848	6,535,169	6,964,788	7,316,309
Buses 40	26,864	30,276	32,362	34,103
Single UnitTrucks 50	198,124	223,208	238,376	250,937
CombinationTrucks 60	360,449	405,298	432,368	455,257
TOTAL	6,444,083	7,245,517	7,722,936	8,114,453

The weekday vehicle type VMT were converted to annual VMT through MOVES's converting tools as the Vehicle Type VMT for MOVES input. The monthly, daily, and hourly factors are obtained with traffic patterns/distribution from ALDOT's traffic count stations in the Birmingham MPO area in 2015 and 2016. The following table illustrates the annual VMT for Jefferson and Shelby Counties as Vehicle Type annual VMT.

ANNUAL VMT BY HPMS VEHICLE TYPE (PER YEAR)	Jefferson County			
	2024	2034	2040	2045
Motorcycles 10	48,079,745	50,433,258	52,022,409	52,971,461
Light-DutyVehicles 25	7,216,727,962	7,603,126,201	7,876,085,261	8,024,085,646
Buses 40	33,878,674	35,863,188	37,319,746	38,068,959
Single UnitTrucks 50	255,645,968	270,324,215	280,962,933	286,485,392
CombinationTrucks 60	528,511,473	561,439,381	586,247,408	597,956,394
TOTAL	8,082,843,821	8,521,186,243	8,832,637,757	8,999,567,852

ANNUAL VMT BY HPMS VEHICLE TYPE (PER YEAR)	Shelby County			
	2024	2034	2040	2045
Motorcycles 10	15,634,785	17,603,898	18,790,554	19,748,141
Light-DutyVehicles 25	1,977,527,918	2,223,261,153	2,369,417,318	2,489,004,582
Buses 40	9,144,420	10,305,854	11,015,922	11,608,553
Single UnitTrucks 50	67,401,684	75,935,248	81,095,393	85,368,639
CombinationTrucks 60	122,624,566	137,882,172	147,091,373	154,878,199
TOTAL	2,192,333,372	2,464,988,325	2,627,410,560	2,760,608,114

The following tables are the annual VMT by year 2015, 2017, 2024, 2034, 2040, and 2045 after combining the annual VMTs in 2015 & 2017 based on HPMS and the annual projected VMTs in 2024, 2034, 2040, and 2045 based on travel demand models as input files for MOVES.

ANNUAL VMT BY HPMS VEHICLE TYPE AND BY YEAR	Jefferson County					
	2015	2017	2024	2034	2040	2045
Motorcycles 10	45,697,578	46,343,770	48,079,745	50,433,258	52,022,409	52,971,461
Light-DutyVehicles 25	6,810,147,421	6,957,378,081	7,216,727,962	7,603,126,201	7,876,085,261	8,024,085,646
Buses 40	31,633,360	32,527,872	33,878,674	35,863,188	37,319,746	38,068,959
Single UnitTrucks 50	239,580,809	245,826,096	255,645,968	270,324,215	280,962,933	286,485,392
CombinationTrucks 60	490,479,882	506,504,410	528,511,473	561,439,381	586,247,408	597,956,394
TOTAL	7,617,539,050	7,788,580,230	8,082,843,821	8,521,186,243	8,832,637,757	8,999,567,852
ANNUAL VMT BY HPMS VEHICLE TYPE AND BY YEAR	Shelby County					
	2015	2017	2024	2034	2040	2045
Motorcycles 10	13,824,298	14,400,945	15,634,785	17,603,898	18,790,554	19,748,141
Light-DutyVehicles 25	1,748,542,461	1,819,412,245	1,977,527,918	2,223,261,153	2,369,417,318	2,489,004,582
Buses 40	8,026,585	8,359,280	9,144,420	10,305,854	11,015,922	11,608,553
Single UnitTrucks 50	59,300,821	61,746,172	67,401,684	75,935,248	81,095,393	85,368,639
CombinationTrucks 60	107,444,054	111,749,759	122,624,566	137,882,172	147,091,373	154,878,199
TOTAL	1,937,138,220	2,015,668,401	2,192,333,372	2,464,988,325	2,627,410,560	2,760,608,114

For the Walker County donut area, the off-model was used to estimate the daily VMT based on the observed traffic counts. Traffic counts for Alabama 269, Corridor-X, County roads, and local roads in the donut area are based on the HPMS 2015/ALDOT traffic counts. AADT for all other years is based on 2015 AADT and ALDOT's growth rates for Interstate 22 and ramps, County roads, and local roads. The Daily VMTs are calculated by AADT and roadway length. A small portion of HPMS in shape file format in AADT and VMT is illustrated in the following Table.

Road Type	Roadway Length(miles)	AADT2015	Growth Rate	AADT2017	AADT2024	AADT2034	AADT2040	AADT2045	VMT2015	VMT2017	VMT2024	VMT2034	VMT2040	VMT2045
I-22 Freeway	0.100	24,330	0.0153	27,860	30,984	36,065	39,505	42,621	2,435	2,788	3,100	3,609	3,953	4,265
I-22 Freeway	0.100	24,330	0.0153	27,860	30,984	36,065	39,505	42,621	2,442	2,796	3,110	3,620	3,965	4,278
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	1,998	2,275	2,530	2,945	3,226	3,480
I-22 Freeway	0.093	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	1,856	2,113	2,350	2,735	2,996	3,232
I-22 Freeway	0.100	24,870	0.0153	27,860	30,984	36,065	39,505	42,621	2,481	2,780	3,092	3,599	3,942	4,253
I-22 Freeway	0.101	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,501	2,851	3,170	3,690	4,042	4,361
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,489	2,837	3,155	3,673	4,023	4,340
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	2,008	2,286	2,542	2,959	3,241	3,497
I-22 Freeway	0.100	20,010	0.0153	28,350	31,529	36,699	40,199	43,370	1,993	2,823	3,140	3,655	4,003	4,319
I-22 Freeway	0.085	20,010	0.0153	28,350	31,529	36,699	40,199	43,370	1,701	2,411	2,681	3,120	3,418	3,688
I-22 Freeway	0.014	24,330	0.0153	27,860	30,984	36,065	39,505	42,621	343	393	437	509	558	602
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,499	2,848	3,168	3,687	4,039	4,357
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,486	2,834	3,152	3,669	4,019	4,336
I-22 Freeway	0.025	24,330	0.0153	28,350	31,529	36,699	40,199	43,370	598	697	776	903	989	1,067
I-22 Freeway	0.085	24,330	0.0153	27,860	30,984	36,065	39,505	42,621	2,079	2,381	2,648	3,082	3,376	3,643
I-22 Freeway	0.101	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,518	2,870	3,192	3,715	4,070	4,391
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	1,991	2,267	2,521	2,935	3,215	3,468
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,491	2,840	3,159	3,677	4,027	4,345
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,482	2,829	3,147	3,663	4,012	4,328
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	2,000	2,277	2,533	2,948	3,229	3,484
I-22 Freeway	0.100	24,330	0.0153	27,860	30,984	36,065	39,505	42,621	2,435	2,788	3,101	3,609	3,953	4,265
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,480	2,827	3,144	3,660	4,009	4,325
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,480	2,827	3,144	3,659	4,008	4,325
I-22 Freeway	0.100	20,010	0.0153	28,350	31,529	36,699	40,199	43,370	2,002	2,837	3,155	3,672	4,022	4,339
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	2,008	2,285	2,542	2,959	3,241	3,496
I-22 Freeway	0.065	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	1,306	1,487	1,653	1,924	2,108	2,274
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	2,000	2,277	2,533	2,948	3,229	3,484
I-22 Freeway	0.003	24,330	0.0153	27,860	30,984	36,065	39,505	42,621	66	76	84	98	108	116
I-22 Freeway	0.100	24,870	0.0153	27,860	30,984	36,065	39,505	42,621	2,482	2,781	3,092	3,600	3,943	4,254
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	1,999	2,276	2,531	2,946	3,227	3,481
I-22 Freeway	0.008	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	153	175	194	226	247	267
I-22 Freeway	0.024	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	587	670	745	867	949	1,024
I-22 Freeway	0.036	24,330	0.0153	28,350	31,529	36,699	40,199	43,370	877	1,022	1,137	1,323	1,450	1,564
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,487	2,835	3,153	3,670	4,020	4,337
I-22 Freeway	0.101	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	2,012	2,290	2,547	2,965	3,248	3,504
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,484	2,831	3,149	3,665	4,015	4,331
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	1,997	2,273	2,528	2,943	3,223	3,478
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,490	2,839	3,157	3,675	4,026	4,343
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,483	2,831	3,148	3,664	4,014	4,331
I-22 Freeway	0.101	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	2,015	2,294	2,551	2,969	3,252	3,509
I-22 Freeway	0.014	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	336	383	426	496	543	586
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,488	2,836	3,154	3,671	4,021	4,338
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	2,005	2,283	2,539	2,955	3,237	3,492
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,494	2,842	3,161	3,680	4,031	4,349
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,489	2,838	3,156	3,673	4,024	4,341
I-22 Freeway	0.099	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	1,979	2,253	2,506	2,916	3,195	3,447
I-22 Freeway	0.099	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	1,989	2,265	2,519	2,932	3,211	3,465
I-22 Freeway	0.100	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	2,484	2,831	3,149	3,665	4,015	4,332
I-22 Freeway	0.100	24,330	0.0153	27,860	30,984	36,065	39,505	42,621	2,432	2,785	3,097	3,605	3,949	4,260
I-22 Freeway	0.100	24,330	0.0153	27,860	30,984	36,065	39,505	42,621	2,441	2,796	3,109	3,619	3,964	4,277
I-22 Freeway	0.101	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	2,029	2,309	2,568	2,990	3,275	3,533
I-22 Freeway	0.016	24,870	0.0153	28,350	31,529	36,699	40,200	43,371	397	453	503	586	642	692
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	2,003	2,280	2,536	2,952	3,233	3,488
I-22 Freeway	0.100	20,010	0.0153	28,350	31,529	36,699	40,199	43,370	2,010	2,847	3,166	3,686	4,037	4,355
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	1,996	2,273	2,528	2,942	3,223	3,477
I-22 Freeway	0.101	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	2,015	2,294	2,551	2,970	3,253	3,510
I-22 Freeway	0.100	20,010	0.0153	22,780	25,335	29,489	32,301	34,849	1,998	2,274	2,529	2,944	3,225	3,479
Ramp	0.374	570	0.0100	550	590	651	691	727	213	206	221	244	259	272
Ramp	0.421	540	0.0100	660	708	782	830	872	227	278	298	329	349	367
Ramp	0.384	790	0.0100	800	858	947	1,006	1,057	303	307	329	364	386	406
Ramp	0.371	580	0.0100	590	633	699	742	780	215	219	235	260	276	290
Ramp	0.419	840	0.0100	850	911	1,007	1,069	1,123	352	357	382	422	448	471
Ramp	0.190	560	0.0100	570	611	675	717	753	106	108	116	128	136	143
Ramp	0.355	670	0.0100	780	836	924	981	1,031	238	277	297	328	348	366
Ramp	0.371	500	0.0100	550	590	651	691	727	185	204	219	242	257	270
AR 269 & County Road 61	0.100	2,640	0.0100	2,270	2,434	2,688	2,853	2,999	264	227	243	268	285	299
AR 269 & County Road 61	0.259	1,530	0.0100	1,440	1,544	1,705	1,810	1,903	396	373	400	442	469	493
AR 269 & County Road 61	0.061	2,700	0.0100	2,570	2,756	3,044	3,231	3,396	164	156	168	185	197	207
AR 269 & County Road 61	0.101	2,800	0.0100	1,970	2,112	2,333	2,477	2,603	282	199	213	235	250	263

All roadway segments with daily VMT for Walker County donut area are regrouped by restrict and unrestricted type as following table for MOVES model input requirement. All roadways in the donut area are located in rural area in the Walker County. The daily vehicle type VMT is multiplied by 365/366

to obtain the annual VMT for Walker County donut area. The daily/annual VMT by road type is listed as following tables.

Roadway Type	Annaul Average Daily Vehicle Miles Traveled (VMT/Day)						Total Road Miles
	VMT2015	VMT2017	VMT2024	VMT2034	VMT2040	VMT2045	
Off_network	0	0	0	0	0	0	0
Freeway - rural	111,822	129,559	144,088	167,714	183,711	198,201	4.97
Arterial & Collector - rural	63,199	58,861	62,416	68,286	72,230	75,753	88.72
Ramp - rural	1,841	1,955	2,096	2,316	2,459	2,584	2.89
Freeway - urban	0	0	0	0	0	0	0
Arterial & Collector - urban	0	0	0	0	0	0	0
Ramp - urban	0	0	0	0	0	0	0
Total	176,862	190,375	208,600	238,316	258,400	276,539	96.58

Roadway Type	Road Type ID	Annaul Vehicle Miles Traveled (VMT/Year)					
		VMT2015	VMT2017	VMT2024*	VMT2034	VMT2040*	VMT2045
Off_network	1	0	0	0	0	0	0
Freeway & Ramp - rural	2	41,486,987	48,002,615	53,503,385	62,061,010	68,138,134	73,286,771
Arterial & Collector - rural	3	23,067,468	21,484,412	22,844,075	24,924,414	26,436,202	27,649,910
Freeway & Ramp - urban	4	0	0	0	0	0	0
Arterial & Collector - urban	5	0	0	0	0	0	0
Total		64,554,455	69,487,026	76,347,460	86,985,424	94,574,336	100,936,681

*: There are 366 days in 2024 and in in 2040. Only 365 days for all other analysis years.

The analysis years, 2024, 2034, 2040, and 2045 are required for the air quality conformity determinations. VMT distributions by HPMS vehicle type are in the following table.

Year	Motorcycles 10	Light-Duty Vehicles 25	Buses 40	Single Unit Trucks 50	Combination Trucks 60	Totla (%)
2024	0.006173	0.883161	0.005392	0.042203	0.063071	100.0%
2034	0.006157	0.880852	0.005528	0.042205	0.065257	100.0%
2040	0.006138	0.878182	0.005682	0.042306	0.067691	100.0%
2045	0.006128	0.876617	0.005775	0.042252	0.069229	100.0%

The total annual VMT by road type was calculated to annual VMT by vehicle type through a distributions above and the annual VMTs. The following table illustrates the annual VMT by vehicle type for Walker County donut area.

Walker County Average Daily VMT by HPMS Vehicle Type

HPMS Vehicle Type	MOVES ID	2010	2015	2024	2030	2040
Motorcycles	10	1,147	1,296	1,766	2,171	3,062
Light Duty Vehicles	25	119,684	137,010	186,730	229,539	323,788
Buses	40	1,383	1,552	2,115	2,600	3,668
Single Unit Trucks	50	8,187	9,446	12,873	15,825	22,322
Combination Trucks	60	19,969	23,838	32,489	39,937	56,335
Total Daily VMT		150,371	173,141	235,974	290,072	409,175

The daily vehicle type VMT is converted to the annual vehicle type VMT as the input format required by MOVES model through the MOVES' VMT convertor.

The following table is the annual VMT by vehicle type for the Walker County donut area and is required by MOVES model.

Annual HPMS VMT	2024	2034	2040	2045
Motorcycles 10	471,318	535,587	580,539	618,494
Light-Duty Vehicles 25	67,427,104	76,621,322	83,053,481	88,482,801
Buses 40	411,653	480,813	537,389	582,897
Single UnitTrucks 50	3,222,071	3,671,254	4,001,108	4,264,736
CombinationTrucks 60	4,815,314	5,676,447	6,401,820	6,987,752
TOTAL	76,347,460	86,985,424	94,574,336	100,936,681

-Ramp Fraction

This fraction is only applied to freeways and interstates. For Jefferson and Shelby Counties, the vehicle driving time on ramp and freeways/interstates are calculated based on travel demand model for all analysis years through the vehicle hours traveled on ramp and freeway. For the Walker County donut area, the ramp fraction is obtained by the vehicle hours traveled on ramps and freeways on the off-model. The default ramp fractions are used for MOVES2014b.

-Road Type Distribution

For Jefferson and Shelby Counties, the weekday VMT by facility type were regrouped as off-network, rural restricted access, including rural freeways, rural ramp, rural interstates, rural unrestricted access including rural arterials, rural major collectors, and rural local roadways, urban restricted access including urban freeways, urban ramp, and urban interstates, urban unrestricted access including urban arterials, urban major collectors, and urban local roadways. The daily VMT for Walker County donut area is considered as rural area VMT because the donut area is located in the rural area of Walker County.

The VMT on all functional class are regrouped into MOVES' five roadway types as following table.

<table>
<tr><th rowspan="2">Fuctional Classification of Roadways by ALDOT</th><th colspan="3">Roadway Type* by MOVES</th></tr>
<tr><th>Urban Business</th><th>Urban</th><th>Rural</th></tr>
<tr><td>Interstate</td><td colspan="2" rowspan="3">4-Urban Restricted Access</td><td rowspan="3">2-Rural Restricted Access</td></tr>
<tr><td>Freeway/Expressway</td></tr>
<tr><td>Ramp of Interstate/Freeway/Expressway</td></tr>
<tr><td>Principal Arterial</td><td colspan="2" rowspan="5">5-Urban Unrestricted Access</td><td rowspan="5">3-Rural Unrestricted Access</td></tr>
<tr><td>Minor Arterial</td></tr>
<tr><td>Major Collector</td></tr>
<tr><td>Minor Collector</td></tr>
<tr><td>Local Road</td></tr>
<tr><td colspan="4">*: (1) MOVES' roadway type 1 is off-road network and not used in Birmingham model runs</td></tr>
<tr><td colspan="3">(2) Walkway and Transit are not used in the MOVES model.</td><td></td></tr>
</table>

The VMT by road type was divided by total VMT for each County for each year to obtain the Road Type Distributions. These estimates of road type distributions for passenger vehicles and light trucks are used. Default distributions are used for other vehicle types. A sample of Jefferson county in 2024 is illustrated in the following table.

sourceTyp	roadTypeID	roadTypeVMTFraction
11	1	0.0000000
11	2	0.0191817
11	3	0.0513441
11	4	0.3667499
11	5	0.5627243
21	1	0.0000000
21	2	0.0161135
21	3	0.0254877
21	4	0.5420434
21	5	0.4163554
31	1	0.0000000
31	2	0.0161135
31	3	0.0254877
31	4	0.5420434
31	5	0.4163554
32	1	0.0000000
32	2	0.0185517
32	3	0.0393551
32	4	0.4861684
32	5	0.4559248
41	1	0.0000000
41	2	0.0318232
41	3	0.0421215
41	4	0.6227706
41	5	0.3032847
42	1	0.0000000
42	2	0.0318232
42	3	0.0421215
42	4	0.6227706
42	5	0.3032847
43	1	0.0000000
43	2	0.0318232
43	3	0.0421215
43	4	0.6227706
43	5	0.3032847
51	1	0.0000000
51	2	0.0339665
51	3	0.0355904
51	4	0.5859713
51	5	0.3444718
52	1	0.0000000
52	2	0.0339665
52	3	0.0355904
52	4	0.5859713
52	5	0.3444718
53	1	0.0000000
53	2	0.0339665
53	3	0.0355904
53	4	0.5859713
53	5	0.3444718
54	1	0.0000000
54	2	0.0339665
54	3	0.0355904
54	4	0.5859713
54	5	0.3444718
61	1	0.0000000
61	2	0.0528876
61	3	0.0227575
61	4	0.7073534
61	5	0.2170015
62	1	0.0000000
62	2	0.0528876
62	3	0.0227575
62	4	0.7073534
62	5	0.2170015

-Average Speed Distribution, MOVES uses the distribution of vehicle hours traveled (VHT) by average speed to determine an appropriate mode distribution with 16 speed bins. The travel demand model can produce speeds and VHT for each roadway facility. The model runs do not provide hourly speed data; however, the model is designed for time of day modeling, and can calculate speeds into four different time periods, which cover 24 hours. The speed distributions for each county based on FHWA's National Performance Management Research Data Set (NPMRDS) are used for year 2015 and 2017. The distributions in 2017 for weekends from NPMRDS are used for weekend distributions in year beyond 2017. The weekday speed distributions are based on travel demand model for year 2024, 2034, 2040, and 2045.

Four time periods for weekdays:

Night Time Period:	18:01- 6:00 (pm to am)
AM Peak Hour Period:	6:01- 9:00 (am to am)
Mid-Day Period:	9:01-15:00 (am to pm)
PM Peak Hour Period:	15:01-18:00 (pm to pm)

For each type of roadway, in each hour, the VHT are calculated separately by weekday and weekend. The VHT is grouped for all 16 speed bins are as follows.

0 <= SPEED BIN RANGE < 2.5 MPH	1
2.5 <= SPEED BIN RANGE < 7.5 MPH	2
7.5 <= SPEED BIN RANGE < 12.5 MPH	3
12.5 <= SPEED BIN RANGE < 17.5 MPH	4
17.5 <= SPEED BIN RANGE < 22.5 MPH	5
22.5 <= SPEED BIN RANGE < 27.5 MPH	6
27.5 <= SPEED BIN RANGE < 32.5 MPH	7
32.5 <= SPEED BIN RANGE < 37.5 MPH	8
37.5 <= SPEED BIN RANGE < 42.5 MPH	9
42.5 <= SPEED BIN RANGE < 47.5 MPH	10
47.5 <= SPEED BIN RANGE < 52.5 MPH	11
52.5 <= SPEED BIN RANGE < 57.5 MPH	12
57.5 <= SPEED BIN RANGE < 62.5 MPH	13
62.5 <= SPEED BIN RANGE < 67.5 MPH	14
67.5 <= SPEED BIN RANGE < 72.5 MPH	15
72.5 <= SPEED BIN RANGE < 79.9 MPH	16

A sample of portion of Jefferson County 2024 speed distributions is illustrated in the following table.

sourceTypeID	roadTypeID	hourDayID	avgSpeedBinID	avgSpeedFraction
11	2	12	1	0.0000000
11	2	12	2	0.0000000
11	2	12	3	0.0000000
11	2	12	4	0.0000000
11	2	12	5	0.0000000
11	2	12	6	0.0000000
11	2	12	7	0.0000000
11	2	12	8	0.0000000
11	2	12	9	0.0000000
11	2	12	10	0.0000000
11	2	12	11	0.0000000
11	2	12	12	0.0000000
11	2	12	13	0.0000000
11	2	12	14	0.0000000
11	2	12	15	1.0000000
11	2	12	16	0.0000000
11	2	22	1	0.0000000
11	2	22	2	0.0000000
11	2	22	3	0.0000000
11	2	22	4	0.0000000
21	5	242	6	0.0929901
21	5	242	7	0.1562324
21	5	242	8	0.2170223
21	5	242	9	0.1039225
21	5	242	10	0.0809502
21	5	242	11	0.0933747
21	5	242	12	0.0509103
21	5	242	13	0.0482534
21	5	242	14	0.0827609
21	5	242	15	0.0191475
21	5	242	16	0.0000000
31	2	12	1	0.0000000
31	2	12	2	0.0000000
31	2	12	3	0.0000000
31	2	12	4	0.0000000
31	2	12	5	0.0000000
31	2	12	6	0.0000000
31	2	12	7	0.0000000
31	2	12	8	0.0000000
31	2	12	9	0.0000000

3. Emissions Inventory, MOVES Outputs

Each run specification file is for one year and one county only. The $PM_{2.5}$ emissions include Total-$PM_{2.5}$, Brake-$PM_{2.5}$, Tire-$PM_{2.5}$, NOx, and VOC in grams per weekday and per weekend day for each month. All emissions are tabled with year 2015, 2017 2024, 2034, 2040, and 2045 to each county. The three

$PM_{2.5}$ values are consisting of Direct $PM_{2.5}$, the so call direct $PM_{2.5}$ emissions. The following tables are the NOx, $PM_{2.5}$, and VOC emission report from MOVES2014b by County.

Emissions for Jefferson County, tons per day

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2015	1	2	9	21.71	0.50	0.05	0.02	0.58	12.64
2015	1	5	22	27.69	0.70	0.08	0.04	0.82	15.33
2015	2	2	8	20.73	0.51	0.05	0.02	0.58	12.74
2015	2	5	20	28.35	0.75	0.08	0.04	0.87	15.74
2015	3	2	9	22.93	0.46	0.06	0.03	0.54	12.61
2015	3	5	22	28.09	0.61	0.09	0.04	0.74	15.04
2015	4	2	8	22.65	0.43	0.06	0.03	0.52	12.92
2015	4	5	22	27.28	0.57	0.09	0.04	0.71	15.17
2015	5	2	10	22.80	0.44	0.06	0.03	0.53	14.00
2015	5	5	21	27.81	0.59	0.09	0.04	0.72	16.43
2015	6	2	8	22.45	0.44	0.06	0.03	0.54	14.91
2015	6	5	22	27.04	0.59	0.09	0.04	0.72	17.35
2015	7	2	8	21.60	0.44	0.06	0.03	0.53	15.14
2015	7	5	23	25.99	0.58	0.09	0.04	0.72	17.60
2015	8	2	10	21.66	0.44	0.06	0.03	0.53	14.63
2015	8	5	21	26.36	0.58	0.09	0.04	0.72	17.13
2015	9	2	8	21.09	0.41	0.06	0.03	0.50	13.81
2015	9	5	22	26.66	0.58	0.09	0.04	0.71	16.47
2015	10	2	9	22.95	0.44	0.06	0.03	0.53	13.01
2015	10	5	22	28.04	0.59	0.09	0.04	0.73	15.39
2015	11	2	9	22.15	0.44	0.06	0.03	0.52	12.51
2015	11	5	21	27.43	0.59	0.09	0.04	0.72	14.97
2015	12	2	8	21.48	0.43	0.06	0.03	0.51	12.25
2015	12	5	23	27.71	0.61	0.09	0.04	0.74	14.86

Emissions for Jefferson County, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2017	1	2	9	15.48	0.34	0.03	0.02	0.40	9.79
2017	1	5	22	19.53	0.49	0.08	0.04	0.60	11.96
2017	2	2	8	14.43	0.30	0.03	0.02	0.36	9.56
2017	2	5	20	19.51	0.47	0.08	0.04	0.59	11.95
2017	3	2	8	17.22	0.35	0.04	0.03	0.42	10.31
2017	3	5	23	20.90	0.49	0.09	0.04	0.62	12.42
2017	4	2	10	17.26	0.34	0.04	0.03	0.41	10.97
2017	4	5	20	20.59	0.46	0.09	0.04	0.59	12.99
2017	5	2	8	16.84	0.35	0.04	0.03	0.42	11.29
2017	5	5	23	20.42	0.48	0.09	0.04	0.62	13.44
2017	6	2	8	16.26	0.35	0.04	0.03	0.42	11.68
2017	6	5	22	19.50	0.48	0.09	0.04	0.61	13.85
2017	7	2	10	15.97	0.35	0.04	0.03	0.42	12.21
2017	7	5	21	19.11	0.47	0.09	0.04	0.61	14.40
2017	8	2	8	15.82	0.35	0.04	0.03	0.42	11.88
2017	8	5	23	19.14	0.47	0.09	0.04	0.61	14.10
2017	9	2	9	15.85	0.33	0.04	0.03	0.40	11.30
2017	9	5	21	19.88	0.47	0.09	0.04	0.61	13.60
2017	10	2	9	16.97	0.34	0.04	0.03	0.41	10.63
2017	10	5	22	20.55	0.48	0.09	0.04	0.61	12.75
2017	11	2	8	16.76	0.36	0.04	0.03	0.42	10.28
2017	11	5	22	20.55	0.50	0.09	0.04	0.63	12.44
2017	12	2	10	16.87	0.41	0.04	0.02	0.48	10.30
2017	12	5	21	21.56	0.59	0.09	0.04	0.72	12.66

Emissions for Jefferson County, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2024	1	2	8	7.92	0.19	0.04	0.02	0.25	5.72
2024	1	5	23	9.89	0.26	0.08	0.04	0.38	6.83
2024	2	2	8	7.34	0.17	0.03	0.02	0.22	5.58
2024	2	5	21	9.86	0.26	0.08	0.04	0.38	6.79
2024	3	2	10	8.78	0.20	0.04	0.03	0.27	5.95
2024	3	5	21	10.54	0.27	0.09	0.04	0.40	7.03
2024	4	2	8	8.73	0.20	0.04	0.03	0.27	6.32
2024	4	5	22	10.33	0.26	0.09	0.04	0.40	7.35
2024	5	2	8	8.55	0.21	0.04	0.03	0.29	6.56
2024	5	5	23	10.28	0.29	0.10	0.04	0.43	7.68
2024	6	2	10	8.24	0.21	0.05	0.03	0.29	6.75
2024	6	5	20	9.79	0.29	0.10	0.04	0.43	7.86
2024	7	2	8	8.07	0.21	0.04	0.03	0.29	7.02
2024	7	5	23	9.55	0.28	0.10	0.04	0.42	8.14
2024	8	2	9	8.01	0.21	0.04	0.03	0.28	6.86
2024	8	5	22	9.59	0.28	0.10	0.04	0.42	7.99
2024	9	2	9	8.04	0.20	0.04	0.03	0.27	6.57
2024	9	5	21	9.99	0.28	0.10	0.04	0.42	7.75
2024	10	2	8	8.65	0.20	0.04	0.03	0.27	6.16
2024	10	5	23	10.37	0.27	0.10	0.04	0.41	7.25
2024	11	2	9	8.58	0.20	0.04	0.03	0.27	5.96
2024	11	5	21	10.38	0.27	0.09	0.04	0.41	7.05
2024	12	2	9	8.65	0.22	0.04	0.03	0.28	6.00
2024	12	5	22	10.98	0.31	0.09	0.04	0.44	7.22

Emissions for Jefferson County, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2034	1	2	9	4.31	0.11	0.04	0.02	0.17	2.99
2034	1	5	22	5.36	0.15	0.09	0.04	0.28	3.52
2034	2	2	8	3.93	0.10	0.04	0.02	0.16	2.86
2034	2	5	20	5.32	0.15	0.09	0.04	0.28	3.44
2034	3	2	8	4.75	0.12	0.04	0.03	0.19	3.05
2034	3	5	23	5.68	0.16	0.10	0.04	0.30	3.56
2034	4	2	10	4.64	0.12	0.05	0.03	0.20	3.17
2034	4	5	20	5.47	0.16	0.10	0.04	0.31	3.64
2034	5	2	8	4.54	0.14	0.05	0.03	0.21	3.26
2034	5	5	23	5.45	0.18	0.10	0.05	0.33	3.78
2034	6	2	8	4.35	0.14	0.05	0.03	0.22	3.34
2034	6	5	22	5.14	0.18	0.10	0.05	0.33	3.84
2034	7	2	10	4.23	0.14	0.05	0.03	0.21	3.47
2034	7	5	21	4.97	0.18	0.10	0.05	0.33	3.97
2034	8	2	8	4.20	0.13	0.05	0.03	0.21	3.39
2034	8	5	23	5.01	0.18	0.10	0.05	0.33	3.90
2034	9	2	9	4.24	0.13	0.04	0.03	0.20	3.26
2034	9	5	21	5.27	0.18	0.10	0.05	0.32	3.80
2034	10	2	9	4.66	0.12	0.05	0.03	0.20	3.12
2034	10	5	22	5.55	0.17	0.10	0.05	0.31	3.63
2034	11	2	8	4.67	0.12	0.04	0.03	0.19	3.08
2034	11	5	22	5.60	0.16	0.10	0.04	0.30	3.60
2034	12	2	10	4.75	0.12	0.04	0.03	0.19	3.25
2034	12	5	21	6.05	0.17	0.10	0.04	0.31	3.87

Emissions for Jefferson County, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2040	1	2	9	4.04	0.10	0.04	0.03	0.17	2.81
2040	1	5	22	5.04	0.14	0.09	0.04	0.28	3.31
2040	2	2	8	3.67	0.09	0.04	0.02	0.16	2.68
2040	2	5	21	4.99	0.14	0.09	0.04	0.28	3.23
2040	3	2	9	4.46	0.11	0.04	0.03	0.19	2.86
2040	3	5	22	5.33	0.15	0.10	0.05	0.30	3.34
2040	4	2	9	4.33	0.12	0.05	0.03	0.19	2.94
2040	4	5	21	5.11	0.15	0.10	0.05	0.30	3.39
2040	5	2	8	4.23	0.13	0.05	0.03	0.21	3.00
2040	5	5	23	5.08	0.17	0.11	0.05	0.33	3.49
2040	6	2	9	4.04	0.13	0.05	0.03	0.21	3.07
2040	6	5	21	4.78	0.17	0.11	0.05	0.33	3.54
2040	7	2	9	3.92	0.13	0.05	0.03	0.21	3.20
2040	7	5	22	4.61	0.17	0.11	0.05	0.32	3.66
2040	8	2	8	3.90	0.13	0.05	0.03	0.21	3.12
2040	8	5	23	4.65	0.17	0.11	0.05	0.32	3.60
2040	9	2	10	3.94	0.12	0.04	0.03	0.20	3.00
2040	9	5	20	4.91	0.17	0.11	0.05	0.32	3.51
2040	10	2	8	4.36	0.12	0.05	0.03	0.19	2.90
2040	10	5	23	5.19	0.16	0.11	0.05	0.31	3.38
2040	11	2	8	4.39	0.11	0.04	0.03	0.18	2.89
2040	11	5	22	5.26	0.15	0.10	0.04	0.30	3.38
2040	12	2	10	4.47	0.12	0.04	0.03	0.19	3.08
2040	12	5	21	5.70	0.16	0.10	0.04	0.31	3.66

Emissions for Jefferson County, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2045	1	2	9	4.08	0.10	0.04	0.03	0.17	2.84
2045	1	5	22	5.09	0.14	0.10	0.04	0.28	3.34
2045	2	2	8	3.70	0.09	0.04	0.02	0.16	2.70
2045	2	5	20	5.05	0.14	0.10	0.04	0.28	3.26
2045	3	2	8	4.49	0.11	0.04	0.03	0.19	2.88
2045	3	5	23	5.38	0.15	0.11	0.05	0.30	3.36
2045	4	2	10	4.35	0.12	0.05	0.03	0.20	2.96
2045	4	5	20	5.15	0.15	0.11	0.05	0.31	3.41
2045	5	2	8	4.25	0.13	0.05	0.03	0.21	3.01
2045	5	5	23	5.12	0.17	0.11	0.05	0.33	3.49
2045	6	2	8	4.06	0.13	0.05	0.03	0.21	3.08
2045	6	5	22	4.81	0.17	0.11	0.05	0.33	3.54
2045	7	2	10	3.93	0.13	0.05	0.03	0.21	3.20
2045	7	5	21	4.63	0.17	0.11	0.05	0.33	3.67
2045	8	2	8	3.91	0.13	0.05	0.03	0.21	3.13
2045	8	5	23	4.68	0.17	0.11	0.05	0.33	3.60
2045	9	2	9	3.96	0.12	0.05	0.03	0.20	3.00
2045	9	5	21	4.94	0.17	0.11	0.05	0.33	3.51
2045	10	2	9	4.39	0.12	0.05	0.03	0.20	2.92
2045	10	5	22	5.24	0.16	0.11	0.05	0.32	3.40
2045	11	2	8	4.43	0.11	0.04	0.03	0.19	2.92
2045	11	5	22	5.31	0.15	0.10	0.05	0.30	3.41
2045	12	2	10	4.51	0.12	0.04	0.03	0.19	3.11
2045	12	5	21	5.77	0.16	0.10	0.05	0.31	3.70

Emissions for Shelby County, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2015	1	2	9	6.23	0.17	0.01	0.01	0.19	3.34
2015	1	5	22	8.30	0.26	0.03	0.01	0.30	4.09
2015	2	2	8	6.10	0.17	0.01	0.01	0.19	3.40
2015	2	5	20	8.45	0.27	0.03	0.01	0.31	4.19
2015	3	2	9	6.56	0.17	0.02	0.01	0.20	3.26
2015	3	5	22	8.40	0.25	0.03	0.01	0.29	3.95
2015	4	2	8	6.56	0.17	0.02	0.01	0.20	3.35
2015	4	5	22	8.21	0.25	0.03	0.01	0.29	3.99
2015	5	2	10	6.52	0.18	0.02	0.01	0.20	3.65
2015	5	5	21	8.23	0.26	0.03	0.01	0.30	4.32
2015	6	2	8	6.25	0.18	0.02	0.01	0.21	3.82
2015	6	5	22	7.77	0.26	0.03	0.01	0.30	4.50
2015	7	2	8	6.13	0.18	0.02	0.01	0.20	3.89
2015	7	5	23	7.65	0.25	0.03	0.01	0.30	4.57
2015	8	2	10	6.19	0.17	0.02	0.01	0.20	3.81
2015	8	5	21	7.84	0.25	0.03	0.01	0.30	4.50
2015	9	2	8	6.12	0.17	0.02	0.01	0.19	3.62
2015	9	5	22	7.98	0.25	0.03	0.01	0.29	4.35
2015	10	2	9	6.67	0.17	0.02	0.01	0.20	3.38
2015	10	5	22	8.45	0.25	0.03	0.01	0.30	4.05
2015	11	2	9	6.37	0.17	0.02	0.01	0.19	3.25
2015	11	5	21	8.28	0.25	0.03	0.01	0.29	3.94
2015	12	2	8	6.26	0.16	0.02	0.01	0.19	3.21
2015	12	5	23	8.34	0.25	0.03	0.01	0.29	3.92

Emissions for Shelby County, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2017	1	2	9	5.22	0.15	0.01	0.01	0.17	2.99
2017	1	5	22	6.92	0.23	0.03	0.01	0.27	3.66
2017	2	2	8	4.98	0.14	0.01	0.01	0.16	2.94
2017	2	5	20	6.86	0.22	0.03	0.01	0.26	3.63
2017	3	2	8	5.81	0.16	0.02	0.01	0.19	3.11
2017	3	5	23	7.40	0.24	0.03	0.01	0.28	3.77
2017	4	2	10	5.78	0.17	0.02	0.01	0.19	3.31
2017	4	5	20	7.20	0.23	0.03	0.01	0.28	3.92
2017	5	2	8	5.65	0.17	0.02	0.01	0.20	3.42
2017	5	5	23	7.12	0.24	0.03	0.01	0.29	4.07
2017	6	2	8	5.43	0.17	0.02	0.01	0.20	3.53
2017	6	5	22	6.75	0.24	0.03	0.01	0.29	4.18
2017	7	2	10	5.32	0.17	0.02	0.01	0.20	3.70
2017	7	5	21	6.62	0.24	0.03	0.01	0.28	4.37
2017	8	2	8	5.21	0.17	0.02	0.01	0.20	3.59
2017	8	5	23	6.58	0.24	0.03	0.01	0.28	4.27
2017	9	2	9	5.30	0.16	0.02	0.01	0.19	3.44
2017	9	5	21	6.89	0.24	0.03	0.01	0.28	4.13
2017	10	2	9	5.74	0.17	0.02	0.01	0.19	3.21
2017	10	5	22	7.24	0.24	0.03	0.01	0.28	3.85
2017	11	2	8	5.63	0.16	0.02	0.01	0.19	3.10
2017	11	5	22	7.28	0.24	0.03	0.01	0.28	3.78
2017	12	2	10	5.75	0.18	0.02	0.01	0.20	3.14
2017	12	5	21	7.61	0.26	0.03	0.01	0.30	3.84

Emissions for Shelby County, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2024	1	2	8	2.46	0.07	0.02	0.01	0.09	1.85
2024	1	5	23	3.22	0.10	0.03	0.01	0.14	2.21
2024	2	2	8	2.33	0.07	0.02	0.01	0.09	1.82
2024	2	5	21	3.18	0.10	0.03	0.01	0.14	2.18
2024	3	2	10	2.71	0.08	0.02	0.01	0.10	1.91
2024	3	5	21	3.41	0.11	0.03	0.01	0.15	2.26
2024	4	2	8	2.67	0.08	0.02	0.01	0.11	2.03
2024	4	5	22	3.31	0.11	0.03	0.01	0.15	2.36
2024	5	2	8	2.63	0.08	0.02	0.01	0.11	2.12
2024	5	5	23	3.29	0.11	0.04	0.01	0.16	2.47
2024	6	2	10	2.53	0.08	0.02	0.01	0.11	2.17
2024	6	5	20	3.11	0.11	0.04	0.01	0.16	2.52
2024	7	2	8	2.48	0.08	0.02	0.01	0.11	2.27
2024	7	5	23	3.05	0.11	0.04	0.01	0.16	2.63
2024	8	2	9	2.43	0.08	0.02	0.01	0.11	2.21
2024	8	5	22	3.04	0.11	0.04	0.01	0.16	2.57
2024	9	2	9	2.47	0.08	0.02	0.01	0.10	2.13
2024	9	5	21	3.18	0.11	0.03	0.01	0.16	2.50
2024	10	2	8	2.67	0.08	0.02	0.01	0.11	1.98
2024	10	5	23	3.34	0.11	0.04	0.01	0.16	2.33
2024	11	2	9	2.63	0.08	0.02	0.01	0.10	1.91
2024	11	5	21	3.37	0.11	0.03	0.01	0.15	2.27
2024	12	2	9	2.72	0.08	0.02	0.01	0.11	1.94
2024	12	5	22	3.55	0.12	0.03	0.01	0.16	2.32

Emissions for Shelby County, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2034	1	2	9	1.14	0.03	0.02	0.01	0.06	1.04
2034	1	5	22	1.49	0.05	0.04	0.01	0.10	1.23
2034	2	2	8	1.06	0.03	0.02	0.01	0.06	1.00
2034	2	5	20	1.46	0.05	0.04	0.01	0.10	1.19
2034	3	2	8	1.23	0.04	0.02	0.01	0.07	1.06
2034	3	5	23	1.56	0.05	0.04	0.01	0.10	1.23
2034	4	2	10	1.19	0.04	0.02	0.01	0.07	1.11
2034	4	5	20	1.48	0.05	0.04	0.01	0.11	1.27
2034	5	2	8	1.17	0.04	0.02	0.01	0.07	1.14
2034	5	5	23	1.48	0.06	0.04	0.01	0.11	1.32
2034	6	2	8	1.12	0.04	0.02	0.01	0.08	1.16
2034	6	5	22	1.38	0.06	0.04	0.01	0.11	1.33
2034	7	2	10	1.09	0.04	0.02	0.01	0.07	1.22
2034	7	5	21	1.35	0.06	0.04	0.01	0.11	1.39
2034	8	2	8	1.07	0.04	0.02	0.01	0.07	1.18
2034	8	5	23	1.35	0.06	0.04	0.01	0.11	1.36
2034	9	2	9	1.09	0.04	0.02	0.01	0.07	1.14
2034	9	5	21	1.42	0.06	0.04	0.01	0.11	1.33
2034	10	2	9	1.20	0.04	0.02	0.01	0.07	1.08
2034	10	5	22	1.51	0.05	0.04	0.01	0.11	1.26
2034	11	2	8	1.20	0.04	0.02	0.01	0.07	1.07
2034	11	5	22	1.55	0.05	0.04	0.01	0.11	1.25
2034	12	2	10	1.28	0.04	0.02	0.01	0.07	1.13
2034	12	5	21	1.67	0.06	0.04	0.01	0.11	1.33

Emissions for Shelby County, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2040	1	2	9	1.04	0.03	0.02	0.01	0.06	0.98
2040	1	5	22	1.37	0.05	0.04	0.01	0.10	1.15
2040	2	2	8	0.97	0.03	0.02	0.01	0.06	0.94
2040	2	5	21	1.33	0.04	0.04	0.01	0.10	1.12
2040	3	2	9	1.12	0.03	0.02	0.01	0.06	0.99
2040	3	5	22	1.43	0.05	0.04	0.01	0.11	1.16
2040	4	2	9	1.07	0.03	0.02	0.01	0.07	1.03
2040	4	5	21	1.35	0.05	0.05	0.02	0.11	1.19
2040	5	2	8	1.06	0.04	0.02	0.01	0.07	1.05
2040	5	5	23	1.34	0.05	0.05	0.02	0.12	1.22
2040	6	2	9	1.00	0.04	0.02	0.01	0.07	1.07
2040	6	5	21	1.25	0.05	0.05	0.02	0.12	1.23
2040	7	2	9	0.98	0.04	0.02	0.01	0.07	1.12
2040	7	5	22	1.22	0.05	0.05	0.02	0.11	1.29
2040	8	2	8	0.96	0.04	0.02	0.01	0.07	1.09
2040	8	5	23	1.22	0.05	0.05	0.02	0.11	1.26
2040	9	2	10	0.98	0.04	0.02	0.01	0.07	1.05
2040	9	5	20	1.28	0.05	0.05	0.02	0.11	1.23
2040	10	2	8	1.08	0.03	0.02	0.01	0.07	1.01
2040	10	5	23	1.38	0.05	0.05	0.02	0.11	1.18
2040	11	2	8	1.09	0.03	0.02	0.01	0.06	1.00
2040	11	5	22	1.42	0.05	0.04	0.01	0.11	1.18
2040	12	2	10	1.17	0.04	0.02	0.01	0.07	1.06
2040	12	5	21	1.54	0.05	0.04	0.01	0.11	1.26

Emissions for Shelby County, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2045	1	2	9	1.06	0.03	0.02	0.01	0.06	0.99
2045	1	5	22	1.42	0.05	0.04	0.01	0.11	1.17
2045	2	2	8	0.99	0.03	0.02	0.01	0.06	0.94
2045	2	5	20	1.38	0.05	0.04	0.01	0.10	1.13
2045	3	2	8	1.14	0.03	0.02	0.01	0.07	0.99
2045	3	5	23	1.47	0.05	0.05	0.02	0.11	1.17
2045	4	2	10	1.10	0.04	0.02	0.01	0.07	1.03
2045	4	5	20	1.39	0.05	0.05	0.02	0.12	1.20
2045	5	2	8	1.08	0.04	0.02	0.01	0.08	1.05
2045	5	5	23	1.38	0.06	0.05	0.02	0.12	1.23
2045	6	2	8	1.03	0.04	0.02	0.01	0.08	1.07
2045	6	5	22	1.29	0.06	0.05	0.02	0.12	1.24
2045	7	2	10	1.00	0.04	0.02	0.01	0.08	1.12
2045	7	5	21	1.25	0.05	0.05	0.02	0.12	1.30
2045	8	2	8	0.98	0.04	0.02	0.01	0.07	1.09
2045	8	5	23	1.25	0.05	0.05	0.02	0.12	1.27
2045	9	2	9	1.00	0.04	0.02	0.01	0.07	1.05
2045	9	5	21	1.32	0.05	0.05	0.02	0.12	1.23
2045	10	2	9	1.11	0.04	0.02	0.01	0.07	1.01
2045	10	5	22	1.42	0.05	0.05	0.02	0.12	1.19
2045	11	2	8	1.12	0.03	0.02	0.01	0.07	1.00
2045	11	5	22	1.46	0.05	0.05	0.02	0.11	1.19
2045	12	2	10	1.20	0.04	0.02	0.01	0.07	1.07
2045	12	5	21	1.59	0.05	0.05	0.02	0.12	1.28

Emissions for Walker County Donut Area, tons per day

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (Tons/Day) based on MOVES output					
2024	1	2	8	0.1596	0.0040	0.0009	0.0003	0.0053	0.0526
2024	1	5	23	0.1926	0.0050	0.0010	0.0004	0.0064	0.0607
2024	2	2	8	0.1467	0.0037	0.0009	0.0003	0.0048	0.0502
2024	2	5	21	0.1941	0.0050	0.0010	0.0004	0.0064	0.0614
2024	3	2	10	0.1833	0.0045	0.0011	0.0004	0.0060	0.0588
2024	3	5	21	0.2103	0.0053	0.0011	0.0004	0.0069	0.0655
2024	4	2	8	0.1831	0.0046	0.0011	0.0004	0.0061	0.0628
2024	4	5	22	0.2068	0.0053	0.0012	0.0004	0.0069	0.0689
2024	5	2	8	0.1769	0.0047	0.0011	0.0004	0.0062	0.0644
2024	5	5	23	0.2051	0.0055	0.0012	0.0004	0.0072	0.0719
2024	6	2	10	0.1723	0.0049	0.0012	0.0004	0.0064	0.0677
2024	6	5	20	0.1923	0.0055	0.0012	0.0004	0.0071	0.0735
2024	7	2	8	0.1653	0.0048	0.0011	0.0004	0.0063	0.0698
2024	7	5	23	0.1857	0.0055	0.0012	0.0004	0.0071	0.0759
2024	8	2	9	0.1630	0.0047	0.0011	0.0004	0.0062	0.0675
2024	8	5	22	0.1876	0.0055	0.0012	0.0004	0.0071	0.0748
2024	9	2	9	0.1668	0.0045	0.0011	0.0004	0.0059	0.0637
2024	9	5	21	0.1974	0.0054	0.0012	0.0004	0.0070	0.0719
2024	10	2	8	0.1864	0.0048	0.0012	0.0004	0.0064	0.0627
2024	10	5	23	0.2062	0.0054	0.0012	0.0004	0.0070	0.0679
2024	11	2	9	0.1851	0.0047	0.0011	0.0004	0.0061	0.0594
2024	11	5	21	0.2032	0.0052	0.0011	0.0004	0.0067	0.0643
2024	12	2	9	0.1684	0.0043	0.0010	0.0003	0.0056	0.0537
2024	12	5	22	0.2191	0.0057	0.0011	0.0004	0.0073	0.0653

Emissions for Walker County Donut Area, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2034	1	2	9	0.1060	0.0019	0.0011	0.0004	0.0034	0.0277
2034	1	5	22	0.1265	0.0024	0.0012	0.0004	0.0040	0.0318
2034	2	2	8	0.0965	0.0018	0.0010	0.0003	0.0031	0.0259
2034	2	5	20	0.1278	0.0024	0.0012	0.0004	0.0040	0.0320
2034	3	2	8	0.1219	0.0022	0.0012	0.0004	0.0039	0.0311
2034	3	5	23	0.1385	0.0026	0.0013	0.0005	0.0044	0.0344
2034	4	2	10	0.1212	0.0023	0.0013	0.0004	0.0041	0.0333
2034	4	5	20	0.1357	0.0027	0.0013	0.0005	0.0045	0.0362
2034	5	2	8	0.1167	0.0024	0.0013	0.0004	0.0042	0.0338
2034	5	5	23	0.1345	0.0029	0.0014	0.0005	0.0047	0.0375
2034	6	2	8	0.1133	0.0025	0.0013	0.0005	0.0043	0.0354
2034	6	5	22	0.1257	0.0028	0.0014	0.0005	0.0047	0.0381
2034	7	2	10	0.1080	0.0025	0.0013	0.0005	0.0043	0.0363
2034	7	5	21	0.1205	0.0028	0.0014	0.0005	0.0047	0.0391
2034	8	2	8	0.1070	0.0024	0.0013	0.0004	0.0042	0.0352
2034	8	5	23	0.1221	0.0028	0.0014	0.0005	0.0047	0.0387
2034	9	2	9	0.1096	0.0023	0.0012	0.0004	0.0040	0.0331
2034	9	5	21	0.1292	0.0028	0.0013	0.0005	0.0046	0.0373
2034	10	2	9	0.1242	0.0024	0.0013	0.0005	0.0042	0.0335
2034	10	5	22	0.1361	0.0027	0.0014	0.0005	0.0046	0.0359
2034	11	2	8	0.1237	0.0023	0.0013	0.0004	0.0040	0.0316
2034	11	5	22	0.1337	0.0025	0.0013	0.0005	0.0043	0.0337
2034	12	2	10	0.1115	0.0020	0.0011	0.0004	0.0035	0.0287
2034	12	5	21	0.1444	0.0027	0.0013	0.0005	0.0045	0.0350

Emissions for Walker County Donut Area, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2040	1	2	9	0.1082	0.0016	0.0012	0.0004	0.0032	0.0276
2040	1	5	22	0.1287	0.0019	0.0013	0.0005	0.0037	0.0315
2040	2	2	8	0.0983	0.0014	0.0011	0.0004	0.0029	0.0258
2040	2	5	21	0.1302	0.0019	0.0013	0.0005	0.0038	0.0318
2040	3	2	9	0.1245	0.0018	0.0014	0.0005	0.0036	0.0312
2040	3	5	22	0.1410	0.0021	0.0014	0.0005	0.0041	0.0343
2040	4	2	9	0.1236	0.0019	0.0014	0.0005	0.0038	0.0334
2040	4	5	21	0.1381	0.0022	0.0015	0.0005	0.0042	0.0361
2040	5	2	8	0.1189	0.0020	0.0014	0.0005	0.0039	0.0338
2040	5	5	23	0.1368	0.0023	0.0015	0.0006	0.0044	0.0373
2040	6	2	9	0.1154	0.0021	0.0015	0.0005	0.0040	0.0354
2040	6	5	21	0.1278	0.0023	0.0015	0.0006	0.0044	0.0379
2040	7	2	9	0.1099	0.0020	0.0015	0.0005	0.0040	0.0362
2040	7	5	22	0.1223	0.0023	0.0015	0.0005	0.0044	0.0389
2040	8	2	8	0.1089	0.0020	0.0014	0.0005	0.0039	0.0351
2040	8	5	23	0.1239	0.0023	0.0015	0.0006	0.0044	0.0384
2040	9	2	10	0.1116	0.0019	0.0014	0.0005	0.0037	0.0331
2040	9	5	20	0.1314	0.0023	0.0015	0.0005	0.0043	0.0371
2040	10	2	8	0.1268	0.0019	0.0015	0.0005	0.0039	0.0336
2040	10	5	23	0.1386	0.0022	0.0015	0.0005	0.0042	0.0358
2040	11	2	8	0.1264	0.0018	0.0014	0.0005	0.0037	0.0316
2040	11	5	22	0.1361	0.0021	0.0014	0.0005	0.0040	0.0335
2040	12	2	10	0.1137	0.0016	0.0012	0.0004	0.0033	0.0285
2040	12	5	21	0.1472	0.0022	0.0015	0.0005	0.0042	0.0347

Emissions for Walker County Donut Area, tons per day (continued)

Year	Month	Code for Weekend/ Weekday	Days in a month for weekends/ weekdays	NOx	Total_ PM2.5	Brake_ PM2.5	Tire_ PM2.5	Direct PM 2.5 (Total+ Brake+Tire)	VOC
				US Short Tons Per Day (TPD) based on MOVES output					
2045	1	2	9	0.1177	0.0017	0.0013	0.0004	0.0034	0.0292
2045	1	5	22	0.1399	0.0021	0.0014	0.0005	0.0040	0.0334
2045	2	2	8	0.1069	0.0015	0.0012	0.0004	0.0031	0.0273
2045	2	5	20	0.1416	0.0021	0.0014	0.0005	0.0040	0.0337
2045	3	2	8	0.1355	0.0019	0.0015	0.0005	0.0039	0.0331
2045	3	5	23	0.1533	0.0023	0.0015	0.0006	0.0044	0.0364
2045	4	2	10	0.1345	0.0020	0.0015	0.0005	0.0041	0.0354
2045	4	5	20	0.1501	0.0023	0.0016	0.0006	0.0045	0.0383
2045	5	2	8	0.1293	0.0021	0.0015	0.0005	0.0042	0.0359
2045	5	5	23	0.1486	0.0025	0.0016	0.0006	0.0047	0.0397
2045	6	2	8	0.1255	0.0022	0.0016	0.0005	0.0043	0.0376
2045	6	5	22	0.1389	0.0025	0.0016	0.0006	0.0047	0.0403
2045	7	2	10	0.1194	0.0022	0.0016	0.0005	0.0043	0.0384
2045	7	5	21	0.1328	0.0025	0.0016	0.0006	0.0047	0.0413
2045	8	2	8	0.1184	0.0021	0.0015	0.0005	0.0042	0.0373
2045	8	5	23	0.1346	0.0025	0.0016	0.0006	0.0047	0.0408
2045	9	2	9	0.1214	0.0020	0.0015	0.0005	0.0040	0.0351
2045	9	5	21	0.1428	0.0025	0.0016	0.0006	0.0046	0.0394
2045	10	2	9	0.1380	0.0021	0.0016	0.0005	0.0042	0.0357
2045	10	5	22	0.1507	0.0024	0.0016	0.0006	0.0045	0.0380
2045	11	2	8	0.1376	0.0020	0.0015	0.0005	0.0040	0.0336
2045	11	5	22	0.1480	0.0022	0.0015	0.0006	0.0043	0.0356
2045	12	2	10	0.1237	0.0018	0.0013	0.0004	0.0035	0.0302
2045	12	5	21	0.1600	0.0023	0.0016	0.0006	0.0045	0.0368

Appendix B

U.S. DOT and U.S. EPA letters Concurring with Conformity Determinations on LRTP and TIP

Federal Highway Administration
Alabama Division Office
9500 Wynlakes Place
Montgomery, AL 36117-8515
(334) 274-6350

Federal Transit Administration
Region 4 Office
230 Peachtree Street, NW Suite 1400
Atlanta, GA 30303
(404) 865-5600

October 7, 2019

Mr. John R. Cooper
Director
Alabama Department of Transportation
1409 Coliseum Boulevard
Montgomery, Alabama 36110

Subject: Air Quality Conformity Determination for Birmingham, Alabama

Dear Mr. Cooper:

The Federal Highway Administration (FHWA) Alabama Division and Federal Transit Administration (FTA) Region IV Office, in coordination with the Environmental Protection Agency (EPA) Region IV Office, have reviewed the Air Quality Conformity Determination Report adopted by the Birmingham Metropolitan Organization (MPO) on September 11, 2019.

The Air Quality Conformity Determination addresses the planned transportation improvements from the Birmingham MPO's Regional Transportation Plan 2045, and the Birmingham MPO's Fiscal Year (FY) 2020-2023 Transportation Improvement Program (TIP) as updated in 2019. This determination is for the annual and 24-hour PM2.5 standards for Jefferson and Shelby Counties and a portion of Walker County in Alabama as well as the 1997 ground-level Ozone standards (including 1-hour and 8-hour standards).

Based on our review, we find the above-referenced documents meet the transportation conformity requirements at 40 CFR Part 93 and associated guidance. If you have any questions regarding this determination, please contact Lian Li at (334) 274-6359.

Sincerely yours,

Mark D. Bartlett

Mark D. Bartlett, P.E.
Alabama Division Administrator
Federal Highway Administration

Sincerely yours,

Yvette G. Taylor

Dr. Yvette G. Taylor
Region IV Administrator
Federal Transit Administration

By email

cc: Nicole Spivey, FTA Region 4
Kelly Sheckler, EPA Region 4
Ed Phillips, ALDOT
Michael Hora, ALDOT
Scott Tillman, Birmingham MPO

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

October 1, 2019

Mark Bartlett
Division Administrator
Alabama Division Office
Federal Highway Administration
9500 Wynlakes Place
Montgomery, Alabama 36117

Dear Mr. Bartlett

Thank you for your letter dated September 19, 2019, requesting our review of the transportation conformity determinations for 1997 8-hour ozone and 2006 24-hour $PM_{2.5}$ standards for the 2045 Regional Transportation Plan (RTP) and Fiscal Year FY 2020-2023 Transportation Improvement Program (TIP) for the Regional Planning Commission of Greater Birmingham. We have completed our review and recommend a finding of conformity for the 2045 RTP and FY 2020-2023 TIP for the 1997 8-hour ozone and 2006 24-hour $PM_{2.5}$ standards for the Birmingham, Alabama maintenance area.

On August 15, 1997, July 1, 2004, and subsequently on May 6, 2005, the U.S. Environmental Protection Agency published revisions related to the criteria and procedures for determining that transportation plans, programs, and projects which are funded or approved under Title 23 U.S.C. or the Federal Transit Act conform with State or Federal air quality implementation plans or the Transportation Conformity Rule (40 Code of Federal Regulations Part 93). These revisions outline the criteria that must be met for the 8-hour ozone and annual $PM_{2.5}$ standards. The EPA has reviewed the conformity determination related to the 1997 8-hour ozone and 2006 24-hour $PM_{2.5}$ standards for the 2045 RTP and FY 2020-2023 TIP for the Birmingham maintenance area and concluded that all of the criteria, including those outlined in the July 1, 2004, conformity rule revision entitled, "Transportation Conformity Rule Amendments: Conformity Amendments for New 8-hour Ozone and $PM_{2.5}$ National Ambient Air Quality Standards, Response to March 1999, Court Decision and Additional Rule Changes," (69 FR 40004) have been met.

Thank you again for the opportunity to review the conformity determinations for the 2045 RTP and FY 2020-2023 TIP for the 1997 8-hour ozone and 2006 24-hour $PM_{2.5}$ standards for the Birmingham, Alabama maintenance area. If you have any questions regarding this letter, please contact Kelly Sheckler at (404) 562-9222 of the EPA Region 4 staff.

Sincerely,

Lynorae E. Benjamin
Chief
Air Regulatory Management Section

cc: Clint Andrews, FHWA AL
Lian Li, FHWA AL
Nicole Spivey, FTA Region 4
Brian Fair, ALDOT
Dale Hurst, ADEM
Scott Tillman, RPCGB
Randy Cole, JCDH

Appendix C

Interagency Consultation Group Meeting Minutes

Interagency Consultation
Alabama Transportation Conformity

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DATE: June 17, 2019
TIME: 10:00 am CST

NUMBER: 1-202-991-0477
CODE: 7570714#

~~~~~~~~~~~~~~~~~~~~AGENDA~~~~~~~~~~~~~~~~~~~~~~

1. **Introductions**
2. **Approval of April Minutes**
3. **Air Quality Conformity Determination Report**
4. **2045 Regional Transportation Plan (RTP)**
5. **FY2020-2023 Transportation Improvement Program (TIP)**

   Mike Kaczorowski of RPCGB gave an update on the process and where things stand. A public involvement meeting was held which went smoothly. The RPCGB currently is putting together the public involvement report which will be shared along with the final draft of all three documents for the RPCGB's subcommittee in July. Another note, the final approval for these is in August with the MPO policy committee reviewing the public involvement documents as well as the three formal documents. The comments received from ALDOT and FHWA were addressed in the reports.

6. **Conformity SIP 101**

   Kelly Sheckler with EPA informed the IAC of an upcoming webinar that will focus on the conformity IAC process as described in ADEM's SIP which is in the form of MOAs with all the respective IAC partners. The webinar will entail the roles and responsibilities, when things happen, occurrences that would require the IAC to meet and make decisions, and also including other information that could prove helpful. The webinar will take place during the IAC scheduled monthly call.

7. **Open Discussion**

   An updated list of attendees for each agency is requested.

   Richard Wong is moving to the position of MOVES contact for the region within EPA and will also still be involved with conformity.

   Egide Louis has left EPA.

8. **Next Call: July 15**

ADEM:
- ☐ Larry Brown
- ✓ Dale Hurst
- ✓ Lisa Edwards
- ☐ Anthony Smiley
- ✓ Sabrina Blakely
- ✓ Brian Sullins
- ✓ Judy Hayes

ALDOT:
- ✓ Natasha Clay
- ☐ Michael Hora
- ☐ Sandra Bonner
- ✓ Bryan Fair
- ✓ Rita Hoke
- ✓ Dolha Kayisavera
- ☐ Diamond Pearson
- ✓ Curtis Pearson

JCDH:
- ☐ Jason Howanitz
- ✓ Matt Lacke
- ☐ Corey Masuca

RPCGB:
- ☐ Scott Tillman
- ✓ Harry He
- ✓ Mike Kaczorowski

FHWA-AL:
- ✓ Lynne Urquhart
- ☐ Clint Andrews
- ✓ Lian Li

FTA:
- ☐ Stan Mitchell
- ☐ Nicole Spivey

U.S. EPA Region 4:
- ☐ Lynorae Benjamin
- ✓ Dianna Myers
- ✓ Kelly Sheckler
- ☐ Richard Wong

BJCTA:
- ☐ Barbara Murdock
- ☐ Karen Jacobs
- ☐ Wytangy Peak-Finney
- ☐ Joshua Johnson
- ☐ Phyllis Goode
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Interagency Consultation
Alabama Transportation Conformity

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DATE: April 15, 2019
TIME: 10:00 am CST

NUMBER: 1-202-991-0477
CODE: 7570714#

~~~~~~~~~~~~~~~~~~~~AGENDA~~~~~~~~~~~~~~~~~~~~~~

1. **Introductions**
2. **Air Quality Conformity Determination Report**

   Mike Kaczorowski of RPCGB solicited comments from the IAC and stated that the comments that have been received are being addressed. Mr. Kaczorowski also provided clarity to the comments of including past Ozone Standards.

3. **2045 Regional Transportation Plan (RTP)**

   Mike Kaczorowski of RPCGB reiterated the comment period and also stated that the comments received from the FHWA about the RTP were also being addressed. Kelly Sheckler of EPA asked if the comments received would affect the Conformity Determination. Mr. Kaczorowski clarified that the comments received would not affect conformity and the comments were for additional explanations with minor corrections being made.

4. **FY2020-2023 Transportation Improvement Program (TIP)**

   Mike Kaczorowski of RPCGB gave an update of the timeline for the comment period for the TIP. Mr. Kaczorowski stated that the TIP was distributed to the IAC on April 3rd and comments were due May 3rd with public involvement following on May 15th. The TIP would also be published online 24 hours ahead of that public involvement meeting.

5. **Open Discussion**

   Lian Li of FHWA asked for clarification on the process. Mike Kaczorowski and Scott Tillman of RPCGB walked Ms. Li through the process of public involvement in relation to conformity. ADEM would provide the Conformity SIP for further clarification and reference via email shortly.

6. **Next Call: May 20**

ADEM:
- ☐ Larry Brown
- ✓ Dale Hurst
- ☐ Lisa Edwards
- ☐ Anthony Smiley
- ✓ Sabrina Blakely
- ✓ Brian Sullins
- ✓ Judy Hayes

ALDOT:
- ☐ Natasha Clay
- ☐ Michael Hora
- ✓ Sandra Bonner
- ✓ Bryan Fair
- ☐ Rita Hoke
- ☐ Dolha Kayisavera
- ☐ Diamond Pearson
- ☐ Curtis Pearson

JCDH:
- ☐ Jason Howanitz
- ✓ Matt Lacke
- ☐ Corey Masuca

RPCGB:
- ✓ Scott Tillman
- ✓ Harry He
- ✓ Mike Kaczorowski

FHWA-AL:
- ✓ Lynne Urquhart
- ☐ Clint Andrews
- ✓ Lian Li

FTA:
- ☐ Stan Mitchell
- ✓ Nicole Spivey

U.S. EPA Region 4:
- ☐ Lynorae Benjamin
- ✓ Dianna Myers
- ✓ Kelly Sheckler
- ✓ Richard Wong
- ☐ Egide Louis

BJCTA:
- ☐ Barbara Murdock
- ☐ Karen Jacobs
- ☐ Wytangy Peak-Finney
- ☐ Joshua Johnson
- ☐ Phyllis Goode
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Interagency Consultation
Alabama Transportation Conformity

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DATE: December 10, 2018
TIME: 10:00 am CST

NUMBER: 1-202-991-0477
CODE: 7570714#

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1. **Introductions**
2. **Approval of November 2018 Minutes**
3. **Comments from IAC, Ozone Conformity Determinations Amendment No.1**

   Mike Kaczorowski of RPCGB stated that comments had been received regarding the Ozone Conformity Determinations and will be reflected in the final draft. The following agencies agreed on the approval of the draft document: RPCGB, ALDOT, FHWA, ADEM, EPA and JCDH.

4. **Timeline 2045 Regional Tran Plan, TIP, next Conformity Determination**

   Mike Kaczorowski of RPCGB opened by detailing the timeline for review from the IAC on the 2045 Regional Transportation Plan, TIP and the next Conformity Determination. Mr. Kaczorowski stated that the IAC will receive these documents by the end of January or beginning of February 2019. Mr. Kaczorowski added that the IAC should complete their review by March 2019. Following the review, those documents will be presented to the MPO subcommittees, with public involvement in May 2019 and the comment period in June 2019. The documents will then be updated with the public comments and passed on to the committees in July 2019, with the final documents of all 3 available in August 2019.

5. **Open Discussion**

   Dianna Myers of EPA informed the IAC that EPA has developed guidance (finalized November 29) for "orphaned" maintenance areas that must demonstrate conformity for the 1997 Ozone Standards in accordance with the South Coast decision. Ms. Myers touched on several criteria for the demonstration of conformity in the Birmingham maintenance area. Ms. Myers gave reference to areas of importance within the guidance such as the chart on page 5 table 2-1 (orphan area list), page 8 figure 2-1 (details an orphan area and the way you demonstrate conformity) and section 2.3 (how to demonstrate conformity for 1997 standard). Ms. Myers added that the guidance states that once conformity determinations are approved by the USDOT, you will have to demonstrate conformity every 4 years. Section 2.4 details the requirements that need to be met in demonstrating conformity. Ms. Myers relayed that when developing the 2045 plan, modeling is not necessary.

6. **Next Call: January 28, 2019**

ADEM:
- ☐ Larry Brown
- ✓ Dale Hurst
- ☐ Lisa Edwards
- ✓ Anthony Smiley
- ✓ Sabrina Blakely
- ✓ Brian Sullins
- ✓ Judy Hayes

ALDOT:
- ☐ Natasha Clay
- ☐ Michael Hora
- ☐ Sandra Bonner
- ✓ Bryan Fair
- ☐ Rita Hoke
- ☐ Dolha Kayisavera
- ☐ Diamond Pearson
- ☐ Curtis Pearson

JCDH:
- ☐ Jason Howanitz
- ✓ Matt Lacke
- ☐ Corey Masuca

RPCGB:
- ✓ Scott Tillman
- ✓ Harry He
- ✓ Mike Kaczorowski

FHWA-AL:
- ☐ Lynne Urquhart
- ☐ Clint Andrews
- ✓ Lian Li

FTA:
- ☐ Stan Mitchell
- ☐ Nicole Spivey

U.S. EPA Region 4:
- ☐ Lynorae Benjamin
- ✓ Dianna Myers
- ☐ Kelly Sheckler
- ✓ Richard Wong
- ☐ Egide Louis

BJCTA:
- ☐ Barbara Murdock
- ☐ Karen Jacobs
- ☐ Wytangy Peak-Finney
- ☐ Joshua Johnson
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Interagency Consultation
Alabama Transportation Conformity

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DATE: November 19, 2018
TIME: 10:00 am CST

NUMBER: 1-202-991-0477
CODE: 7570714#

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1. **Introductions**
2. **Approval of October 2018 Minutes**
3. **1997 Ozone Standard Conformity Determinations**

   Kelly Sheckler of EPA shared with the IAC clarifying language to be added to the introduction of the Conformity Determination document. After a brief discussion, Mike Kaczorowski and Scott Tillman of RPCGB, agreed to edit the language and include it in the second draft of the Conformity Determination. Harry He of RPCGB informed the IAC of a minor change to the capacity project list. The Corridor X (I-22) project shifted years and modeling is being adjusted accordingly. RPCGB notified the IAC that these adjustments will be made in the capacity project list as well as explained by a paragraph in the nonexempt project language. Mr. Kaczorowski asked for approval by the IAC of the approach used for this process and the IAC concurred.

4. **Timeline for Review and Approval**

   Mike Kaczorowski of RPCGB stated that a second draft of the Conformity Determination will be sent to the IAC for review and comments are requested by December 10, 2018. The RPCGB public involvement meeting would then follow a week later. A 21 day comment period would then ensue and succeeding that period a document will be drafted for the RPCGB committees in January with final adoption in February. Mr. Kaczorowski asked for approval by the IAC of the timeline and the IAC concurred.

5. **Request IAC call for Monday December 10**

   The IAC was in agreement with this motion.

6. **Open Discussion**
7. **Next Call: December 10, 2018 10:00AM CST.**

ADEM:
- ☐ Larry Brown
- ✓ Dale Hurst
- ✓ Lisa Edwards
- ☐ Anthony Smiley
- ✓ Sabrina Blakely
- ✓ Brian Sullins
- ☐ Judy Hayes

ALDOT:
- ☐ Natasha Clay
- ☐ Michael Hora
- ☐ Sandra Bonner
- ✓ Bryan Fair
- ✓ Rita Hoke
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- ☐ Curtis Pearson

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BJCTA:
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- ☐ Wytangy Peak-Finney
- ☐ Joshua Johnson
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Interagency Consultation
Alabama Transportation Conformity

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DATE:
TIME: 10:00 am CST

NUMBER: 1-202-991-0477
CODE: 7570714#

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1. **Introductions**
2. **Approval of September 2018 Minutes**
3. **FHWA Guidance Comments**

   Lian Li with FHWA-AL opened discussion giving an update to the Federal Highway's Interim Guidance memorandum from April. Ms. Li informed the IAC that FHWA and FTA strongly encourage all impacted areas to make every effort to complete their 1997 ozone conformity determinations as soon as possible to prevent any delays of transportation plans, programs, and non-exempt projects. Conformity determinations for the 1997 Ozone NAAQS will be required on the plan, TIP and project actions after February 15, 2019, and agencies need to plan ahead to make sure they are prepared to make these determinations. As of February 16, 2019, you will be required to conform to the 1997 requirements. Projects that are already in the TIP that have gone through the NEPA process will be allowed to be let before that, but after February 16, 2019, you will have to meet the 1997 requirements.
4. **Open Discussion**
5. **Next Call: November 19, 2018**

ADEM:
- ✓ Larry Brown
- ✓ Dale Hurst
- ✓ Lisa Edwards
- ✓ Anthony Smiley
- ✓ Sabrina Blakely
- ✓ Brian Sullins
- ☐ Judy Hayes

ALDOT:
- ☐ Natasha Clay
- ☐ Michael Hora
- ☐ Sandra Bonner
- ✓ Bryan Fair
- ✓ Rita Hoke
- ✓ Dolha Kayisavera
- ☐ Diamond Pearson
- ☐ Curtis Pearson

JCDH:
- ☐ Jason Howanitz
- ✓ Matt Lacke
- ☐ Corey Masuca

RPCGB:
- ☐ Scott Tillman
- ✓ Harry He
- ✓ Mike Kaczorowski

FHWA-AL:
- ☐ Lynne Urquhart
- ☐ Clint Andrews
- ✓ Lian Li

FTA:
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- ☐ Nicole Spivey

U.S. EPA Region 4:
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- ✓ Dianna Myers
- ☐ Kelly Sheckler
- ✓ Richard Wong
- ☐ Egide Louis

BJCTA:
- ☐ Barbara Murdock
- ☐ Karen Jacobs
- ☐ Wytangy Peak-Finney
- ☐ Joshua Johnson
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Interagency Consultation
Alabama Transportation Conformity

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DATE: September 17, 2018
TIME: 10:00 am CST

NUMBER: 1-202-991-0477
CODE: 7570714#

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1. **Introductions**
2. **Approval of April 2018 Minutes**
3. **South Coast v EPA Update**

   Kelly Sheckler of EPA updated the South Coast vs EPA lawsuit stating that the US Court of Appeals for the DC Circuit Court, issued an order granting in part, a petition for a panel rehearing of the February 16 partial vacature of the Implementation Rule for the 2008 Ozone NAAQS which stayed until February 19, 2019, the portion of the vacature that exempted orphan areas from transportation conformity. Ms. Sheckler urged the IAC of the need to continue to demonstrate transportation conformity for the 1997 ozone standard. Ms. Sheckler also stated that the EPA is moving forward in implementing the court's ruling that the second 10 year maintenance plan is due for the 1997 Ozone Standards. For quick reference EPA states that language be included for the South Coast decision when developing conformity determinations. This entails using budgets for the 1997 or 2008 Ozone NAAQS until you have 2015 budgets as applicable to your particular area.

4. **US-280 Auxiliary Lanes**

   Mike Kaczorowski of RPCGB informed the IAC that ALDOT has decided to add an auxiliary lane between interchanges on US 280. Mr. Kaczorowski stated that due to the project's short distance that this project is not considered capacity adding according to interpretation by RPCGB and is not considered as a capacity project in their analysis.

5. **New Projects**

   Mr. Kaczorowski referred the IAC to the New Projects email attachments. Mr. Kaczorowski requested IAC comments on the exempt statues for these projects and well as their qualifications for CMAQ funding.

6. **2045 Regional Transport Plan Schedule**

   Mr. Kaczorowski informed the IAC that RPCGB is currently working on air quality conformity and the modeling associated with the process. Mr. Kaczorowski added that the schedule is to get the draft 2045 long range plan to the IAC in the first week of December and allow for the 30 day review period for comments. Once the comment period ends in February, the plan will go to the necessary committees and then onto public involvement meetings in April. The end of the schedule is to have the MPO adopt the 2045 long range plan, the 2020-2023 TIP, as well as the air quality conformity reports, to be adopted by the MPO by July thus finalizing the draft final schedule for final review before the fiscal year.

7. **Open Discussion**
8. **Next Call: October 15, 2018**

ADEM:
- ☐ Larry Brown
- ✓ Dale Hurst
- ✓ Lisa Edwards
- ✓ Anthony Smiley
- ✓ Sabrina Blakely
- ✓ Brian Sullins
- ✓ Judy Hayes

ALDOT:
- ✓ Natasha Clay
- ✓ Michael Hora
- ☐ Sandra Bonner
- ✓ Bryan Fair
- ✓ Rita Hoke
- ✓ Dolha Kayisavera
- ✓ Diamond Pearson
- ☐ Curtis Pearson

JCDH:
- ☐ Jason Howanitz
- ✓ Matt Lacke
- ☐ Corey Masuca

RPCGB:
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- ☐ Harry He
- ✓ Mike Kaczorowski

FHWA-AL:
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- ✓ Clint Andrews
- ✓ Lian Li

FTA:
- ☐ Stan Mitchell
- ☐ Nicole Spivey

U.S. EPA Region 4:
- ☐ Lynorae Benjamin
- ☐ Dianna Myers
- ✓ Kelly Sheckler
- ☐ Richard Wong
- ☐ Egide Louis

BJCTA:
- ☐ Wytangy Peak-Finney
- ☐ Joshua Johnson
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Interagency Consultation
Alabama Transportation Conformity

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DATE:
TIME: 10:00 am CST

NUMBER: 1-202-991-0477
CODE: 7570714#

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1. **Introductions**
2. **Approval of April 2018 Minutes**
3. **South Coast v EPA Update/Guidance**

   Dianna Myers of EPA gave an update to the IAC stating that on April 23, EPA filed a petition for a rehearing on a couple of portions of the D.C. Circuit Court case. EPA asked the court for a rehearing on the issues of the transportation conformity vacation and on EPA's revocation of the 1997 ozone standard after the final implementation of the 2008 ozone standard. EPA also asked if a rehearing isn't granted that the court remand the vacature of the conformity requirements back to EPA to give EPA an opportunity to best implement the court's decision. Ms. Myers added that in the meantime FHWA has put together an interim guidance directing the areas on how to handle those orphan maintenance areas and nonattainment areas. Clint Andrews of FHWA-AL stated that the guidance was issued by FTA and FHWA, so it would pertain to any projects. Mr. Andrews added that the decision was made that if the transportation plan and TIP have met all conformity requirements, there are no issues with signing a NEPA document. If there are projects to be added to a TIP or a long range plan which are capacity–adding, conformity would have to be demonstrated for the 1997 standard if the project is not exempt, and as long as the projects are in a plan right now, FHWA will authorize the projects and sign the NEPA. Mr. Andrews continued to say that if no guidance has been issued by the time they update the long-range plan, they will run it for the '97 standard as well and make a determination based on that. Bryan Fair of ALDOT asked about CBD projects in relation to the guidance and the STIP and long range plans. Mr. Andrews stated that the CBD is already in the STIP and the long range plan. He also added that the project was actually an exempt project and that exempt projects are fine.

4. **Ground Level Ozone Standard Budgets**

   Mike Kaczorowski of RPCGB informed the IAC that RPCBG planned to publish the next conformity determination document with both the 1 hour standard and the 8 hour standard. Mr. Kaczorowski added that the next conformity analysis is to start later this summer and will be distributed to the IAC in the fall or early winter. The plan is to adopt the 2045 long-range plan, regional transportation plan, the fiscal year 2020-2023 transportation improvement plan and the conformity documentation, which will go out to public involvement in the summer of 2019. Mr. Kaczorowski also stated that the IAC will have the opportunity to look at the long-range plan, TIP and air quality conformity document ahead of our public involvement meetings that will be in the spring. Mr. Andrews of FHWA asked if there has been a discussion between RPCBG and ADEM regarding future year budgets. He also asked if the budgets are straight line budgets or do they drop, and with new projects will the budgets still be attainable? Harry He of RPCBG added that the budgets stay the same with no drop off each year and that even with new projects the budgets would be unaffected. Dale Hurst of ADEM added that ADEM will need to update the maintenance budget as well as everything beyond the 2017 year, but for conformity purposes that the initial budget is the only concern at this time.

5. **Open Discussion**
6. **Next Call: June 18, 2018**

ADEM:
- ✓ Larry Brown
- ✓ Dale Hurst
- ✓ Lisa Edwards
- ✓ Anthony Smiley
- ☐ Sabrina Blakely
- ✓ Brian Sullins
- ✓ Judy Hayes

ALDOT:
- ☐ Natasha Clay
- ✓ Michael Hora
- ☐ Sandra Bonner
- ✓ Bryan Fair
- ☐ Rita Hoke
- ☐ Dolha Kayisavera
- ☐ Diamond Pearson
- ☐ Curtis Pearson

JCDH:
- ☐ Jason Howanitz
- ✓ Matt Lacke
- ☐ Corey Masuca

RPCGB:
- ☐ Scott Tillman
- ✓ Harry He
- ✓ Mike Kaczorowski

FHWA-AL:
- ☐ Lynne Urquhart
- ✓ Clint Andrews
- ✓ Lian Li

FTA:
- ☐ Stan Mitchell
- ✓ Nicole Spivey

U.S. EPA Region 4:
- ☐ Lynorae Benjamin
- ✓ Dianna Myers
- ✓ Kelly Sheckler
- ☐ Richard Wong
- ☐ Egide Louis

BJCTA:
- ☐ Barbara Murdock
- ☐ Karen Jacobs
- ☐ Wytangy Peak-Finney
- ☐ Joshua Johnson
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Interagency Consultation
Alabama Transportation Conformity

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DATE:
TIME: 10:00 am CST

NUMBER: 1-202-991-0477
CODE: 7570714#

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1. **Introductions**
2. **Approval of February 26, 2018 Minutes**
3. **1997 Ozone Standards – Potential Conformity Requirements – RPCGB**

   Mike Kaczorowski of RPCGB suggested a clarification of the court ruling involving the 1997 Ozone Standards. Dianna Myers of EPA stated, on February 16, 2018, judges in D.C. circuit court ruled that EPA shouldn't have revoked the conformity requirements for the 1997 ozone standard. EPA headquarters is still gathering information for the Department of Justice to see if they have enough information to seek a rehearing on the case. The deadline to file a rehearing would be April 23 of 2018.

4. **2045 Regional Transportation Plan – Base Year, Interim Years, and Horizon Year – RPCGB**
   a. **Base Year – 2015**
   b. **Interim Years – 2024, 2034, 2040**
   c. **Horizon Year – 2045**

   Mike Kaczorowski of RPCBG presented to the IAC that in anticipation of the modeling, development of the base year, interim years, and horizon years were conducted. However, a change from the interim year 2030 to 2034 was in order to add flexibility for the phase 2 projects. Harry He of RPCGB indicated that there are two SIP's budgets for Ozone standards for years 2015 and 2017. Ms. Myers stressed that with two budgets with relative proximity for 2015 and 2017 that the year 2017 must be included as an analysis year. Ms. Myers also suggested that the input datasets for the MOVES model can be interpolated for year 2017.

5. **Open Discussion**

   Ariel Holway-Jones with ADEM informed the group that she would be transferring to a different section and that Brian Sullins would assume responsibilities for the IAC call meetings. Dale Hurst informed the group that Mr. Sullins works with the MOVES modeling at ADEM and has been helping with the IAC minutes, so this should be a smooth transition.

   It was also brought to the attention that the members list on the agenda needs to be updated. The following changes will be: Correct Judy Akers to Judy Hayes for ADEM; add Diamond Pearson and Curtis Pearson and remove Lance Taylor for ALDOT; Nicole Spivey needs to be moved from FHWA-AL to FTA; and add Kelly Sheckler and remove Zuri Farngalo for EPA.

6. **Next Call: May 21, 2018**

ADEM:
- ☐ Larry Brown
- ✓ Dale Hurst
- ✓ Lisa Edwards
- ✓ Anthony Smiley
- ☐ Sabrina Blakely
- ☐ Brian Sullins
- ✓ Judy Hayes

ALDOT:
- ☐ Natasha Clay
- ✓ Michael Hora
- ☐ Sandra Bonner
- ✓ Bryan Fair
- ☐ Rita Hoke
- ✓ Dolha Kayisavera
- ✓ Diamond Pearson
- ✓ Curtis Pearson

JCDH:
- ☐ Jason Howanitz
- ✓ Matt Lacke
- ☐ Corey Masuca

RPCGB:
- ✓ Scott Tillman
- ✓ Harry He
- ✓ Mike Kaczorowski

FHWA-AL:
- ☐ Lynne Urquhart
- ✓ Clint Andrews
- ☐ Lian Li

FTA:
- ☐ Stan Mitchell
- ☐ Nicole Spivey

U.S. EPA Region 4:
- ☐ Lynorae Benjamin
- ✓ Dianna Myers
- ✓ Richard Wong
- ✓ Egide Louis
- ✓ Kelly Sheckler

BJCTA:
- ☐ Barbara Murdock
- ☐ Karen Jacobs
- ✓ Wytangy Peak-Finney
- ☐ Joshua Johnson
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Interagency Consultation
Alabama Transportation Conformity

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DATE: February 26, 2018
TIME: 10:00 am CST

NUMBER: 1-202-991-0477
CODE: 7570714#

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1. **Introductions**
2. **Approval of November 2016 Minutes**
3. **RPCGB - Performance Measure Target - CMAQ - PM 2.5 Daily Reduction Estimates**

   Mike Kaczorowski of RPCGB opened the discussion on the estimated reductions of $PM_{2.5}$ lbs/day that would be achieved in the current CMAQ program. After reviewing the history, 2010 will be used because of the efficiency of the MOVES model, instead of prior history that was obtained with the MOBILE model. After reviewing the numbers it is clear that it's around the low 30s and the numbers will actually go down in the reduction estimates because vehicles are becoming more efficient and cleaner. Bryan Fair with ALDOT asked if this was based on actual monitoring for air quality. Mr. Kaczorowski stated that it was not from the monitoring stations and continued explaining that the main project that reduces $PM_{2.5}$ is the Ozone Awareness Program, which has a reduction of 95-99% of all of the reductions under CMAQ. A consultant under contract with ALDOT will be helping to achieve these estimates and determining which programs are the most effective for RPCGB.

4. **Open Discussion**

   Dianna Myers with EPA informed the group that on Friday, February 16, 2018, there was a ruling on the lawsuit against EPA regarding the 2008 Ozone SIP requirements rule. In the decision there are a couple of things that could have an impact on the Birmingham area concerning the 1997 Ozone Standard if the decision is upheld. Ms. Myers will get back to the group when more information is available on the topic, but in the meantime will forward the court ruling to the group.

   Kelly Sheckler with EPA asked the group if there was a Long Range Transportation update. Scott Tillman with RPCGB stated it would be adopted in May 2019 and had received the concurrence letter in February, but was going to push the adoption back a couple months so the 4 year TIP and LRTP would be aligned.

5. **Next Call is March 19, 2018.**

ADEM:
- ☐ Larry Brown
- ✓ Dale Hurst
- ☐ Lisa Edwards
- ✓ Anthony Smiley
- ✓ Sabrina Blakely
- ✓ Ariel Holway-Jones
- ✓ Brian Sullins
- ✓ Judy Akers

ALDOT:
- ☐ Natasha Clay
- ☐ Lance Taylor
- ☐ Michael Hora
- ☐ Sandra Bonner
- ✓ Bryan Fair
- ✓ Rita Hoke
- ☐ Dolha Kayisavera

JCDH:
- ☐ Jason Howanitz
- ✓ Matt Lacke
- ☐ Corey Masuca

RPCGB:
- ✓ Scott Tillman
- ✓ Harry He
- ✓ Mike Kaczorowski

FHWA-AL:
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- ✓ Clint Andrews
- ☐ Nicole Spivey
- ☐ Lian Li

FTA:
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U.S. EPA Region 4:
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- ✓ Dianna Myers
- ☐ Zuri Farngalo
- ✓ Richard Wong
- ☐ Egide Louis
- ✓ Kelly Sheckler

BJCTA:
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- ☐ Karen Jacobs
- ✓ Wytangy Peak-Finney
- ✓ Joshua Johnson
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Appendix D

Conformity Checklists

Demonstration Requirements for Transportation Conformity of Metropolitan Transportation Improvement Programs (TIPs)

Identify if the Item is Complete with a Check and Include the Appropriate Page Number from the Document.

__√__ 1. The report documents that the TIP is in conformance with the State Implementation Plan (SIP) and complies with the Clean Air Act, the Transportation Conformity Regulation, the Statewide and Metropolitan Planning Regulation, and other applicable federal and state requirements. Page Number _1-1, 1-2_

__√__ 2. The report states that the TIP is a subset of the latest conforming Transportation Plan and the conformity determination made for the Transportation Plan also applies to the TIP. Page Number 1-2 and 4-1

__√__ 3. The report explains how the requirements of 40 CFR 93.122 (e) are met. Page Number _3-1_

__√__ 4. The report supplies a copy of the Metropolitan Planning Organization's (MPO's) and FHWA/FTA's findings of conformity on the current Transportation Plan. Page Number _vi, vii, and Appendix B

__√__ 5. The report contains a copy of the Adopting Resolution by the MPO and the Conformity Determination for the TIP. Page Number vi and vii

__√__ 6. The report contains a cross reference of projects sufficiently described in terms of design concept and design scope for comparison to the Transportation Plan. Page Number _Appendix F and in section 2.0 Projects of the TIP Report__

__√__ 7. The report documents comments raised verbally or in writing by an interagency consultation partner and how the MPO addressed such concerns' or, the report states that no significant comments were received. Page Number Appendix C

__√__ 8. The report documents the public participation process of the TIP including any comments raised verbally or in writing and how the MPO addressed such concerns; or, the report states that no significant comments were received. Page Number 5-1 and in a report entitled, *Public Involvement Meeting Documentation May 2019*;"

__√__ 9. The report explains how the TIP was developed according to the consultation procedures outlined in 40 CFR 93.105 and 93.112. Page Number _1-4, 1-5, 2-1, 2-2_

Demonstration Requirements for Transportation Conformity of Metropolitan Long Range Plans

Identify if the Item is Complete with a Check and Include the Appropriate Page Number from the Document.

__√__ 1. The report documents that the Transportation Plan is in conformance with the State Implementation Plan (SIP) and complies with the Clean Air Act, the Transportation Conformity Regulation, the Statewide and Metropolitan Planning Regulation, and other applicable federal and state requirements. Page Number 1-1, 1-2

__√__ 2. Tabulation of Analysis Results for applicable pollutants showing that the required conformity test was met for each analysis year. Page Number 4-1 to 4-7

__√__ 3. The report contains a copy of the Adopting Resolution by the Metropolitan Planning Organization (MPO) of the Transportation Plan, and the Conformity Determination for the Transportation Plan. Page Number vi and vii

__√__ 4. The report documents that the Transportation Plan at minimum has a 20 year planning horizon. Page Number 1-2, 1-5

__√__ 5. The report documents that the Transportation Plan and Transportation Improvement Program (TIP) are fiscally constrained and a funding source for all the projects listed in the Plan and the TIP for the construction and operation (if applicable) of the project is identified. Page Number Appendix F

__√__ 6. The report documents that the contents of the Transportation Plan meet the requirements of 40 CFR 93.106, including the highway and transit system described in terms of regional significance which is sufficiently identified in terms of design concept and design scope to allow modeling consistent with the modeling methods for area-wide transportation analysis in use by the MPO. Page Number 2-1 to 2-7

__√__ 7. The report documents all projects for each of the Transportation Plan's horizon years, including project identification number for reference in the TIP, exempt status, and regional significance, including non-federal projects. Page Number in Appendix F

__√__ 8. The report documents that the latest planning assumptions were used, including demographics, employment, land use, and other factors affecting the analysis that were updated or revised form the last adopted Plan. Page Number 2-1, 2-2, and Appendix A

__√__ 9. The report explains how the latest planning assumptions of the Transportation Plan meet the requirements of 40 CFR 93.110. Page Number 2-1 and 2-2

__√__ 10. The dates the area was designated or redesignated by the Environmental Protection Agency (EPA) are shown along with information on criteria and/or precursor pollutants. Page Number __1-1 to 1-4__

__√__ 11. The report documents comments raised verbally or in writing by an interagency consultation partner and how the MPO addressed such concerns; or, the report states that no significant comments were received. Page Number _1-3, 1-4, and Appendix C

__√__ 12. The report documents the public participation process of the Transportation Plan and conformity analysis including any comments raised verbally or in writing and how the MPO addressed such concerns; or, the report states that no significant comments were received. Page Number 5-1 and in a report entitled, "*Public Involvement Meeting Documentation May 2019*;"

__√__ 13. The report explains how the Transportation Plan and conformity analysis were developed according to the consultation procedures outline in 40 CFR 93.112 including but not limited to, model evaluation and selection, minor arterials and other transportation projects treated as regionally significant, and determining if a project otherwise exempt under 40 CFR 93.126 should be treated as non-exempt. Page Number 1-4, 1-5, 2-1, 2-2_

Transportation Control Measures (TCMs)

__√__ 14. If the Transportation Plan contains any SIP TCMs the requirements in 40 CFR 93.110 (e) and 93.110 are met; or, the report states the Transportation Plan contains no SIP TCMs. Page Number _3-1__

Regional Emission Analysis

__√__ 15. The analysis/horizon years were selected by the MPO through the interagency consultation process. Page Number _1-6, Appendix C_

__√__ 16. The analysis/horizon years meet the requirements of 40 CFR 93.106 (a) (1), 93.118 (b), or 93.119 (e), which ever is applicable. Page Number _1-5 and 1-6_

__√__ 17. The report documents the use of latest emissions estimation model, consistency with the SIP assumptions, and provides copies of the input and output files used in the analysis. Page Number _2-1 & Appendix A_

__√__ 18. The report documents how the requirements of the Emission Budget Test in 40 CFR 93.118 or the Emission Reduction Test in 40 CFR 93.119 were met for each pollutant the area is designated nonattainment or maintenance. Page Number __4-1 to 4-7_

__√__ 19. Applicable if Emission Budget Test was used: the report documents that the emission budgets used in the conformity analysis are those found in the latest approved SIP or latest SIP budget found adequate by the EPA for transportation conformity. The appropriate Federal Register notice is also present. Page Number 1-5, 1-6, and Appendix E_

__√__ 20. Applicable if Emission Reduction Test was used: The report documents that the "Baseline" scenario includes all the future transportation system resulting from all in place regionally significant highway and transit facilities; all ongoing travel demand management and regionally significant projects that are currently under construction or undergoing right-of-way acquisition, regardless of funding source. Page Number Not Applicable

__√__ 21. Applicable if Emission Reduction Test was used: The report documents that the "Action" scenario includes all facilities, services, and activities in the "Baseline" scenario as well as the future transportation system resulting from the implementation of the proposed Transportation Plan, all expected regionally significant projects and additional projects delineated in 40 CFR 93.119 (g). Page Number Not Applicable

__√__ 22. The report documents that the requirements of 40 CFR 93.122 are met, including but not limited to, explaining how the Vehicle Miles of Travel (VMT) from projects which are not regionally significant have been estimated in accordance with reasonable professional practice; and how reasonable methods were used to estimate VMT for off-model transportation projects. Page Number 2-2 to 2-7 and Appendix A

__√__ 23. The report explains (as applicable) how the travel demand model VMT used as the basis for the emission inventory has been reconciled and calibrated to the Highway Performance Monitoring System VMT for the year of validation and future estimates of VMT. Page Number 2-3 to 2-5, Appendix A

Appendix E

U.S. EPA's Redesignations of the 1997/2006 Ground-Level Ozone, the 1997 Annual and the 2006 24-hour $PM_{2.5}$ Nonattainment Areas to Attainment Areas and 2024 Motor Vehicle Emissions Budgets

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart GG—New Mexico

■ 2. Section 52.1620(c) is amended by revising the entries for Parts 74 and 79 under the first table titled ''New Mexico Administrative Code (NMAC) Title 20—Environment Protection Chapter 2—Air Quality''.

The revisions read as follows:

§ 52.1620 Identification of plan.

* * * * *

(c) * * *

EPA APPROVED NEW MEXICO REGULATIONS

State citation	Title/subject	State approval/ effective date	EPA approval date	Comments
New Mexico Administrative Code (NMAC) Title 20—Environment Protection Chapter 2—Air Quality				
* *	*	*	*	* *
Part 74	Permits—Prevention of Significant Deterioration.	6/3/2011	1/22/2013 [Insert *FR* page number where document begins].	Revisions to 20.2.74.303(A) NMAC submitted 5/23/2011, effective 6/3/2011, are *NOT* part of SIP. 20.2.74.303 NMAC submitted 12/1/2010, effective 1/1/2011, remains SIP approved (6/20/2011, 76 FR 43149).
* *	*	*	*	* *
Part 79	Permits—Nonattainment Areas.	6/3/2011	1/22/2013 [Insert *FR* page number where document begins].	
* *	*	*	*	* *

* * * * *

[FR Doc. 2013–00729 Filed 1–18–13; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R08–OAR–2011–0114; FRL–9771–9]

Approval, Disapproval and Promulgation of State Implementation Plans; State of Utah; Regional Haze Rule Requirements for Mandatory Class I Areas Under 40 CFR 51.309; Correction

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; correction.

SUMMARY: The EPA is supplementing the preamble to the final rule that appeared in the **Federal Register** on December 14, 2012. This final rule partially approved and partially disapproved a State Implementation Plan (SIP) revision submitted by the State of Utah on May 26, 2011 that addresses regional haze. The final rule preamble inadvertently did not include language pertaining to judicial review, and this document adds that language.

DATES: Effective on January 14, 2013.

FOR FURTHER INFORMATION CONTACT: Laurel Dygowski, Air Program, Mailcode 8P–AR, Environmental Protection Agency, Region 8, 1595 Wynkoop Street, Denver, Colorado 80202–1129, (303) 312–6144, *dygowski.laurel@epa.gov*.

SUPPLEMENTARY INFORMATION: In **Federal Register** document 2012–29406 published in the **Federal Register** on December 14, 2012 (77 FR 74355), the following corrections are made:

1. On page 74372, in the first column, in section V. *Statutory and Executive Order Reviews,* paragraph L. is added to read as follows: ''*L. Judicial Review*—Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by March 25, 2013. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See CAA section 307(b)(2).)''

Dated: December 20, 2012.

James B. Martin,

Regional Administrator, Region 8.

[FR Doc. 2013–01081 Filed 1–18–13; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA–R04–OAR–2011–0316; FRL–9771–1]

Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes; Alabama; Redesignation of the Birmingham 1997 Annual Fine Particulate Matter Nonattainment Area to Attainment

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is taking final action to approve a request submitted on May 2, 2011, from the State of Alabama, through the Alabama Department of Environmental Management (ADEM), Air Division, to redesignate the Birmingham fine particulate matter ($PM_{2.5}$) nonattainment area (hereafter referred to as the ''Birmingham Area'' or

''Area'') to attainment for the 1997 Annual $PM_{2.5}$ national ambient air quality standards (NAAQS). The Birmingham 1997 Annual $PM_{2.5}$ nonattainment area is comprised of Jefferson and Shelby Counties in their entireties and a portion of Walker County. EPA's approval of the redesignation request is based on the determination that the State of Alabama has met the criteria for redesignation to attainment set forth in the Clean Air Act (CAA or Act), including the determination that the Birmingham Area has attained the 1997 Annual $PM_{2.5}$ NAAQS. Additionally, EPA is approving a revision to the Alabama state implementation plan (SIP) to include the 1997 Annual $PM_{2.5}$ maintenance plan for the Birmingham Area that contains the new 2024 motor vehicle emission budgets (MVEBs) for nitrogen oxides (NO_X) and $PM_{2.5}$. This action also approves the 2009 emissions inventory submitted with the maintenance plan.

DATES: *Effective Date:* This rule will be effective on February 21, 2013.

ADDRESSES: EPA has established a docket for this action under Docket Identification No. EPA–R04–OAR–2011–0316. All documents in the docket are listed on the *www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *www.regulations.gov* or in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303–8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 a.m. to 4:30 p.m., excluding federal holidays.

FOR FURTHER INFORMATION CONTACT: Joel Huey, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303–8960. Joel Huey may be reached by phone at (404) 562–9104 or via electronic mail at *huey.joel@epa.gov*.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. What is the background for the actions?

As stated in our proposed approval notice published on November 10, 2011 (76 FR 70078), this redesignation action addresses the Birmingham Area's status solely with respect to the 1997 Annual $PM_{2.5}$ NAAQS, for which designations were finalized on January 5, 2005 (70 FR 944) and April 14, 2005 (70 FR 19844). On May 2, 2011, the State of Alabama, through ADEM, submitted a request to redesignate the Birmingham Area to attainment for the 1997 Annual $PM_{2.5}$ NAAQS and for EPA approval of the Alabama SIP revisions containing a maintenance plan for the Area. In the November 10, 2011, notice, EPA proposed to take the following three separate but related actions, some of which involve multiple elements: (1) To redesignate the Birmingham Area to attainment for the 1997 Annual $PM_{2.5}$ NAAQS, provided EPA approves the emissions inventory submitted with the maintenance plan; (2) to approve into the Alabama SIP, under section 175A of the CAA, Alabama's 1997 Annual $PM_{2.5}$ NAAQS maintenance plan, including the associated MVEBs; and (3) to approve, under CAA section 172(c)(3), the emissions inventory submitted with the maintenance plan. No comments were received on the proposed action. EPA is now taking final action on the three actions identified above. Additional background for today's action, and other details regarding the proposed redesignation, is set forth in EPA's November 10, 2011, proposal and is summarized below. The following information also: (1) Affirms that the most recent available ambient monitoring data continue to support this redesignation action, (2) summarizes the NO_X and $PM_{2.5}$ MVEBs for the year 2024 for the Birmingham Area, and (3) provides additional information on events that have occurred since the November 10, 2011, proposal.

With regard to the data, EPA has reviewed the most recent ambient monitoring data, which indicate that the Birmingham Area continues to attain the 1997 Annual $PM_{2.5}$ NAAQS beyond the 3-year attainment period of 2008–2010, which was provided with Alabama's May 2, 2011, submittal and request for redesignation. As stated in EPA's November 10, 2011, proposal notice, the 3-year design value of 13.7 $\mu g/m^3$ for 2008–2010 meets the NAAQS of 15.0 $\mu g/m^3$. Quality assured and certified data now in EPA's Air Quality System (AQS) for 2011 provide a 3-year design value of 12.9 $\mu g/m^3$ for 2009–2011. Furthermore, preliminary monitoring data for 2012 indicate that the Area is continuing to attain the 1997 Annual $PM_{2.5}$ NAAQS. The 2012 preliminary data are available in AQS although are not yet quality assured and certified.

The MVEBs, specified in tons per year (tpy), included in the maintenance plan are as shown in Table 1 below. In the November 10, 2011, proposed action, EPA noted that the period for public comment on the adequacy of these MVEBs (as contained in Alabama's submittal) began on March 24, 2011, and closed on April 25, 2011. No comments were received during the public comment period. Through this final action, EPA is finding the 2024 NO_X and $PM_{2.5}$ MVEBs adequate for transportation conformity purposes and finalizing the approval of the budgets.

TABLE 1—BIRMINGHAM AREA $PM_{2.5}$ NO_X MVEBS

[tpy]

	$PM_{2.5}$	NO_X
2024 On-road Mobile Emissions	335.70	8,738.39
Safety Margin Allocated to MVEBs	106.37	7,243.11
2024 Conformity MVEBs	442.07	15,981.50

In the November 10, 2011, proposed redesignation of the Birmingham Area, EPA proposed to determine that the emission reduction requirements that contributed to attainment of the 1997 Annual $PM_{2.5}$ standard in the

nonattainment area could be considered permanent and enforceable. *See* 76 FR at 70092, 70097–70099. At the time of proposal, EPA noted that the requirements of the Clean Air Interstate Rule (CAIR),[1] which had been in place since 2005, were to be replaced, starting in 2012, by the requirements in the then recently promulgated Cross-State Air Pollution Rule (CSAPR), 76 FR 48208 (August 8, 2011). CSAPR included regulatory changes to sunset (i.e., discontinue) the CAIR requirements for control periods in 2012 and beyond. *See* 76 FR at 48322. Although Alabama's redesignation request and maintenance plan included reductions associated with CAIR, EPA proposed to approve the request based in part on the fact that CSAPR achieved similar or greater reductions in the relevant areas in 2012 and beyond. *See* 76 FR at 70092, 70097–70099. Because CSAPR requirements were expected to replace the CAIR requirements starting in 2012, EPA considered the impact of CSAPR related reductions on the Birmingham Area. On this basis, EPA proposed to determine that, pursuant to CAA section 107(d)(3)(E)(iii), the pollutant transport part of the reductions that led to attainment in the Birmingham Area could be considered permanent and enforceable. *See* 76 FR at 70079, 70084–70086.

On December 30, 2011, shortly after EPA's proposed approval of the Birmingham redesignation, the D.C. Circuit issued an order addressing the status of CSAPR and CAIR in response to motions filed by numerous parties seeking a stay of CSAPR pending judicial review. In that order, the court stayed CSAPR pending resolution of the petitions for review of that rule in *EME Homer City Generation, L.P.* v. *EPA* (No. 11–1302 and consolidated cases), also referred to as *EME Homer City.* The court also indicated that EPA was expected to continue to administer CAIR in the interim until judicial review of CSAPR was completed. Subsequently, on August 21, 2012, the D.C. Circuit issued a decision in *EME Homer City* to vacate and remand CSAPR and to keep CAIR in place. Specifically, the court ordered EPA to continue administering CAIR pending the promulgation of a valid replacement. *EME Homer City Generation, L.P.* v. *EPA,* 696 F.3d 7, 38 (D.C. Cir. 2012). The D.C. Circuit has not yet issued the final mandate in *EME Homer City* as EPA (as well as several intervenors) petitioned for rehearing *en banc,* asking the full court to review the decision. While rehearing proceedings are pending, EPA intends to act in accordance with the panel opinion in the *EME Homer City* opinion.

Subsequent to the *EME Homer City* opinion, EPA published several proposals to redesignate both particulate matter and ozone nonattainment areas to attainment. These proposals explained the legal status of CAIR and CSAPR, and provided a basis on which EPA would consider emissions reductions associated with CAIR to be permanent and enforceable for redesignation purposes, pursuant to CAA section 107(d)(3)(D)(iii). In those actions, EPA explained that in light of the August 21, 2012, order by the D.C. Circuit, CAIR remains in place and enforceable until substituted by a ''valid'' replacement rule. *See, e.g.,* 77 FR 69409 (November 19, 2012); 77 FR 68087 (November 15, 2012).

Alabama's May 2, 2011, SIP submittal supporting its redesignation request includes CAIR as a control measure, which became state-effective on April 3, 2007, and was approved by EPA on October 1, 2007, for the purpose of reducing SO_2 and NO_X emissions. *See* 72 FR 55659. Due to the legal status of CSAPR at the time that EPA proposed approval of Alabama's May 2, 2011, redesignation submittal, EPA was able to rely on CSAPR related reductions. EPA also recognized that the monitoring data used to demonstrate the Birmingham Area's attainment of the 1997 Annual $PM_{2.5}$ NAAQS included reductions associated with CAIR. Due to the uncertainty regarding the legal status of CAIR when Alabama provided its submittal on May 2, 2011, the State's analysis assumed that no additional reductions in SO_2 or NO_X emissions from utilities would occur above and beyond those achieved through 2012 as a result of CAIR. To the extent that the Alabama submittal relies on CAIR reductions that occurred through 2012, the recent directive from the D.C. Circuit in *EME Homer City* ensures that the reductions associated with CAIR will be permanent and enforceable for the necessary time period for purposes of CAA section 107(d)(3)(E)(iii). EPA has been ordered by the court to develop a new rule, and the opinion makes clear that after promulgating that new rule EPA must provide states an opportunity to draft and submit SIPs to implement that rule. CAIR thus cannot be replaced until EPA has promulgated a final rule through a notice-and-comment rulemaking process; states have had an opportunity to draft and submit SIPs; EPA has reviewed the SIPs to determine if they can be approved; and EPA has taken action on the SIPs, including promulgating a Federal Implementation Plan, if appropriate. The court's clear instruction to EPA is that it must continue to administer CAIR until a ''valid replacement'' exists, and thus CAIR reductions may be relied upon until the necessary actions are taken by EPA and states to administer CAIR's replacement. Furthermore, the court's instruction provides an additional backstop; by definition, any rule that replaces CAIR and meets the court's direction would require upwind states to have SIPs that eliminate significant contributions to downwind nonattainment and prevent interference with maintenance in downwind areas.

Further, in deciding to vacate CSAPR and to require EPA to continue administering CAIR, the D.C. Circuit emphasized that the consequences of vacating CAIR ''might be more severe now in light of the reliance interests accumulated over the intervening four years.'' *EME Homer City,* 696 F.3d at 38. The accumulated reliance interests include the interests of states who reasonably assumed they could rely on reductions associated with CAIR, which brought certain nonattainment areas into attainment with the NAAQS. If EPA were prevented from relying on reductions associated with CAIR in redesignation actions, states would be forced to impose additional, redundant reductions on top of those achieved by CAIR. EPA believes this is precisely the type of irrational result the court sought to avoid by ordering EPA to continue administering CAIR. For these reasons also, EPA believes it is appropriate to allow states to rely on CAIR, and the existing emissions reductions achieved by CAIR, as sufficiently permanent and enforceable for purposes such as redesignation. Following promulgation of the replacement rule, EPA will review SIPs as appropriate to identify whether there are any issues that need to be addressed.

In light of these unique circumstances and for the reasons explained above, EPA is approving the redesignation request and the related SIP revision for Jefferson and Shelby Counties in their entireties and a portion of Walker County in Alabama, including Alabama's plan for maintaining attainment of the 1997 Annual $PM_{2.5}$ NAAQS in the Birmingham Area. EPA

[1] On May 12, 2005, EPA published CAIR, which requires significant reductions in emissions of sulfur dioxide (SO_2) and NO_X from electric generating units to limit the interstate transport of these pollutants and the ozone and fine particulate matter they form in the atmosphere. *See 70 FR 25162. The* U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) initially vacated CAIR, *North Carolina* v. *EPA,* 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded the rule to EPA without vacatur to preserve the environmental benefits provided by CAIR, *North Carolina* v. *EPA,* 550 F.3d 1176, 1178 (D.C. Cir. 2008).

continues to implement CAIR in accordance with current direction from the court, and thus CAIR is in place and enforceable, and will remain so, until substituted by a valid replacement rule. Alabama's SIP revision lists CAIR as a control measure, which became state-effective on April 3, 2007, and was approved by EPA on October 1, 2007, for the purpose of reducing SO_2 and NO_X emissions. The monitoring data used to demonstrate the Area's attainment of the 1997 Annual $PM_{2.5}$ NAAQS by the April 2010 attainment deadline was impacted by CAIR.

II. What are the actions EPA is taking?

In today's rulemaking, EPA is approving: (1) A change to the legal designation of the Birmingham Area from nonattainment to attainment for the 1997 Annual $PM_{2.5}$ NAAQS; (2) under CAA section 175A, Alabama's 1997 Annual $PM_{2.5}$ NAAQS maintenance plan, including the associated MVEBs; and (3) under CAA section 172(c)(3), the emissions inventory submitted with the maintenance plan for the Area. The maintenance plan is designed to demonstrate that the Birmingham Area will continue to attain the 1997 Annual $PM_{2.5}$ NAAQS through 2024. EPA's approval of the redesignation request is based on EPA's determination that the Birmingham Area meets the criteria for redesignation set forth in CAA, sections 107(d)(3)(E) and 175A, including EPA's determination that the Birmingham Area has attained the 1997 Annual $PM_{2.5}$ NAAQS. EPA's analyses of Alabama's redesignation request, emissions inventory, and maintenance plan are described in detail in the November 10, 2011, proposed rule (76 FR 70078).

Consistent with the CAA, the maintenance plan that EPA is approving also includes 2024 NO_X and $PM_{2.5}$ MVEBs for the Birmingham Area. In this action, EPA is approving these NO_X and $PM_{2.5}$ MVEBs for the Birmingham Area for the purposes of transportation conformity. For required regional emissions analysis years that involve 2024 or beyond, the applicable budgets will be the new 2024 NO_X and $PM_{2.5}$ MVEBs.

III. Why is EPA taking these actions?

EPA has determined that the Birmingham Area has attained the 1997 Annual $PM_{2.5}$ NAAQS and has also determined that all other criteria for the redesignation of the Birmingham Area from nonattainment to attainment of the 1997 Annual $PM_{2.5}$ NAAQS have been met. *See* CAA section 107(d)(3)(E). One of those requirements is that the Birmingham Area has an approved plan demonstrating maintenance of the 1997 Annual $PM_{2.5}$ NAAQS. EPA is also taking final action to approve the maintenance plan for the Birmingham Area as meeting the requirements of sections 175A and 107(d)(3)(E) of the CAA. In addition, EPA is approving the new NO_X and $PM_{2.5}$ MVEBs for the year 2024 for the Birmingham Area as contained in Alabama's maintenance plan because these MVEBs are consistent with maintenance of the 1997 Annual $PM_{2.5}$ standard in the Birmingham Area. Finally, EPA is approving the emissions inventory as meeting the requirements of section 172(c)(3) of the CAA. The detailed rationale for EPA's determinations and actions are set forth in the proposed rulemaking and in other discussion in this final rulemaking.

IV. What are the effects of these actions?

Approval of the redesignation request changes the legal designation of the Birmingham Area from nonattainment to attainment for the 1997 Annual $PM_{2.5}$ NAAQS. EPA is modifying the regulatory table in 40 CFR 81.301 to reflect a designation of attainment for these full and partial counties. EPA is also approving, as a revision to the Alabama SIP, Alabama's plan for maintaining the 1997 Annual $PM_{2.5}$ NAAQS in the Birmingham Area through 2024. The maintenance plan includes contingency measures to remedy possible future violations of the 1997 Annual $PM_{2.5}$ NAAQS and establishes NO_X and $PM_{2.5}$ MVEBs for the year 2024 for the Birmingham Area. Additionally, this action approves the emissions inventory for the Birmingham Area pursuant to section 172(c)(3) of the CAA.

V. Final Action

EPA is taking final action to approve three separate but related actions, some of which involve multiple elements: (1) The redesignation of the Birmingham Area to attainment for the 1997 Annual $PM_{2.5}$ NAAQS; (2) under CAA section 175A, Alabama's 1997 Annual $PM_{2.5}$ NAAQS maintenance plan, including the associated MVEBs; and (3) under CAA section 172(c)(3), the emissions inventory submitted with the maintenance plan for the Area. The 1997 Annual $PM_{2.5}$ maintenance plan for the Birmingham Area includes the new 2024 NO_X and $PM_{2.5}$ MVEBs of 15,981.50 tpy and 442.07 tpy, respectively. Within 24 months from the effective date of EPA's adequacy determination, the transportation partners will need to demonstrate conformity to the new NO_X and $PM_{2.5}$ MVEBs pursuant to 40 CFR 93.104(e).[2]

VI. Statutory and Executive Order Reviews

Under the CAA, redesignation of an area to attainment and the accompanying approval of the maintenance plan under CAA section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those required by state law. A redesignation to attainment does not in and of itself impose any new requirements, but rather results in the application of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For these reasons, these actions:

- Are not a ''significant regulatory action'' subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Do not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Are not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Are not significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Are not subject to requirements of Section 12(d) of the National

[2] The adequacy finding becomes effective upon the date of publication of this notice in the **Federal Register**. 40 CFR 93.118(f)(2)(iii).

Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and,

• Do not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this final rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the State, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by March 25, 2013. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. *See* section 307(b)(2).

List of Subjects

40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements, and Particulate matter.

40 CFR Part 81

Environmental protection, Air pollution control, National parks.

Dated: January 9, 2013.

Gwendolyn Keyes Fleming,

Regional Administrator, Region 4.

40 CFR parts 52 and 81 are amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart B—Alabama

■ 2. Section 52.50(e) is amended by adding a new entry for ''1997 Annual $PM_{2.5}$ Maintenance Plan for the Birmingham Alabama Area'' at the end of the table to read as follows:

§ 52.50 Identification of plan.

* * * * *

(e) * * *

EPA-APPROVED ALABAMA NON-REGULATORY PROVISIONS

Name of nonregulatory SIP provision	Applicable geographic or nonattainment area	State submittal date/effective date	EPA approval date	Explanation
*	*	*	*	*
1997 Annual $PM_{2.5}$ Maintenance Plan for the Birmingham Area.	Birmingham $PM_{2.5}$ Nonattainment Area.	5/2/11	1/22/13 [Insert citation of publication].	

PART 81—DESIGNATION OF AREAS FOR AIR QUALITY PLANNING PURPOSES

■ 1. The authority citation for part 81 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 2. In § 81.301, the table entitled ''Alabama—$PM_{2.5}$ (Annual NAAQS)'' is amended under ''Birmingham, AL'' by revising the entry for ''Jefferson County, Shelby County, Walker County (part)'' to read as follows:

§ 81.301 Alabama.

* * * * *

ALABAMA—$PM_{2.5}$ (ANNUAL NAAQS)

Designated area	Designation [a]	
	Date [1]	Type
Birmingham, AL:		
Jefferson County	This action is effective 1/22/13	Attainment.
Shelby County	This action is effective 1/22/13	Attainment.
Walker County (part) The area described by U.S. Census 2000 block group identifiers 01–127–0214–5, 01–127–0215–4, and 01–127–0216–2.	This action is effective 1/22/13	Attainment.
*	*	*

[a] Includes Indian Country located in each county or area, except as otherwise specified.

[1] This date is 90 days after January 5, 2005, unless otherwise noted.

* * * * *

[FR Doc. 2013–00954 Filed 1–18–13; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 111207737–2141–2]

RIN 0648–XC452

Fisheries of the Exclusive Economic Zone Off Alaska; Pacific Cod by Catcher/Processors Using Trawl Gear in the Western Regulatory Area of the Gulf of Alaska

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS is prohibiting directed fishing for Pacific cod by catcher/processors (C/Ps) using trawl gear in the Western Regulatory Area of the Gulf of Alaska (GOA). This action is necessary to prevent exceeding the A season allowance of the 2013 Pacific cod total allowable catch apportioned to C/Ps using trawl gear in the Western Regulatory Area of the GOA.

DATES: Effective 1200 hours, Alaska local time (A.l.t.), January 20, 2013, through 1200 hours, A.l.t., September 1, 2013.

FOR FURTHER INFORMATION CONTACT: Obren Davis, 907–586–7228.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the GOA exclusive economic zone according to the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP) prepared by the North Pacific Fishery Management Council under authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations governing fishing by U.S. vessels in accordance with the FMP appear at subpart H of 50 CFR part 600 and 50 CFR part 679. Regulations governing sideboard protections for GOA groundfish fisheries appear at subpart B of 50 CFR part 680.

The A season allowance of the 2013 Pacific cod total allowable catch (TAC) apportioned to C/Ps using trawl gear in the Western Regulatory Area of the GOA is 188 metric tons (mt), as established by the final 2012 and 2013 harvest specifications for groundfish of the GOA (77 FR 15194, March 14, 2012) and inseason adjustment to the final 2013 harvest specifications for Pacific cod (78 FR 267, January 3, 2013).

In accordance with § 679.20(d)(1)(i), the Administrator, Alaska Region, NMFS (Regional Administrator) has determined that the A season allowance of the 2013 Pacific cod TAC apportioned to C/Ps using trawl gear in the Western Regulatory Area of the GOA will soon be reached. Therefore, the Regional Administrator is establishing a directed fishing allowance of 0 mt, and is setting aside the remaining 188 mt as bycatch to support other anticipated groundfish fisheries. In accordance with § 679.20(d)(1)(iii), the Regional Administrator finds that this directed fishing allowance has been reached. Consequently, NMFS is prohibiting directed fishing for Pacific cod by C/Ps using trawl gear in the Western Regulatory Area of the GOA. After the effective date of this closure the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a trip.

Classification

This action responds to the best available information recently obtained from the fishery. The Assistant Administrator for Fisheries, NOAA (AA), finds good cause to waive the requirement to provide prior notice and opportunity for public comment pursuant to the authority set forth at 5 U.S.C. 553(b)(B) as such requirement is impracticable and contrary to the public interest. This requirement is impracticable and contrary to the public interest as it would prevent NMFS from responding to the most recent fisheries data in a timely fashion and would delay the directed fishing closure of Pacific cod for C/Ps using trawl gear in the Western Regulatory Area of the GOA. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of January 15, 2013.

The AA also finds good cause to waive the 30-day delay in the effective date of this action under 5 U.S.C. 553(d)(3). This finding is based upon the reasons provided above for waiver of prior notice and opportunity for public comment.

This action is required by § 679.20 and is exempt from review under Executive Order 12866.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: January 16, 2013.

Kara Meckley,

Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2013–01165 Filed 1–16–13; 4:15 pm]

BILLING CODE 3510–22–P

substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);

• Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);

• Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

• Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

• Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

• Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and

• Does not provide EPA with the discretionary authority to address disproportionate human health or environmental effects with practical, appropriate, and legally permissible methods under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the State, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: November 6, 2012.

Jared Blumenfeld,

Regional Administrator, Region IX.

Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart F—California

■ 2. Section 52.220 is amended by adding paragraph (c)(404)(i)(A)(*2*) to read as follows:

§ 52.220 Identification of plan.

* * * * *

(c) * * *

(404) * * *

(i) * * *

(A) * * *

(*2*) Rule 1420.1, ''Emissions Standard For Lead From Large Lead-Acid Battery Recycling Facilities,'' adopted on November 5, 2010.

* * * * *

[FR Doc. 2013–01449 Filed 1–24–13; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA–R04–OAR–2011–0043; FRL–9771–2]

Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes; Alabama; Redesignation of the Birmingham 2006 24-Hour Fine Particulate Matter Nonattainment Area to Attainment

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is taking final action to approve a request submitted on June 17, 2010, from the State of Alabama, through the Alabama Department of Environmental Management (ADEM), Air Division, to redesignate the Birmingham fine particulate matter ($PM_{2.5}$) nonattainment area (hereafter referred to as the ''Birmingham Area'' or ''Area'') to attainment for the 2006 24-hour $PM_{2.5}$ national ambient air quality standards (NAAQS). The Birmingham 2006 24-hour $PM_{2.5}$ nonattainment area is comprised of Jefferson and Shelby Counties in their entireties and a portion of Walker County. EPA's approval of the redesignation request is based on the determination that the State of Alabama has met the criteria for redesignation to attainment set forth in the Clean Air Act (CAA or Act), including the determination that the Birmingham Area has attained the 2006 24-hour $PM_{2.5}$ NAAQS. Additionally, EPA is approving a revision to the Alabama state implementation plan (SIP) to include the 2006 24-hour $PM_{2.5}$ maintenance plan for the Birmingham Area that contains the new 2024 motor vehicle emission budgets (MVEBs) for nitrogen oxides (NO_X) and $PM_{2.5}$. This action also approves the 2009 emissions inventory submitted with the maintenance plan.

DATES: *Effective Date:* This rule will be effective February 25, 2013.

ADDRESSES: EPA has established a docket for this action under Docket Identification No. EPA–R04–OAR–2011–0043. All documents in the docket are listed on the *www.regulations.gov* Web site. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through *www.regulations.gov* or in hard copy at the Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303–8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday, 8:30 to 4:30, excluding Federal holidays.

FOR FURTHER INFORMATION CONTACT: Joel Huey, Regulatory Development Section, Air Planning Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303–8960. Joel Huey may be reached by phone at (404) 562–9104 or via electronic mail at *huey.joel@epa.gov.*

SUPPLEMENTARY INFORMATION:

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V. Final Action
VI. Statutory and Executive Order Reviews

I. What is the background for the actions?

As stated in our proposed approval notice published on November 10, 2011 (76 FR 70091), this redesignation action addresses the Birmingham Area's status solely with respect to the 2006 24-hour $PM_{2.5}$ NAAQS, for which designations were finalized on November 13, 2009 (74 FR 58688). On June 17, 2010, the State of Alabama, through ADEM, submitted a request to redesignate the Birmingham Area to attainment for the 2006 24-hour $PM_{2.5}$ NAAQS and for EPA approval of the Alabama SIP revisions containing a maintenance plan for the Area. In the November 10, 2011, notice, EPA proposed to take the following three separate but related actions, some of which involve multiple elements: (1) To redesignate the Birmingham Area to attainment for the 2006 24-hour $PM_{2.5}$ NAAQS, provided EPA approves the emissions inventory submitted with the maintenance plan; (2) to approve into the Alabama SIP, under section 175A of the CAA, Alabama's 2006 24-hour $PM_{2.5}$ NAAQS maintenance plan, including the associated MVEBs; and (3) to approve, under CAA section 172(c)(3), the emissions inventory submitted with the maintenance plan. No comments were received on the proposed action. EPA is now taking final action on the three actions identified above. Additional background for today's action, and other details regarding the proposed redesignation, is set forth in EPA's November 10, 2011, proposal and is summarized below. The following information also: (1) Affirms that the most recent available ambient monitoring data continue to support this redesignation action, (2) summarizes the NO_X and $PM_{2.5}$ MVEBs for the year 2024 for the Birmingham Area, and (3) provides additional information on events that have occurred since the November 10, 2011, proposal.

With regard to the data, EPA has reviewed the most recent ambient monitoring data, which indicate that the Birmingham Area continues to attain the 2006 24-hour $PM_{2.5}$ NAAQS beyond the 3-year attainment period of 2007–2009, which was provided with Alabama's June 17, 2010, submittal and request for redesignation. As stated in EPA's November 10, 2011, proposal notice, the 3-year design values of 34 $\mu g/m^3$ for 2007–2009 and 29 $\mu g/m^3$ for 2008–2010 meet the NAAQS of 35 $\mu g/m^3$. Quality assured and certified data now in EPA's Air Quality System (AQS) for 2011 provide a 3-year design value of 27 $\mu g/m^3$ for 2009–2011. Furthermore, preliminary monitoring data for 2012 indicate that the Area is continuing to attain the 2006 24-hour $PM_{2.5}$ NAAQS. The 2012 preliminary data are available in AQS although are not yet quality assured and certified.

The MVEBs, specified in tons per day (tpd), included in the maintenance plan are as shown in Table 1 below. In the November 10, 2011, proposed action, EPA noted that the period for public comment on the adequacy of these MVEBs (as contained in Alabama's submittal) began on March 24, 2011, and closed on April 25, 2011. No comments were received during the public comment period. Through this final action, EPA is finding the 2024 NO_X and $PM_{2.5}$ MVEBs adequate for transportation conformity purposes and finalizing the approval of the budgets.

TABLE 1—BIRMINGHAM AREA $PM_{2.5}$ NO_X MVEBS
(tpd)

	$PM_{2.5}$	NO_X
2024 On-road Mobile Emissions	0.96	25.20
Safety Margin Allocated to MVEBs	0.245	23.21
2024 Conformity MVEBs	1.21	48.41

In the November 10, 2011, proposed redesignation of the Birmingham Area, EPA proposed to determine that the emission reduction requirements that contributed to attainment of the 2006 24-hour $PM_{2.5}$ standard in the nonattainment area could be considered permanent and enforceable. *See* 76 FR at 70092, 70097–70099. At the time of proposal, EPA noted that the requirements of the Clean Air Interstate Rule (CAIR),[1] which had been in place since 2005, were to be replaced, starting in 2012, by the requirements in the then recently promulgated Cross-State Air Pollution Rule (CSAPR), 76 FR 48208 (August 8, 2011). CSAPR included regulatory changes to sunset (i.e., discontinue) the CAIR requirements for control periods in 2012 and beyond. *See* 76 FR at 48322. Although Alabama's redesignation request and maintenance plan included reductions associated with CAIR, EPA proposed to approve the request based in part on the fact that CSAPR achieved similar or greater reductions in the relevant areas in 2012 and beyond. *See* 76 FR at 70092, 70097–70099. Because CSAPR requirements were expected to replace the CAIR requirements starting in 2012, EPA considered the impact of CSAPR related reductions on the Birmingham Area. On this basis, EPA proposed to determine that, pursuant to CAA section 107(d)(3)(E)(iii), the pollutant transport part of the reductions that led to attainment in the Birmingham Area could be considered permanent and enforceable. *See* 76 FR at 70092, 70097–70099.

On December 30, 2011, shortly after EPA's proposed approval of the Birmingham redesignation, the D.C. Circuit issued an order addressing the status of CSAPR and CAIR in response to motions filed by numerous parties seeking a stay of CSAPR pending judicial review. In that order, the court stayed CSAPR pending resolution of the petitions for review of that rule in *EME Homer City Generation, L.P.* v. *EPA* (No. 11–1302 and consolidated cases), also referred to as *EME Homer City.* The court also indicated that EPA was expected to continue to administer CAIR in the interim until judicial review of CSAPR was completed. Subsequently, on August 21, 2012, the D.C. Circuit issued a decision in *EME Homer City* to vacate and remand CSAPR and to keep CAIR in place. Specifically, the court ordered EPA to continue administering CAIR pending the promulgation of a valid replacement. *EME Homer City Generation, L.P.* v. *EPA,* 696 F.3d 7, 38 (D.C. Cir. 2012). The D.C. Circuit has not yet issued the final mandate in *EME Homer City* as EPA (as well as several intervenors) petitioned for rehearing *en banc,* asking the full court to review the decision. While rehearing proceedings are pending, EPA intends to act in accordance with the panel opinion in the *EME Homer City* opinion.

Subsequent to the *EME Homer City* opinion, EPA published several proposals to redesignate both particulate matter and ozone nonattainment areas to attainment. These proposals explained the legal status of CAIR and CSAPR, and provided a basis on which EPA would consider emissions reductions associated with CAIR to be permanent and enforceable for redesignation purposes, pursuant to CAA section 107(d)(3)(D)(iii). In those actions, EPA explained that in light of the August 21, 2012, order by the D.C. Circuit, CAIR remains in place and enforceable until substituted by a

[1] On May 12, 2005, EPA published CAIR, which requires significant reductions in emissions of sulfur dioxide (SO_2) and NO_X from electric generating units to limit the interstate transport of these pollutants and the ozone and fine particulate matter they form in the atmosphere. *See* 70 FR 75163. The U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) initially vacated CAIR, *North Carolina* v. *EPA,* 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded the rule to EPA without vacatur to preserve the environmental benefits provided by CAIR, *North Carolina* v. *EPA,* 550 F.3d 1176, 1178 (D.C. Cir. 2008).

''valid'' replacement rule. *See, e.g.,* 77 FR 69409 (November 19, 2012); 77 FR 68087 (November 15, 2012).

Alabama's June 17, 2010, SIP submittal supporting its redesignation request includes CAIR as a control measure, which became state-effective on April 3, 2007, and was approved by EPA on October 1, 2007, for the purpose of reducing SO_2 and NO_X emissions. *See* 72 FR 55659. Due to the legal status of CSAPR at the time that EPA proposed approval of Alabama's June 17, 2010, redesignation submittal, EPA was able to rely on CSAPR related reductions. EPA also recognized that the monitoring data used to demonstrate the Birmingham Area's attainment of the 2006 24-hour $PM_{2.5}$ NAAQS included reductions associated with CAIR. Due to the uncertainty regarding the legal status of CAIR when Alabama provided its submittal on June 17, 2010, the State's analysis assumed that no additional reductions in SO_2 or NO_X emissions from utilities would occur above and beyond those achieved through 2012 as a result of CAIR. To the extent that the Alabama submittal relies on CAIR reductions that occurred through 2012, the recent directive from the D.C. Circuit in *EME Homer City* ensures that the reductions associated with CAIR will be permanent and enforceable for the necessary time period for purposes of CAA section 107(d)(3)(E)(iii). EPA has been ordered by the court to develop a new rule, and the opinion makes clear that after promulgating that new rule EPA must provide states an opportunity to draft and submit SIPs to implement that rule. CAIR thus cannot be replaced until EPA has promulgated a final rule through a notice-and-comment rulemaking process; states have had an opportunity to draft and submit SIPs; EPA has reviewed the SIPs to determine if they can be approved; and EPA has taken action on the SIPs, including promulgating a Federal Implementation Plan, if appropriate. The court's clear instruction to EPA is that it must continue to administer CAIR until a ''valid replacement'' exists, and thus CAIR reductions may be relied upon until the necessary actions are taken by EPA and states to administer CAIR's replacement. Furthermore, the court's instruction provides an additional backstop; by definition, any rule that replaces CAIR and meets the court's direction would require upwind states to have SIPs that eliminate significant contributions to downwind nonattainment and prevent interference with maintenance in downwind areas.

Further, in deciding to vacate CSAPR and to require EPA to continue administering CAIR, the D.C. Circuit emphasized that the consequences of vacating CAIR ''might be more severe now in light of the reliance interests accumulated over the intervening four years.'' *EME Homer City,* 696 F.3d at 38. The accumulated reliance interests include the interests of states who reasonably assumed they could rely on reductions associated with CAIR, which brought certain nonattainment areas into attainment with the NAAQS. If EPA were prevented from relying on reductions associated with CAIR in redesignation actions, states would be forced to impose additional, redundant reductions on top of those achieved by CAIR. EPA believes this is precisely the type of irrational result the court sought to avoid by ordering EPA to continue administering CAIR. For these reasons also, EPA believes it is appropriate to allow states to rely on CAIR, and the existing emissions reductions achieved by CAIR, as sufficiently permanent and enforceable for purposes such as redesignation. Following promulgation of the replacement rule, EPA will review SIPs as appropriate to identify whether there are any issues that need to be addressed.

In light of these unique circumstances and for the reasons explained above, EPA is approving the redesignation request and the related SIP revision for Jefferson and Shelby Counties in their entireties and a portion of Walker County in Alabama, including Alabama's plan for maintaining attainment of the 2006 24-hour $PM_{2.5}$ NAAQS in the Birmingham Area. EPA continues to implement CAIR in accordance with current direction from the court, and thus CAIR is in place and enforceable and will remain so until substituted by a valid replacement rule. Alabama's SIP revision lists CAIR as a control measure, which became state-effective on April 3, 2007, and was approved by EPA on October 1, 2007, for the purpose of reducing SO_2 and NO_X emissions. The monitoring data used to demonstrate the Area's attainment of the 2006 24-hour $PM_{2.5}$ NAAQS by the April 2010 attainment deadline was impacted by CAIR.

II. What are the actions EPA is taking?

In today's rulemaking, EPA is approving: (1) A change to the legal designation of the Birmingham Area from nonattainment to attainment for the 2006 24-hour $PM_{2.5}$ NAAQS; (2) under CAA section 175A, Alabama's 2006 24-hour $PM_{2.5}$ NAAQS maintenance plan, including the associated MVEBs; and (3) under CAA section 172(c)(3), the emissions inventory submitted with the maintenance plan for the Area. The maintenance plan is designed to demonstrate that the Birmingham Area will continue to attain the 2006 24-hour $PM_{2.5}$ NAAQS through 2024. EPA's approval of the redesignation request is based on EPA's determination that the Birmingham Area meets the criteria for redesignation set forth in CAA, sections 107(d)(3)(E) and 175A, including EPA's determination that the Birmingham Area has attained the 2006 24-hour $PM_{2.5}$ NAAQS. EPA's analyses of Alabama's redesignation request, emissions inventory, and maintenance plan are described in detail in the November 10, 2011, proposed rule (76 FR 70091).

Consistent with the CAA, the maintenance plan that EPA is approving also includes 2024 NO_X and $PM_{2.5}$ MVEBs for the Birmingham Area. In this action, EPA is approving these NOx and $PM_{2.5}$ MVEBs for the Birmingham Area for the purposes of transportation conformity. For required regional emissions analysis years that involve 2024 or beyond, the applicable budgets will be the new 2024 NO_X and $PM_{2.5}$ MVEBs.

III. Why is EPA taking these actions?

EPA has determined that the Birmingham Area has attained the 2006 24-hour $PM_{2.5}$ NAAQS and has also determined that all other criteria for the redesignation of the Birmingham Area from nonattainment to attainment of the 2006 24-hour $PM_{2.5}$ NAAQS have been met. *See* CAA section 107(d)(3)(E). One of those requirements is that the Birmingham Area has an approved plan demonstrating maintenance of the 2006 24-hour $PM_{2.5}$ NAAQS. EPA is also taking final action to approve the maintenance plan for the Birmingham Area as meeting the requirements of sections 175A and 107(d)(3)(E) of the CAA. In addition, EPA is approving the new NO_X and $PM_{2.5}$ MVEBs for the year 2024 for the Birmingham Area as contained in Alabama's maintenance plan because these MVEBs are consistent with maintenance of the 2006 24-hour $PM_{2.5}$ standard in the Birmingham Area. Finally, EPA is approving the emissions inventory as meeting the requirements of section 172(c)(3) of the CAA. The detailed rationale for EPA's determinations and actions are set forth in the proposed rulemaking and in other discussion in this final rulemaking.

IV. What are the effects of these actions?

Approval of the redesignation request changes the legal designation of the Birmingham Area from nonattainment

to attainment for the 2006 24-hour $PM_{2.5}$ NAAQS. EPA is modifying the regulatory table in 40 CFR 81.301 to reflect a designation of attainment for these full and partial counties. EPA is also approving, as a revision to the Alabama SIP, Alabama's plan for maintaining the 2006 24-hour $PM_{2.5}$ NAAQS in the Birmingham Area through 2024. The maintenance plan includes contingency measures to remedy possible future violations of the 2006 24-hour $PM_{2.5}$ NAAQS and establishes NO_X and $PM_{2.5}$ MVEBs for the year 2024 for the Birmingham Area. Additionally, this action approves the emissions inventory for the Birmingham Area pursuant to section 172(c)(3) of the CAA.

V. Final Action

EPA is taking final action to approve three separate but related actions, some of which involve multiple elements: (1) The redesignation of the Birmingham Area to attainment for the 2006 24-hour $PM_{2.5}$ NAAQS; (2) under CAA section 175A, Alabama's 2006 24-hour $PM_{2.5}$ NAAQS maintenance plan, including the associated MVEBs; and (3) under CAA section 172(c)(3), the emissions inventory submitted with the maintenance plan for the Area. The 2006 24-hour $PM_{2.5}$ maintenance plan for the Birmingham Area includes the new 2024 NO_X and $PM_{2.5}$ MVEBs of 48.41 tpd and 1.21 tpd, respectively. Within 24 months from the effective date of EPA's adequacy determination, the transportation partners will need to demonstrate conformity to the new NO_X and $PM_{2.5}$ MVEBs pursuant to 40 CFR 93.104(e).[2]

VI. Statutory and Executive Order Reviews

Under the CAA, redesignation of an area to attainment and the accompanying approval of the maintenance plan under CAA section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those required by state law. A redesignation to attainment does not in and of itself impose any new requirements, but rather results in the application of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting federal requirements and does not impose additional requirements beyond those imposed by state law. For these reasons, these actions:

- Are not a ''significant regulatory action'' subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Are certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Do not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Do not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Are not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Are not significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Are not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and,
- Do not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this final rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the State, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 *et seq.,* as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by March 26, 2013. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. *See* section 307(b)(2).

List of Subjects

40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements, and Particulate matter.

40 CFR Part 81

Environmental protection, Air pollution control, National parks.

Dated: January 9, 2013.

Gwendolyn Keyes Fleming,

Regional Administrator, Region 4.

40 CFR parts 52 and 81 are amended as follows:

PART 52—[AMENDED]

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart B—Alabama

■ 2. Section 52.50(e) is amended by adding a new entry for ''2006 24-hour $PM_{2.5}$ Maintenance Plan for the Birmingham Area'' at the end of the table to read as follows:

[2] The adequacy finding becomes effective upon the date of publication of this notice in the **Federal Register**. 40 CFR 93.118(f)(2)(iii).

§ 52.50 Identification of plan.

(e) * * *

* * * * *

EPA-APPROVED ALABAMA NON-REGULATORY PROVISIONS

Name of non-regulatory SIP provision	Applicable geographic or non-attainment area	State submittal date/effective date	EPA approval date	Explanation
*	* *	*	*	* *
2006 24-hour $PM_{2.5}$ Maintenance Plan for the Birmingham Area.	Birmingham $PM_{2.5}$ Nonattainment Area.	6/17/10	1/25/13 [Insert citation of publication].	

PART 81—[AMENDED]

■ 3. The authority citation for part 81 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 4. In § 81.301, the table entitled ''Alabama—$PM_{2.5}$ (24-hour NAAQS)'' is amended under ''Birmingham, AL'' by revising the entries for ''Jefferson County'', ''Shelby County'', and ''Walker County (part)'' to read as follows:

§ 81.301 Alabama.

* * * * *

ALABAMA—$PM_{2.5}$ (24-HOUR NAAQS)

Designation area	Designation for the 1997 NAAQS [a]		Designation for the 2006 NAAQS [a]	
	Date [1]	Type	Date [2]	Type
Birmingham, AL:				
Jefferson County		Unclassifiable/Attainment	This action is effective 1/25/13	Attainment.
Shelby County		Unclassifiable/Attainment	This action is effective 1/25/13	Attainment.
Walker County (part). The area described by U.S. Census 2000 block group identifiers 01–127–0214–5, 01–127–0215–4, and 01–127–0216–2.		Unclassifiable/Attainment	This action is effective 1/25/13	Attainment.
* *	*	*	* *	*

[a] Includes Indian Country located in each county or area, except as otherwise specified.
[1] This date is 90 days after January 5, 2005, unless otherwise noted.
[2] This date is 30 days after November 13, 2009, unless otherwise noted.

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[FR Doc. 2013–01209 Filed 1–24–13; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

47 CFR Part 301

[Docket No. 120620177–2445–02]

RIN 0660–AA26

Relocation of and Spectrum Sharing by Federal Government Stations—Technical Panel and Dispute Resolution Boards

AGENCY: National Telecommunications and Information Administration, Commerce.

ACTION: Final rule.

SUMMARY: The National Telecommunications and Information Administration (NTIA) adopts regulations governing the Technical Panel and dispute resolution process established by Congress to facilitate the relocation of, and spectrum sharing with, U.S. Government stations in spectrum bands reallocated from Federal use to non-Federal use or to shared use. This action is necessary to ensure the timely relocation of Federal entities' spectrum-related operations and, where applicable, the timely implementation of arrangements for the sharing of radio frequencies. Specifically, this action implements certain additions and modifications to the NTIA Organization Act as amended by the Middle Class Tax Relief and Job Creation Act of 2012 (the Tax Relief Act). As required by the Tax Relief Act, this rule has been reviewed and approved by the Director of the Office of Management and Budget (OMB).

DATES: These regulations become effective February 25, 2013.

ADDRESSES: A complete set of public comments filed in response to the *Notice of Proposed Rulemaking* is available for public inspection at the Office of the Chief Counsel, National Telecommunications and Information Administration, Room 4713, U.S. Department of Commerce, 1401 Constitution Avenue NW., Washington, DC.[1] The public comments can also be viewed electronically at *http://www.ntia.doc.gov/federal-register-notice/2012/comments-technical-panel-and-dispute-resolution-board-nprm.*

FOR FURTHER INFORMATION CONTACT: Milton Brown, NTIA, (202) 482–1816.

SUPPLEMENTARY INFORMATION:

Authority: National Telecommunications and Information Administration Organization Act, 47 U.S.C. 901 *et seq.,* as amended by the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. 112–96, Title VI, Subtitle G, 126 Stat. 245 (Feb. 22, 2012) (47 U.S.C. 923(g)–(i), 928).

[1] *See* Relocation of and Spectrum Sharing by Federal Government Stations—Technical Panel and Dispute Resolution Board, *Notice of Proposed Rulemaking,* Docket No. 110627357–2209–03, 77 FR 41956 (July 17, 2012) (*NPRM*).

Appendix F

Non-Exempt Project (High Capacity Project) Listings by Conformity Analysis Year, then by Sponsor, then by MAP ID, and Visionary Project Listings

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Non-Exempt Projects (Highway Capacity Projects)
2045 Regional Transportation Plan

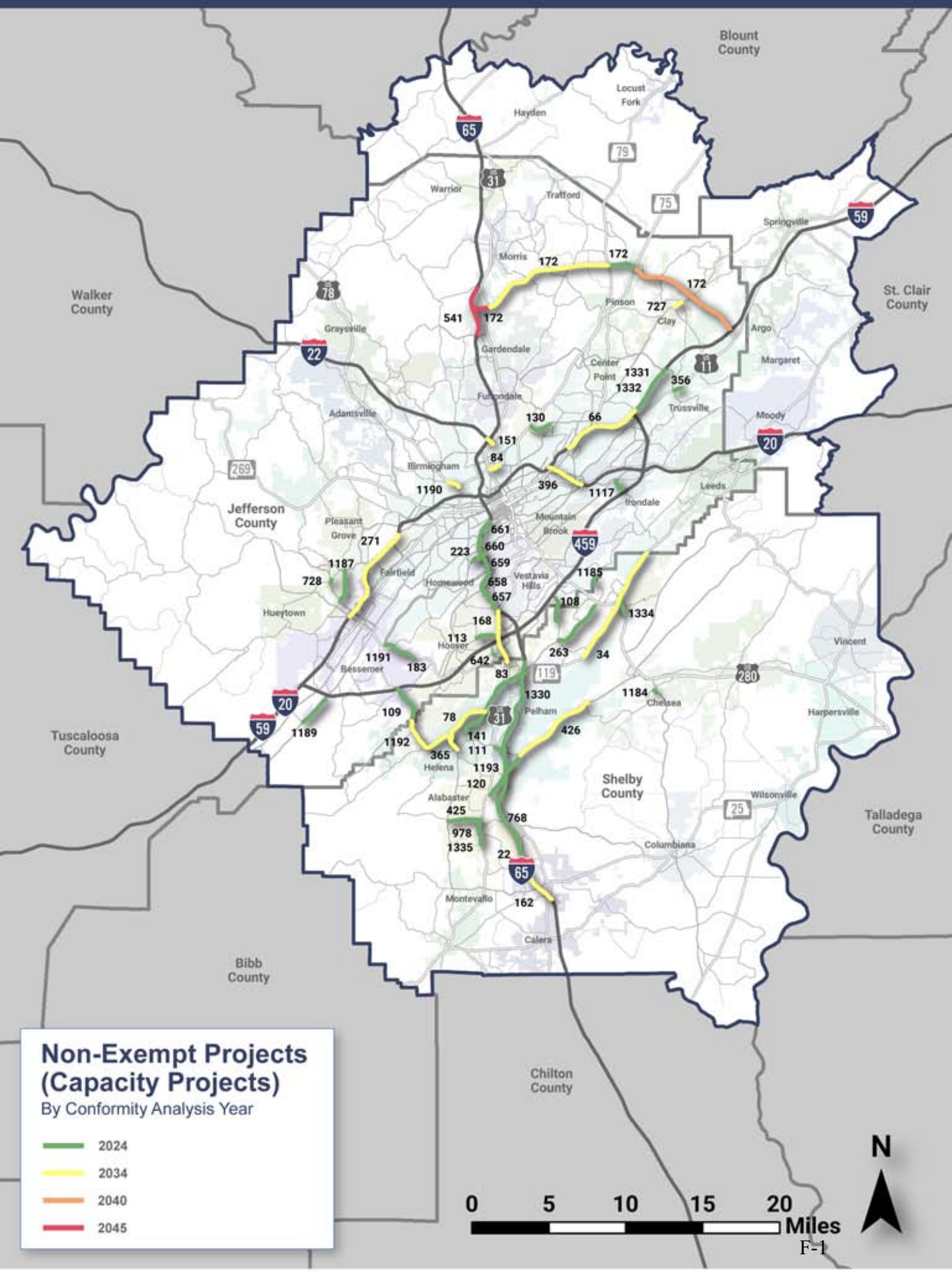

TABLE 1. Non-Exempt Projects (Highway Capacity Projects), 2045 Regional Transportation Plan sorted by Analysis Year, then by sponsor, then by MAP ID

Sponsor	MAP (MPO) ID	Project Descriptions	Lane Before	Lane After	Length	Proposed Fiscal Year	Regional Significant	Conformity Analysis Years	TELUS Table #	ALDOT Project #	Scope	Type of Work	Funding Program	Total Cost (Year of Expenditure)	Federal Cost (Year of Expenditure)	Total Cost (2015 $)	Federal Cost (2015 $)
														$2,701,879,410	$2,477,792,817	$2,301,086,891	$2,096,787,033
Alabaster	978	Additional Lanes on SR-119 from Butler Road to CR-26 (Fulton Springs Road) - Phase 1	2	4	1.06	2019	Yes	2024	1	100061286	RW	Additional Roadway Lanes	STPBH	$2,000,000	$1,600,000	$1,921,961	$1,537,569
Alabaster	978	Additional Lanes on SR-119 from Butler Road to CR-26 (Fulton Springs Road) - Phase 1	2	4	1.06	2019	Yes	2024	1	100063109	UT	Additional Roadway Lanes	STPBH	$1,000,000	$800,000	$960,980	$768,784
Alabaster	978	Additional Lanes on SR-119 from Butler Road to CR-26 (Fulton Springs Road) - Phase 1	2	4	1.06	2020	Yes	2024	2	100061118	CN	Additional Roadway Lanes	ATRIPS	$9,664,310	$7,731,448	$9,195,259	$7,356,207
Alabaster	1335	Additional Lanes on SR-119 from CR-80 (Mission Hills Road) to Butler Road - Phase 2	2	4	0.63	2024	Yes	2024	2	500000594	RW	Additional Roadway Lanes	STPAA	$2,000,000	$1,600,000	$1,828,680	$1,462,944
Alabaster	1335	Additional Lanes on SR-119 from CR-80 (Mission Hills Road) to Butler Road - Phase 2	2	4	0.63	2024	Yes	2024	2	500000595	UT	Additional Roadway Lanes	STPAA	$1,000,000	$800,000	$914,340	$731,472
Alabaster	1335	Additional Lanes on SR-119 from CR-80 (Mission Hills Road) to Butler Road - Phase 2	2	4	0.63	2024	Yes	2024	2	500000596	CN	Additional Roadway Lanes	STPAA	$10,000,000	$8,000,000	$9,143,398	$7,314,719
ALDOT	22	I-65 Add Lanes From CR-87 (Exit 234) North to US-31 (Exit 238) in Alabaster	4	8	4.52	2024	Yes	2024	3	100044964	UT	Utility Adjustment	NHPP	$153,945	$123,156	$140,758	$112,606
ALDOT	22	I-65 Add Lanes From CR-87 (Exit 234) North to US-31 (Exit 238) in Alabaster	4	8	4.52	2024	Yes	2024	3	100044963	CN	Additional Roadway Lanes	NHPP	$86,362,296	$69,089,837	$78,964,487	$63,171,589
ALDOT	83	Additional Lanes on CR-17 (Valleydale Rd.) From SR-3 (US-31) to Riverchase Parkway East	2	4	0.75	2019	Yes	2024	3	100046237	RW	Additional Roadway Lanes	NHPP	$3,952,765	$3,162,212	$3,798,529	$3,038,824
ALDOT	83	Additional Lanes on CR-17 (Valleydale Rd.) From SR-3 (US-31) to Riverchase Parkway East	2	4	0.75	2020	Yes	2024	3	100046238	UT	Utility Adjustment	NHPP	$691,127	$552,902	$657,584	$526,067
ALDOT	83	Additional Lanes on CR-17 (Valleydale Rd.) From SR-3 (US-31) to Riverchase Parkway East	2	4	0.75	2020	Yes	2024	3	100046239	CN	Additional Roadway Lanes	NHPP	$3,935,830	$3,148,664	$3,744,807	$2,995,846
ALDOT	111	Pelham TOPICS, Widen CR 52 from I-65 to US 31 from 3-lane to 4-lane	3	4	1.10	2019	Yes	2024	1	100039450	CN	Additional Roadway Lanes	STPBH	$561,262	$449,010	$539,362	$431,489
ALDOT	141	Add Lanes SR-261 From Bearden Rd to SR-3 (US-31)	2	4	2.60	2021	No	2024	2	100046437	UT	Utility Adjustment	STPAA	$1,726,056	$1,380,845	$1,626,023	$1,300,818
ALDOT	141	Add Lanes SR-261 From Bearden Rd to SR-3 (US-31)	2	4	2.60	2022	No	2024	2	100009265	CN	Additional Roadway Lanes	STPAA	$27,965,274	$22,372,219	$26,083,716	$20,866,973
ALDOT	172	SR-959 (Birmingham Northern Beltline) Construct a 4-Lane Expressway from SR-79 to SR-75	0	4	2.78	2024	Yes	2024	3	500000593	CN	New Road	NHPP	$84,082,524	$84,082,524	$76,880,000	$76,880,000
ALDOT	183	SR-150 from West of CR-6 (Parkwood Rd) to West of Shades Creek (Phase 2)	2	4	2.35	2020	no	2024	7	100025540	CN	Add lanes	Local	$9,948,348	$0	$9,465,512	$0
ALDOT	657	I-65 Auxiliary Lanes From US 31 to Alford Avenue	6	8	1.72	2024	Yes	2024	3	500000309	CN	Additional Roadway Lanes	NHPP	$24,080,000	$19,264,000	$22,017,303	$17,613,842
ALDOT	658	I-65 Auxiliary Lanes From Alford Avenue to Lakeshore Parkway	6	8	1.38	2024	Yes	2024	3	500000310	CN	Additional Roadway Lanes	NHPP	$19,320,000	$15,456,000	$17,665,045	$14,132,036
ALDOT	659	I-65 Auxiliary Lanes From Lakeshore Parkway to Oxmoor Road	6	8	1.04	2024	Yes	2024	3	500000312	CN	Additional Roadway Lanes	NHPP	$14,560,000	$11,648,000	$13,312,788	$10,650,230
ALDOT	660	I-65 Auxiliary Lanes From Oxmoor Road to Greensprings Avenue	6	8	1.43	2024	Yes	2024	3	500000313	CN	Additional Roadway Lanes/Bridge	NHPP	$20,020,000	$16,016,000	$18,305,083	$14,644,067
ALDOT	661	I-65 Auxiliary Lanes From Greensprings Road to University Blvd	6	8	1.26	2024	Yes	2024	3	500000314	CN	Additional Roadway Lanes	NHPP	$17,640,000	$14,112,000	$16,128,954	$12,903,164
ALDOT	768	Bridge Widening on I-65 South of SR-3 (US-31) In Alabaster Bin #006489 and #006490 over L & N RR, Bin #006491 and #006492 over CR-26 and Bin #006493 and #006494 over L & N RR/CR-87	4	8	0.54	2020	Yes	2024	6	100055334	PE	Bridge Widening	BR	$1,441,660	$1,153,328	$1,371,690	$1,097,352

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Sponsor	MAP (MPO) ID	Project Descriptions	Lane Before	Lane After	Length	Proposed Fiscal Year	Regional Significant	Conformity Analysis Years	TELUS Table #	ALDOT Project #	Scope	Type of Work	Funding Program	Total Cost (Year of Expenditure)	Federal Cost (Year of Expenditure)	Total Cost (2015 $)	Federal Cost (2015 $)
														$2,701,879,410	$2,477,792,817	$2,301,086,891	$2,096,787,033
ALDOT	768	Bridge Widening on I-65 South of SR-3 (US-31) In Alabaster Bin #006489 and #006490 over L & N RR, Bin #006491 and #006492 over CR-26 and Bin #006493 and #006494 over L & N RR/CR-87	4	8	0.54	2022	Yes	2024	6	100055335	CN	Bridge Widening	BR	$13,568,571	$10,854,857	$12,655,651	$10,124,521
ALDOT	1191	SR-150 from Morgan Rd at Bessemer to MP 4.3 W of Parkwood Rd. Phase I	2	4	2.03	2020	no	2024	7	100025539	CN	Add lanes	Local	$10,000,000	$0	$9,514,657	$0
ALDOT	1193	I-65 Add Lanes From SR-3 (US-31) Exit 238 North to CR-52 Exit 242 (8-Ln) (Phase 2)	4	8	3.53	2018	Yes	2024	3	100044672	CN	Additional Roadway Lanes	NHPP	$81,644,623	$65,315,698	$79,243,467	$63,394,773
ALDOT	1193	I-65 Add Lanes From SR-3 (US-31) Exit 238 North to CR-52 Exit 242 (8-Ln) (Phase 2)	4	8	3.53	2018	Yes	2024	3	100044672	CN	Additional Roadway Lanes	NHPP	$7,099,532	$5,679,626	$6,890,736	$5,512,589
ALDOT	1330	I-65 Add Lanes (Restripe) From Cahaba River Bridges to CR-52 Exit 242 (8-Ln)	6	8	6.56	2024	Yes	2024	3	500000585	CN	Additional Roadway Lanes	NHPP	$2,000,000	$1,600,000	$1,828,680	$1,462,944
ALDOT	1331	I-59 Add Lanes From I-459 to Chalkville Road (Improved Shoulder)	4	6	2.10	2024	Yes	2024	3	500000586	CN	Additional Roadway Lanes	NHPP	$5,000,000	$4,000,000	$4,571,699	$3,657,359
ALDOT	1334	US-280 Add Lanes From SR-119 to Doug Baker Blvd. (restripe right turn pockets)	4	6	0.90	2024	Yes	2024	2	500000588	CN	Additional Roadway Lanes	STPAA	$4,000,000	$3,200,000	$3,657,359	$2,925,887
ALDOT/ Trussville	356	Widen SR-7 (US-11) From End of 5-Lane Facility, East of Chalkville Rd to The Cahaba River Bridge	4	4	0.44	2019	No	2024	1	100039839	CN	Turn Lanes	STPBH	$2,561,813	$2,049,450	$2,461,852	$1,969,482
Homewood	223	Oxmoor Blvd-Green Springs to Barber Court. Intersection Improvements At Barber Ct. and Oxmoor Rd.	4	6	1.10	2019	No	2024	1	100029563	RW	Intersection Improvements	STPBH	$304,163	$243,331	$292,295	$233,836
Homewood	223	Oxmoor Blvd-Green Springs to Barber Court. Intersection Improvements At Barber Ct. and Oxmoor Rd.	4	6	1.10	2020	No	2024	1	100029566	UT	Intersection Improvements	STPBH	$822,457	$657,966	$782,540	$626,032
Homewood	223	Oxmoor Blvd-Green Springs to Barber Court. Intersection Improvements At Barber Ct. and Oxmoor Rd.	4	6	1.10	2021	No	2024	1	100029510	CN	Intersection Improvements	STPBH	$4,496,251	$3,597,001	$4,235,672	$3,388,537
Hoover	263	Valleydale Rd(CR-17) (Caldwell Mill to Inverness Center)	2	4	3.50	2018	No	2024	1	100033067	UT	Additional Roadway Lanes	STPBH	$3,244,800	$2,595,840	$3,149,371	$2,519,497
Hoover	263	Valleydale Rd(CR-17) (Caldwell Mill to Inverness Center)	2	4	3.50	2019	No	2024	1	100033064	CN	Additional Roadway Lanes	STPBH	$12,764,692	$10,211,753	$12,266,618	$9,813,294
Hueytown	1187	Brooklane Dr. from Allison Bonnett to 19th St/Hueytown Rd	2	2	2.20	2024	No	2024	1	500000581	PE	Aligning & Adding Lanes	STPBH	$250,000	$200,000	$228,585	$182,868
Hueytown	1187	Brooklane Dr. from Allison Bonnett to 19th St/Hueytown Rd	2	2	2.20	2024	No	2024	1	500000581	RW	Aligning & Adding Lanes	STPBH	$500,000	$400,000	$457,170	$365,736
Hueytown	1187	Brooklane Dr. from Allison Bonnett to 19th St/Hueytown Rd	2	2	2.20	2024	No	2024	1	500000581	UT	Aligning & Adding Lanes	STPBH	$250,000	$200,000	$228,585	$182,868
Hueytown	1187	Brooklane Dr. from Allison Bonnett to 19th St/Hueytown Rd	2	2	2.20	2024	No	2024	1	500000581	CN	Aligning & Adding Lanes	STPBH	$4,000,000	$3,200,000	$3,657,359	$2,925,887
Jefferson County	108	CR-29 (Caldwell Mill Rd), From Heatherwood Rd. (CR-370) to Acton Rd.(CR-2311) Widen and Bridge Replacement over Cahaba River	2	2	4.00	2018	No	2024	1	100045964	RW	Bridge Replacement	STPBH	$5,343,053	$4,274,442	$5,185,914	$4,148,732
Jefferson County	108	CR-29 (Caldwell Mill Rd), From Heatherwood Rd. (CR-370) to Acton Rd.(CR-2311) Widen and Bridge Replacement over Cahaba River	2	2	4.00	2019	No	2024	1	100007540	CN	Bridge Replacement	STPBH	$1,985,818	$1,588,654	$1,908,332	$1,526,665
Jefferson County	109	Morgan Rd (CR-52),I-459 to South Shades Crest Rd(CR-2)	2	4	2.47	2019	No	2024	1	100007542	CN	Intersection Improvements	STPBH	$12,383,363	$9,906,690	$11,900,168	$9,520,135
Jefferson County	113	Hoover Topics Phase 3, Patton Chapel Rd	2	2	1.50	2019	No	2024	1	100007555	CN	Turn Lanes	STPBH	$2,520,645	$2,016,516	$2,422,291	$1,937,832
Jefferson County	130	Jefferson County Topics - Phase 9 (Tarrant -Huffman Rd.)	2	2	1.60	2021	No	2024	1	100007609	CN	Additional Roadway Lanes	STPBH	$4,614,095	$3,691,276	$4,346,686	$3,477,349

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														$2,701,879,410	$2,477,792,817	$2,301,086,891	$2,096,787,033
Jefferson County	642	Galleria Blvd Extension from South Lorna Road to SR 150	0	2	0.44	2017	No	2024	1	100056487	RW	new Roadways	STPBH	$4,356,000	$3,484,800	$4,270,170	$3,416,136
Jefferson County	642	Galleria Blvd Extension from South Lorna Road to SR 150	0	2	0.44	2020	No	2024	1	100056488	UT	new Roadways	STPBH	$500,000	$400,000	$475,733	$380,586
Jefferson County	642	Galleria Blvd Extension from South Lorna Road to SR 150	0	2	0.44	2020	No	2024	1	100056489	CN	new Roadways	STPBH	$4,000,000	$3,200,000	$3,805,863	$3,044,690
Jefferson County	728	Hueytown Rd-Virginia Dr Intersection Improvements - Add Lanes and Sidewalk	2	4	0.70	2014	No	2024	1	100056287	PE	Aligning & Adding Lanes	STPBH	$150,000	$120,000	$150,000	$120,000
Jefferson County	728	Hueytown Rd-Virginia Dr Intersection Improvements - Add Lanes and Sidewalk	2	4	0.70	2017	No	2024	1	100056288	RW	Aligning & Adding Lanes	STPBH	$250,000	$200,000	$245,074	$196,059
Jefferson County	728	Hueytown Rd-Virginia Dr Intersection Improvements - Add Lanes and Sidewalk	2	4	0.70	2019	No	2024	1	100056289	UT	Aligning & Adding Lanes	STPBH	$250,000	$200,000	$240,245	$192,196
Jefferson County	728	Hueytown Rd-Virginia Dr Intersection Improvements - Add Lanes and Sidewalk	2	4	0.70	2020	No	2024	1	100056290	CN	Aligning & Adding Lanes	STPBH	$1,500,000	$1,200,000	$1,427,199	$1,141,759
Jefferson County	1117	Grants Mill Road from Old Leeds Road to Grantswood Road	2	4	0.80	2022	No	2024	7	500000601	CN	Additional Roadway Lanes	Local	$8,106,036	$0	$7,560,646	$0
Jefferson County	1189	Eastern Valley Rd from McAshan Dr to Letson Farm Pkwy	2	2	2.10	2020	No	2024	1	100064231	PE	Add lanes from 2 to 3	STPBH	$600,000	$480,000	$570,879	$456,704
Jefferson County	1189	Eastern Valley Rd from McAshan Dr to Letson Farm Pkwy	2	2	2.10	2024	No	2024	1	100064232	RW	Add lanes from 2 to 3	STPBH	$2,000,000	$1,600,000	$1,828,680	$1,462,944
Jefferson County	1189	Eastern Valley Rd from McAshan Dr to Letson Farm Pkwy	2	2	2.10	2024	No	2024	1	100064233	UT	Add lanes from 2 to 3	STPBH	$1,700,000	$1,360,000	$1,554,378	$1,243,502
Jefferson County	1189	Eastern Valley Rd from McAshan Dr to Letson Farm Pkwy	2	2	2.10	2024	No	2024	1	100064234	CN	Add lanes from 2 to 3	STPBH	$6,306,060	$5,044,848	$5,765,882	$4,612,705
Shelby County	120	Shelby CR-11 From US-31 to East Weatherly Entrance (Henderson Rd.). Widen 2 to 3 Lanes	2	2	3.20	2024	No	2024	1	100007575	PE	Widening and Resurfacing (Roadway)	STPBH	$237,952	$190,362	$217,569	$174,055
Shelby County	120	Shelby CR-11 From US-31 to East Weatherly Entrance (Henderson Rd.). Widen 2 to 3 Lanes	2	2	3.20	2024	No	2024	1	100007576	RW	Widening and Resurfacing (Roadway)	STPBH	$2,421,139	$1,936,911	$2,213,744	$1,770,995
Shelby County	120	Shelby CR-11 From US-31 to East Weatherly Entrance (Henderson Rd.). Widen 2 to 3 Lanes	2	2	3.20	2024	No	2024	1	100007577	UT	Widening and Resurfacing (Roadway)	STPBH	$1,204,078	$963,262	$1,100,936	$880,749
Shelby County	120	Shelby CR-11 From US-31 to East Weatherly Entrance (Henderson Rd.). Widen 2 to 3 Lanes	2	2	1.61	2024	No	2024	1	100007572	CN	Widening and Resurfacing (Roadway)	STPBH	$3,847,719	$3,078,175	$3,518,123	$2,814,498
Shelby County	425	CR-26 (Kent Dairy Rd.), From CR-17 to Kentwood Dr., Widen 2 to 3 Lanes	2	2	1.20	2024	No	2024	1	500000075	CN	Additional Roadway Lanes	STPBH	$3,000,000	$2,400,000	$2,743,019	$2,194,416
Shelby County	1184	County Road 47/39 Reconfiguration - Chelsea	0	2	0.20	2020	No	2024	16	500000574	CN	Add lanes	Local	$3,000,000	$0	$2,854,397	$0
Shelby County	1185	Cahaba Beach Rd from 0.2 mile w of Swan Dr. in Shelby County to Sicard Hollow Rd	0	2	0.30	2019	No	2024	2	100059534	CN	Add lanes/Bridge	ATRIPS	$4,000,000	$3,200,000	$3,843,921	$3,075,137
ALDOT	34	SR-119 From South of Oak Mountain Elementary to North of Greystone Way	2	4	5.10	2024	No	2034	2	100009241	RW	Grade, Drain, Base and Pave	STPAA	$11,612,000	$9,289,600	$10,617,314	$8,493,851
ALDOT	34	SR-119 From South of Oak Mountain Elementary to North of Greystone Way	2	4	5.10	2024	No	2034	2	100044918	UT	Utility Adjustment	STPAA	$468,000	$374,400	$427,911	$342,329
ALDOT	34	SR-119 From South of Oak Mountain Elementary to North of Greystone Way	2	4	5.10	2024	No	2034	2	100009238	CN	Grade, Drain, Base and Pave	STPAA	$49,904,455	$39,923,564	$45,629,631	$36,503,705
ALDOT	66	I-59 From MP 132.16 @ 1st Av North to MP 137.19 @ I-459 (4 to 6 Lanes)	4	6	4.99	2024	Yes	2034	3	100064120	PE	Additional Roadway Lanes	NHPP	$2,102,020	$1,681,616	$1,921,961	$1,537,568
ALDOT	66	I-59 From MP 132.16 @ 1st Av North to MP 137.19 @ I-459 (4 to 6 Lanes)	4	6	4.99	2026	Yes	2034	3	100045051	UT	Utility Adjustment	NHPP	$146,186	$116,949	$131,030	$104,824

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														$2,701,879,410	$2,477,792,817	$2,301,086,891	$2,096,787,033
ALDOT	66	I-59 From MP 132.16 @ 1st Av North to MP 137.19 @ I-459 (4 to 6 Lanes)	4	6	4.99	2027	Yes	2034	3	100004982	CN	Additional Roadway Lanes	NHPP	$48,826,084	$39,060,867	$43,330,670	$34,664,536
ALDOT	151	Corridor "X" From East of I-65 to US-31	0	6	0.40	2025	Yes	2034	3	100059531	CN	Grade, Drain, Base, Pave & Bridge	NHPP	$20,100,091	$19,704,040	$18,196,350	$17,837,810
ALDOT	151	Corridor "X" From East of I-65 to US-31	0	6	0.40	2025	Yes	2034	3	100045131	CN	Grade, Drain, Base, Pave & Bridge	NHPP	$26,564,938	$21,251,950	$24,048,892	$19,239,113
ALDOT	162	I-65 Add Lanes From US-31 (Exit 231) in Calera to CR-87 (Exit 234)	4	8	2.74	2031	Yes	2034	3	100047786	UT	Utility Adjustment	NHPP	$92,056	$73,645	$78,507	$62,806
ALDOT	162	I-65 Add Lanes From US-31 (Exit 231) in Calera to CR-87 (Exit 234)	4	8	2.74	2032	Yes	2034	3	100047486	CN	Additional Roadway Lanes	NHPP	$48,087,145	$38,469,716	$40,603,703	$32,482,962
ALDOT	168	US-31 From Riverchase Parkway to I-65	4	6	3.21	2030	Yes	2034	2	100042145	RW	Additional Roadway Lanes	STPAA	$3,202,000	$2,561,600	$2,758,041	$2,206,433
ALDOT	168	US-31 From Riverchase Parkway to I-65	4	6	3.21	2031	Yes	2034	2	100047490	UT	Utility Adjustment	STPAA	$1,385,000	$1,108,000	$1,181,157	$944,926
ALDOT	168	US-31 From Riverchase Parkway to I-65	4	6	2.47	2032	Yes	2034	2	100009260	CN	Additional Roadway Lanes	STPAA	$15,377,000	$12,301,600	$12,983,993	$10,387,194
ALDOT	172	SR-959 (Birmingham Northern Beltline) Convert from 4-Lane Expressway to a 6-Lane Interstate from SR-79 to SR-75	4	6	2.78	2032	Yes	2034	2	500000597	CN	New Road	GARVEE	$99,016,141	$99,016,141	$83,607,000	$83,607,000
ALDOT	172	SR-959 (Birmingham Northern Beltline) Construct a 6-Lane Interstate from US-31 to SR-79	0	6	8.83	2030	Yes	2034	2	500000598	CN	New Road	GARVEE	$373,756,541	$373,756,541	$321,935,000	$321,935,000
ALDOT	271	I-59 From 18th/19th Street(Exit 112) to Valley Rd.(Exit 118)	4	6	6.27	2026	Yes	2034	3	100039736	RW	Additional Roadway Lanes	NHPP	$383,341	$306,673	$343,598	$274,878
ALDOT	271	I-59 From 18th/19th Street(Exit 112) to Valley Rd.(Exit 118)	4	6	6.27	2027	Yes	2034	3	100047791	UT	Utility Adjustment	NHPP	$74,460	$59,568	$66,079	$52,864
ALDOT	271	I-59 From 18th/19th Street(Exit 112) to Valley Rd.(Exit 118)	4	6	6.27	2028	Yes	2034	3	100033203	CN	Additional Roadway Lanes	NHPP	$33,347,279	$26,677,823	$29,301,007	$23,440,805
ALDOT	396	Widen I-20, 4 to 6 Lanes, From I-59 Interchange to Montevallo Road (Exit 132B) and Interchange	4	6	2.25	2025	Yes	2034	3	500000037	CN	Additional Roadway Lanes	NHPP	$71,106,160	$56,884,928	$64,371,479	$51,497,183
ALDOT	1190	SR-5 (US-78) Add Lanes From Finley Blvd to Pratt Hwy (2nd St) (Phase 2)	4	6	0.81	2025	Yes	2034	3	100044952	RW	Additional Roadway Lanes	NHPP	$4,177,168	$3,341,734	$3,781,536	$3,025,229
ALDOT	1190	SR-5 (US-78) Add Lanes From Finley Blvd to Pratt Hwy (2nd St) (Phase 2)	4	6	0.81	2026	Yes	2034	3	100044953	UT	Utility Adjustment	NHPP	$1,525,273	$1,220,219	$1,367,139	$1,093,711
ALDOT	1190	SR-5 (US-78) Add Lanes From Finley Blvd to Pratt Hwy (2nd St) (Phase 2)	4	6	0.81	2027	Yes	2034	3	100044951	CN	Additional Roadway Lanes	NHPP	$8,304,051	$6,643,241	$7,369,424	$5,895,539
ALDOT	1332	I-59 Add Lanes From I-459 to Chalkville Road (widen to 8 lanes)	6	8	3.20	2030	Yes	2034	3	500000589	CN	Additional Roadway Lanes	NHPP	$44,800,000	$35,840,000	$38,588,456	$30,870,765
ALDOT/ Helena	78	Helena Bypass From CR-52 West of Helena to SR-261 North of Helena	0	4	5.90	2013	No	2034	14	100049207	PE	Grade, Drain, Base, Pave & Bridge	HPP	$632,660	$506,128	$632,660	$506,128
ALDOT/ Helena	78	Helena Bypass From CR-52 West of Helena to SR-261 North of Helena	0	4	5.90	2021	No	2034	14	100049209	RW	Grade, Drain, Base, Pave & Bridge	HPP	$2,431,056	$1,944,845	$2,290,165	$1,832,132
ALDOT/ Helena	78	Helena Bypass From CR-52 West of Helena to SR-261 North of Helena	0	4	5.90	2022	No	2034	14	100049210	UT	Utility Adjustment	HPP	$145,986	$116,789	$136,164	$108,931
ALDOT/ Helena	78	Helena Bypass From CR-52 West of Helena to SR-261 North of Helena	0	4	5.90	2024	No	2034	14	100049211	CN	Grade, Drain, Base, Pave & Bridge	HPP	$5,656,656	$4,525,325	$5,172,106	$4,137,685

TABLE 1. Non-Exempt Projects (Highway Capacity Projects), 2045 Regional Transportation Plan sorted by Analysis Year, then by sponsor, then by MAP ID

Sponsor	MAP (MPO) ID	Project Descriptions	Lane Before	Lane After	Length	Proposed Fiscal Year	Regional Significant	Conformity Analysis Years	TELUS Table #	ALDOT Project #	Scope	Type of Work	Funding Program	Total Cost (Year of Expenditure)	Federal Cost (Year of Expenditure)	Total Cost (2015 $)	Federal Cost (2015 $)
														$2,701,879,410	$2,477,792,817	$2,301,086,891	$2,096,787,033
ALDOT/ Helena	78	Helena Bypass From CR-52 West of Helena to SR-261 North of Helena	0	4	5.90	2024	No	2034	2	100049211	CN	Grade, Drain, Base, Pave & Bridge	STPAA	$20,375,982	$16,300,786	$18,630,572	$14,904,457
Birmingham	84	Finley Ave Extension From SR-3(US-31/26th Street) to Fred Shuttlesworth Drive, Phase 1, (Phase 2 and Phase 3, Continuing to SR-79)	0/2	4	0.70	2025	No	2034	1	100046959	CN	Grade and Drain	STPBH	$24,853,086	$19,882,469	$22,499,175	$17,999,340
Clay	727	Old Springville Rd (CR-30) Intersection Improvements	2	2	0.98	2024	No	2034	1	100056273	RW	Adding Turn Lanes	STPBH	$2,550,000	$2,040,000	$2,331,567	$1,865,253
Clay	727	Old Springville Rd (CR-30) Intersection Improvements	2	2	0.98	2024	No	2034	1	100056275	UT	Adding Turn Lanes	STPBH	$1,410,000	$1,128,000	$1,289,219	$1,031,375
Clay	727	Old Springville Rd (CR-30) Intersection Improvements	2	2	0.98	2024	No	2034	1	100056276	CN	Adding Turn Lanes	STPBH	$4,850,000	$3,880,000	$4,434,548	$3,547,639
Shelby County	426	CR-11 From CR-52 Intersection to CR-36. Widen 2 to 5 Lanes	2	4	5.70	2032	No	2034	1	500000076	CN	Additional Roadway Lanes	STPBH	$28,972,279	$23,177,823	$24,463,540	$19,570,832
Shelby County/Helena/ Hoover	365	Morgan Rd (CR-52), From CR-13 to SR-261. Widen 2 to 5 Lanes,	2	4	2.92	2025	No	2034	1	500000048	CN	Additional Roadway Lanes	STPBH	$8,539,871	$6,831,897	$7,731,034	$6,184,827
Shelby County/Helena/ Hoover	1192	Morgan Rd (CR-52), From South Shades Crest to CR-13. Widen 2 to 5 Lanes,	2	4	2.03	2028	No	2034	1	500000049	CN	Additional Roadway Lanes	STPBH	$9,236,724	$7,389,379	$8,115,964	$6,492,771
ALDOT	172	SR-959 (Birmingham Northern Beltline) Construct a 6-Lane Interstate from SR-75 to I-59	0	6	7.74	2035	Yes	2040	2	500000599	CN	New Road	GARVEE	$534,706,799	$534,706,799	$438,216,000	$438,216,000
ALDOT	172	SR-959 (Birmingham Northern Beltline) Construct a 6-Lane Interstate from I-65 to US-31	0	6	1.05	2041	Yes	2045	2	500000600	CN	New Road	GARVEE	$595,982,143	$595,982,143	$460,126,800	$460,126,800
ALDOT	541	Addition of Acceleration and Deceleration Lanes on I-65 For The Connection With SR-959 (Birmingham Northern Beltline) Between CR-112 (Mt. Olive Rd)	6	8	3.47	2040	Yes	2045	2	500000590	RW	Grade, Drain, Base, Pave & Bridge	GARVEE	$253,064	$202,451	$197,331	$157,865
ALDOT	541	Addition of Acceleration and Deceleration Lanes on I-65 For The Connection With SR-959 (Birmingham Northern Beltline) Between CR-112 (Mt. Olive Rd) and CR-2637 (Mary Buckelew Parkway)	6	8	3.47	2041	Yes	2045	2	500000591	UT	Utility Adjustment	GARVEE	$1,447,525	$1,158,020	$1,117,559	$894,047
ALDOT	541	Addition of Acceleration and Deceleration Lanes on I-65 For The Connection With SR-959 (Birmingham Northern Beltline) Between CR-112 (Mt. Olive Rd) and CR-2637 (Mary Buckelew Parkway)	6	8	3.47	2043	Yes	2045	2	500000592	CN	Grade, Drain, Base, Pave & Bridge	GARVEE	$26,589,932	$21,271,946	$20,124,206	$16,099,365
													Totals=	$2,701,879,410	$2,477,792,817	$2,301,086,891	$2,096,787,033

Visionary Projects
2045 Regional Transportation Plan

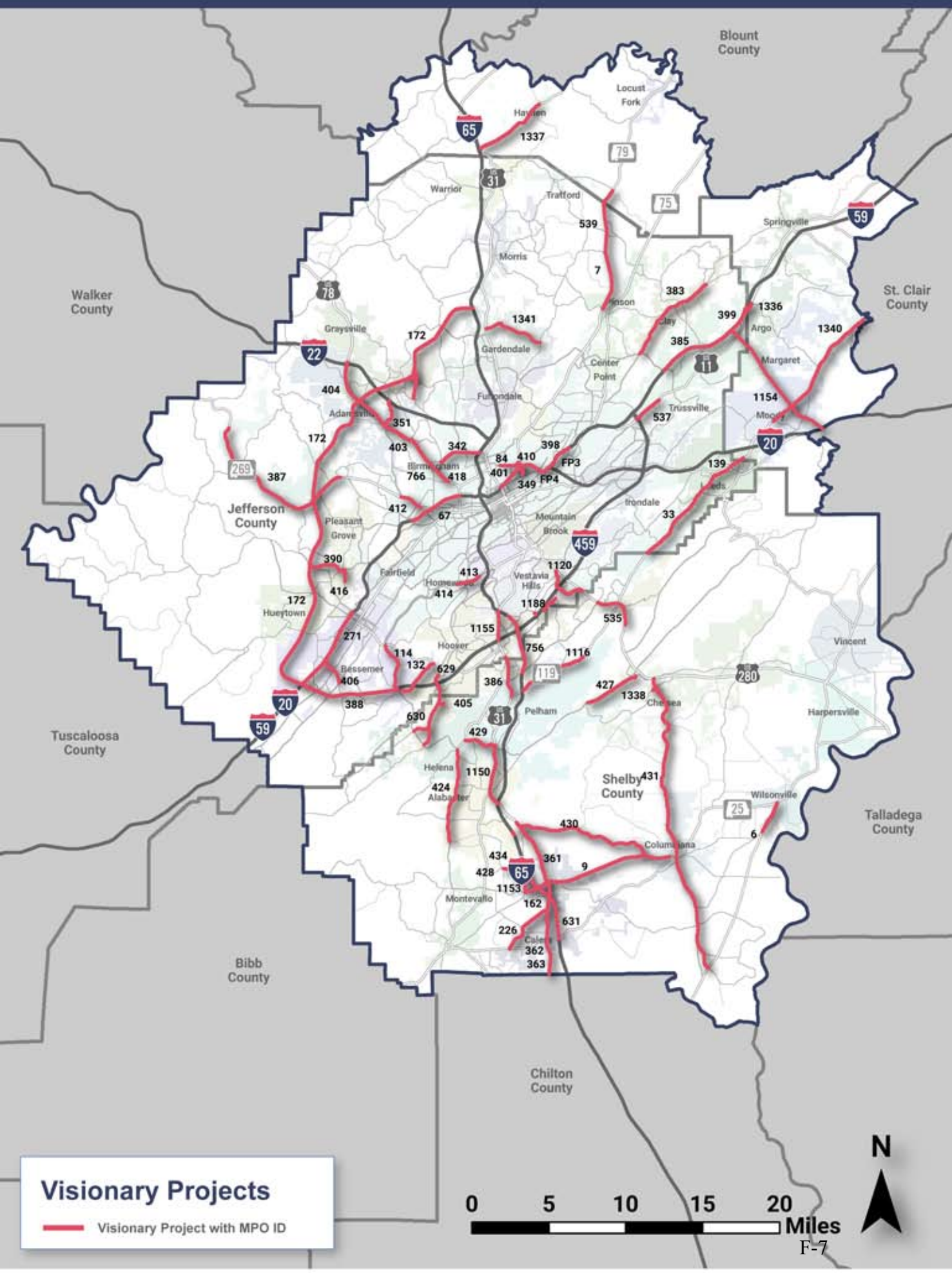

TABLE 2. Highway Visionary Projects, 2045 Regional Transportation Plan sorted by Sponsor, then by MAP ID

Sponsor	MAP (MPO) ID	Non-Exempt Project Descriptions	Lane Before	Lane After	Length	Regional Significant	ALDOT Project #	Scope	Type of Work	Total Cost	Federal Cost
							Total Costs of Visionary Plan Capacity Projects=			**$5,700,458,206**	**$5,024,378,822**
ALDOT	6	Extend SR-145 From CR-61 North to SR-25 In Wilsonville	0	2	2.36	No	100040859	UT	Utility Adjustment	$26,185	$20,948
ALDOT	6	Extend SR-145 From CR-61 North to SR-25 In Wilsonville	0	2	2.36	No	100046121	CN	Grade, Drain, Base, Pave & Bridge	$18,955,093	$15,164,075
ALDOT	7	SR-79 From North End of 4-Lane to 1 Mile Inside Blount County Line	2	4	6.67	Yes	100004804	CN	Base and Pave	$16,956,257	$13,565,006
ALDOT	33	SR-119 From The Jefferson-Shelby County Line to Leeds	2	4	7.89	No	100009171	PE	Grade, Drain, Base, Pave & Bridge	$553,223	$442,578
ALDOT	33	SR-119 From The Jefferson-Shelby County Line to Leeds	2	4	7.89	No	100009172	RW	Grade, Drain, Base, Pave & Bridge	$587,810	$470,248
ALDOT	33	SR-119 From The Jefferson-Shelby County Line to Leeds	2	4	7.89	No	100009170	CN	Grade, Drain, Base, Pave & Bridge	$8,951,748	$7,161,399
ALDOT	67	I-59 From N of (CR-80)Av I to S of (SR-5)Arkadelphia Rd	8	10	2.70	Yes	100004980	CN	Additional Roadway Lanes	$26,625,303	$23,962,772
ALDOT	139	US-411 From East of Dawson Street Connector to End of 4-Lane	2	4	0.50	No	100008317	RW	Additional Roadway Lanes	$531,065	$424,852
ALDOT	139	US-411 From East of Dawson Street Connector to End of 4-Lane	2	4	0.50	No	100008315	CN	Additional Roadway Lanes	$997,397	$797,918
ALDOT	162	Bridge Widening & Add Lanes on I-65 South (#I65-59-2.7 Dual Bridges). MP 236; RR Involvement	4	8	0.50	No	100005054	CN	Bridge Widening	$11,926,087	$10,733,478
ALDOT	172	SR-959 (Birmingham Northern Beltline) From I-459 to SR-269	0	6	13.40	Yes	100051650…	PE/ RW/ UT/ CN	Grade and Drain	$1,496,095,555	$1,496,095,555
ALDOT	172	SR-959 (Birmingham Northern Beltline) From US 78 W to I-65	0	6	10.60	Yes	100051658…	PE/ RW/ UT/ CN	Grade and Drain	$1,057,006,535	$1,057,006,535
ALDOT	172	SR-959 (Birmingham Northern Beltline) From SR-269 to US 78 W	0	6	7.80	Yes	100056244…	PE/ RW/ UT/ CN	Grade and Drain	$310,647,722	$310,647,722
ALDOT	271	2. 6-Lane I-59 From North of Academy Drive(Exit 108) to 18th/19th Street (Exit 112), Phase 2	4	6	3.57	Yes	100044587	PE	Additional Roadway Lanes	$311,188	$248,950
ALDOT	271	2. 6-Lane I-59 From I-459(Exit 106) to A Point North of Academy Drive (Exit 108)	4	6	6.00	Yes	100039734	RW	Additional Roadway Lanes	$175,549	$157,994
ALDOT	271	2. 6-Lane I-59 From I-459(Exit 106) to A Point North of Academy Drive (Exit 108)	4	6	8.00	Yes	100033202	CN	Additional Roadway Lanes	$18,827,817	$16,945,035
ALDOT	271	2. 6-Lane I-59 From North of Academy Drive(Exit 108) to 18th/19th Street (Exit 112), Phase 2	4	6	3.57	Yes	100043629	CN	Additional Roadway Lanes	$18,827,817	$15,062,253
ALDOT	351	CR-65 (Hillcrest Rd) From SR-5 (US-78) to Corridor X	2	4	3.20	No	100040404	PE	Grade, Drain, Base and Pave	$639,357	$511,486
ALDOT	351	CR-65 (Hillcrest Rd) From SR-5 (US-78) to Corridor X	2	4	3.20	No	100038801	RW	Grade, Drain, Base and Pave	$8,824,068	$7,059,255
ALDOT	351	CR-65 (Hillcrest Rd) From SR-5 (US-78) to Corridor X	2	4	3.20	No	100040405	UT	Grade, Drain, Base and Pave	$211,629	$169,303
ALDOT	351	CR-65 (Hillcrest Rd) From SR-5 (US-78) to Corridor X	2	4	3.20	No	100038803	CN	Grade and Drain	$11,793,354	$9,434,683
ALDOT	361	US-31, Widen 2 to 4 Lanes, From I-65 (Exit 231) North to Alabaster 2.6 Mi	2	4	2.20	Yes	500000144	CN	Additional Roadway Lanes	$22,283,982	$17,827,185
ALDOT	362	Widen US-31, 2 to 4 Lanes, From I-65(Exit 231) South to 6th Ave(Calera) 2.2 Miles	2	4	2.20	Yes	500000032	CN	Additional Roadway Lanes	$19,810,379	$15,848,303
ALDOT	363	Widen US-31, 2 to 4 Lanes, From 20Th St.(Calera) South to Chilton County Line2.1 Miles	2	4	2.10	Yes	500000033	CN	Additional Roadway Lanes	$22,121,916	$17,697,533

TABLE 2. Highway Visionary Projects, 2045 Regional Transportation Plan sorted by Sponsor, then by MAP ID

Sponsor	MAP (MPO) ID	Non-Exempt Project Descriptions	Lane Before	Lane After	Length	Regional Significant	ALDOT Project #	Scope	Type of Work	Total Cost	Federal Cost
							Total Costs of Visionary Plan Capacity Projects=			$5,700,458,206	$5,024,378,822
ALDOT	385	Widen I-59 North, From I-459 to Deerfoot Parkway (4 to 6 Lanes NBL)	4	6	5.10	Yes	500000023	CN	Additional Roadway Lanes	$34,918,779	$27,935,023
ALDOT	386	Widen US-31 From SR-119 to Cahaba River (Riverchase Parkway) 4 to 6 Lanes	4	6	2.25	Yes	500000024	CN	Additional Roadway Lanes	$18,732,077	$14,985,662
ALDOT	387	Widen SR-269 From Maytown CL to Port Birmingham 2 to 4 Lanes.(Intermodal Project)	2	4	9.25	No	500000025	CN	Additional Roadway Lanes	$97,441,774	$77,953,420
ALDOT	388	Widen I-459 From I-59 to (CR-52) Morgan Rd (4 to 6 Lanes)	4	6	6.50	Yes	500000026	CN	Additional Roadway Lanes	$54,114,889	$43,291,911
ALDOT	398	Widen I-59 North I-20 Interchange (Exit 130) to 1st Ave. North(Exit 132) (6 to 8Lanes)	6	8	1.95	Yes	500000041	CN	Additional Roadway Lanes	$20,541,779	$16,433,424
ALDOT	399	Widen I-59 North, From Deerfoot Parkway to Jefferson/St.Clair County Line (4 to 6 Lanes NBL)	4	6	5.20	Yes	500000036	CN	Additional Roadway Lanes	$43,291,911	$34,633,529
ALDOT	401	Widen I-59 North, From EBS Expressway(Exit 126A) to I-20 Interchange (Exit 130) (8 to 10 Lanes)	8	10	3.90	Yes	500000040	CN	Additional Roadway Lanes	$41,083,559	$32,866,847
ALDOT	403	Widen US-78 From Cherry Ave(CR-105) to Hillcrest Rd(CR-65). 4 to 6 Lanes	4	6	5.20	Yes	500000044	CN	Additional Roadway Lanes	$57,763,055	$46,210,444
ALDOT	404	Widen US-78 From Hillcrest Rd(CR-65) to Corridor X Interchange Graysville. 4 to 6 Lanes	4	6	3.60	Yes	500000045	CN	Additional Roadway Lanes	$42,400,721	$33,920,577
ALDOT	410	SR-79 (Tallapoosa St.) From 400' South of I-59/I-20 to East Lake Blvd. Widen and Drainage Correction 4 to 6 Lanes. Intermodal Project)	4	6	0.45	Yes	500000056	CN	Additional Roadway Lanes	$5,554,140	$4,443,312
ALDOT	411	I-65, From Green Springs Hwy(Exit 258) North to 6Th Ave. South(Exit 259). Widen 6 to 8 Lanes,	6	8	1.00	Yes	500000057	CN	Additional Roadway Lanes	$9,860,054	$7,888,043
ALDOT	412	SR-269 From Ave. F to Minor Parkway. Widen 4 to 6 Lanes	4	6	9.25	No	500000058	CN	Additional Roadway Lanes	$5,653,429	$4,522,744
ALDOT	418	Widen US-78 From Pratt Hwy (2nd St.) to Cherry Ave(CR-105). 4 to 8 Lanes	4	6	0.70	Yes	500000043	CN	Additional Roadway Lanes	$8,741,636	$6,993,309
ALDOT	420	I-65 Additional Lanes From South End of Overpass At Valleydale Rd. (CR-17) to South End of The Cahaba River Bridge. Phase 4	6/8	8/10	1.18	Yes	100044677	CN	Additional Roadway Lanes	$14,553,383	$11,642,706
ALDOT	535	SR-38 (US-280)Adding Lanes From CR-17 (Valleydale Road) To CR-355 (Eagle Point Pkwy.)Including Access Management Improvements (Phase 3)	4/6	6/8	2.66	Yes	100047378	CN	Additional Roadway Lanes	$9,542,874	$7,634,299
ALDOT	537	US-11 Additional Lanes From I-459 to Tutwiler Drive	4	6	1.25	Yes	100047792	UT	Utility Adjustment	$345,764	$276,612
ALDOT	537	US-11 Additional Lanes From I-459 to Tutwiler Drive	4	6	1.25	Yes	100047793	CN	Additional Roadway Lanes	$6,915,288	$5,532,230
ALDOT	539	Replace Bridge, Bin 006360, SR-79 over Gurley Creek (Suff=59.0, Status=Fo) and Additional Bridge For 4 Lane Grade & Drain	2	4	0.10	Yes	100049405	CN	Bridge Replacement	$2,081,342	$1,665,074
ALDOT	631	Widen I-65, 4 to 8 Lanes, From SR-25 (Exit 228) to US-31, North of Calera	4	8	3.00	Yes	500000554	CN	Additional Roadway Lanes	$32,363,546	$25,890,837
ALDOT	644	US 280 Corridor Improvements (West Segment) from EB Expressway to Eagle Point Pkwy	6	8	16.10	Yes	500000201	CN	Additional Roadway Lanes	$962,622,138	$770,097,710
ALDOT	645	US 280 Limited Access Road (East Segment) from Eagle Point Pkwy to Shelby & Talladega County Line (Coosa River)	4	6	22.10	Yes	500000202	CN	Access Management/ Additional Roadway Lanes	$45,053,372	$36,042,697

TABLE 2. Highway Visionary Projects, 2045 Regional Transportation Plan sorted by Sponsor, then by MAP ID

Sponsor	MAP (MPO) ID	Non-Exempt Project Descriptions	Lane Before	Lane After	Length	Regional Significant	ALDOT Project #	Scope	Type of Work	Total Cost	Federal Cost
							Total Costs of Visionary Plan Capacity Projects=			$5,700,458,206	$5,024,378,822
ALDOT	662	US 280 Frontage Roads (Eastbound) from Eagle Point Pkwy to Shelby & Talladega County Line (Coosa River)	0	2	22.10	Yes	500000199	CN	Access Management/ Additional Roadway Lanes	$45,053,372	$36,042,697
ALDOT	756	I-65 Additional Lanes From South End of The Cahaba River Bridge to South End of CR-2310 (Wisteria Drive) Overpass. Phase 3	6/8	8/10	2.87	Yes	100044679	CN	Additional Roadway Lanes	$18,315,809	$14,652,647
ALDOT	766	Bridge Replacement and Approaches on US-78 (SR-5) over Dugan Avenue, Bin 1392	4	6	0.25	Yes	100042354	CN	Bridges and Approaches	$1,727,436	$1,381,950
ALDOT	1150	US 31 widen from 4 to 6 lanes From CR 52 to I-65 at Alabaster and from CR 105 to Riverchase Pkwy	4	6	8.90	Yes	100039450	CN	Additional Roadway Lanes	$75,000,000	$60,000,000
ALDOT	1152	Interchange Modification on I-65 @ CR-17 (Valleydale Road), (Flyover Ramps) Phase 2	6/8	8/10	0.29	Yes	100042793	PE	Interchange	$768,458	$691,612
ALDOT	1152	Interchange Modification on I-65 @ CR-17 (Valleydale Road), (Flyover Ramps) Phase 2	6/8	8/10	0.29	Yes	100042088	RW	Interchange	$548,064	$493,257
ALDOT	1152	Interchange Modification on I-65 @ CR-17 (Valleydale Road), (Flyover Ramps) Phase 2	6/8	8/10	0.29	Yes	100042794	UT	Utility Adjustment	$215,882	$194,294
ALDOT	1152	Interchange Modification on I-65 @ CR-17 (Valleydale Road), (Flyover Ramps) Phase 2	6/8	8/10	0.29	Yes	100042797	CN	Interchange	$27,172,570	$24,455,313
ALDOT	1154	Route From I-59 @ Trussville - I-20 @ Leeds Extend Northern Beltline to East of Leeds	0	6	6.75	Yes	500000021	CN	Grade, Drain, Base, Pave & Bridge	$146,110,200	$116,888,160
ALDOT	1155	US-31 From Riverchase Parkway to Data Drive and from I-459 to I-65,Add Lanes	4	6	3.21	Yes	100042145	RW	Additional Roadway Lanes	$3,324,658	$2,659,726
ALDOT	1155	US-31 From Riverchase Parkway to Data Drive and from I-459 to I-65,Add Lanes	4	6	3.21	Yes	100047490	UT	Utility Adjustment	$1,396,888	$1,117,510
ALDOT	1155	US-31 From Riverchase Parkway to Data Drive and from I-459 to I-65,Add Lanes	4	6	3.21	Yes	100009260	CN	Additional Roadway Lanes	$16,286,933	$13,029,546
ALDOT/ Calera	226	Calera Northern Bypass From SR-25 West of Calera to SR-3 (US-31) North of Calera	0	2	3.50	Yes	100050235	PE	Grade, Drain and Bridge	$374,104	$299,283
ALDOT/ Calera	226	Calera Northern Bypass From SR-25 West of Calera to SR-3 (US-31) North of Calera	0	2	3.50	Yes	100050243	RW	Grade, Drain and Bridge	$2,244,975	$1,795,980
ALDOT/ Calera	226	Calera Northern Bypass From SR-25 West of Calera to SR-3 (US-31) North of Calera	0	2	3.50	Yes	100050244	UT	Utility Adjustment	$364,964	$291,971
ALDOT/ Calera	226	Calera Northern Bypass From SR-25 West of Calera to SR-3 (US-31) North of Calera	0	2	3.50	Yes	100050239	CN	Grade, Drain and Bridge	$2,910,388	$2,328,310
ALDOT/ Calera	226	Calera Northern Bypass From SR-25 West of Calera to SR-3 (US-31) North of Calera	0	2	3.50	Yes	100050239	CN	Grade, Drain and Bridge	$3,167,797	$2,534,238
ALDOT/ Shelby	1116	SR-119 From I-65 to South of Oak Mountain Elementary	2	4	4.30	No	500000570	RW	Grade, Drain, Base and Pave	$9,790,510	$7,832,408
ALDOT/ Shelby	1116	SR-119 From I-65 to South of Oak Mountain Elementary	2	4	4.30	No	500000569	UT	Utility Adjustment	$394,588	$315,671
ALDOT/ Shelby	1116	SR-119 From I-65 to South of Oak Mountain Elementary	2	4	4.30	No	500000571	CN	Grade, Drain, Base and Pave	$42,076,306	$33,661,044

TABLE 2. Highway Visionary Projects, 2045 Regional Transportation Plan sorted by Sponsor, then by MAP ID

Sponsor	MAP (MPO) ID	Non-Exempt Project Descriptions	Lane Before	Lane After	Length	Regional Significant	ALDOT Project #	Scope	Type of Work	Total Cost	Federal Cost
							Total Costs of Visionary Plan Capacity Projects=			$5,700,458,206	$5,024,378,822
ALDOT/Argo	1336	Widen US-11 from Argo Pkwy to Argo-Margaret Rd	2	4	0.50	No	500000603	CN	Additional Roadway Lanes	$6,350,000	$5,080,000
ALDOT/Blount	1337	Widen SR-160 from I-65 to CR 7 in Hyden	2	4	5.30	No	500000604	CN	Additional Roadway Lanes	$37,100,000	$29,680,000
ALDOT/St. Clair	1340	Widen US-411 from Park Ave to SR-174	2	4	9.00	No	500000605	CN	Additional Roadway Lanes	$63,000,000	$50,400,000
Bessemer	132	Parkwood Road Improvements	2	2	3.20	No	100007636	RW	Intersection Improvements	$11,822	$9,458
Bessemer	132	Parkwood Road Improvements	2	2	3.20	No	100007630	CN	Intersection Improvements	$931,371	$745,097
Birmingham	84	Finley Ave Extension From SR-3(US-31/26th Street) to Fred Shuttlesworth Drive, Phase 2 and Phase 3, Continuing to SR-79	0	4	1.30	No	500000202	CN	additional lanes and	$48,424,147	$38,739,318
Birmingham	342	Daniel Payne Dr.(CR-94),From Cherry Ave (CR-105). to I-65, Add Left Turn Lanes.	4	4	2.50	No	100042371	RW	Turn Lanes	$58,527	$46,822
Birmingham	342	Daniel Payne Dr.(CR-94),From Cherry Ave (CR-105). to I-65, Add Left Turn Lanes.	4	4	2.50	No	100042372	UT	Turn Lanes	$189,908	$151,926
Birmingham	342	Daniel Payne Dr.(CR-94),From Cherry Ave (CR-105). to I-65, Add Left Turn Lanes.	4	4	2.50	No	100042373	CN	Turn Lanes	$2,532,108	$2,025,686
Birmingham	349	40Th St North,From I-59 to 400Ft. South of 10Th Ave. North, Add Left Turn Lane	2	2	0.50	No	100042375	RW	Turn Lanes	$59,112	$47,290
Birmingham	349	40Th St North,From I-59 to 400Ft. South of 10Th Ave. North, Add Left Turn Lane	2	2	0.50	No	100042376	UT	Turn Lanes	$191,807	$153,446
Birmingham	349	40Th St North,From I-59 to 400Ft. South of 10Th Ave. North, Add Left Turn Lane	2	2	0.50	No	100042377	CN	Turn Lanes	$831,164	$664,932
Chelsea	1338	CR 39 widen-including bridges over railroad & Yellow Cleaf Creek	0/2	4	0.50	No	500000601	CN	Additional Roadway Lanes	$20,610,000	$16,488,000
Clay	727	Old Springville Rd (CR-30) Intersection Improvements	2	2	0.98	No	100056276	CN	Adding Turn Lanes	$4,850,000	$3,880,000
Gardendale	1341	New Road from US 31 to New Castle Rd in Gardendale	0	2	3.90	No	500000602	CN	Additional Roadway Lanes	$16,280,000	$13,024,000
Hoover	405	Stadium Trace Parkway, From Current Terminus to CR-52. Extend Existing Roadway. 0 to 4 Lanes,	2	4	3.50	No	500000050	CN	Additional Roadway Lanes	$31,103,184	$24,882,547
Hoover	629	S. Shades Crest Interchange	0	1	1.00	yes	100056291	PE	New Interchange & Extension	$1,576,515	$1,261,212
Hoover	629	S. Shades Crest Interchange	0	1	1.00	yes	100056292	RW	New Interchange & Extension	$2,165,713	$1,732,571
Hoover	629	S. Shades Crest Interchange	0	1	1.00	yes	100056293	UT	New Interchange & Extension	$552,311	$441,849
Hoover	629	S. Shades Crest Interchange	0	1	1.00	yes	100056294	CN	New Interchange & Extension	$28,720,175	$22,976,140
Hoover	630	Ross Bridge Parkway Extension (parallel roadway of South Shades Crest Road) from SR 150 to CR 52	0/2	4	7.60	No	500000204	CN	New Roadway	$40,104,736	$32,083,789
Jefferson County	114	Lakeshore Parkway Extension from SR-150 to I-459	0	4	3.10	No	100046957	PE	Base and Pave	$148,110	$118,488
Jefferson County	114	Lakeshore Parkway Extension from SR-150 to I-459	0	4	3.10	No	100007562	UT	Grade, Drain, Base, Pave & Bridge	$3,652,079	$2,921,663
Jefferson County	114	Lakeshore Parkway Extension from SR-150 to I-459	0	4	3.10	No	100046956	CN	Grade and Drain	$12,544,951	$10,035,961
Jefferson County	114	Lakeshore Parkway Extension from SR-150 to I-459	0	4	3.10	No	100046954	CN	Base and Pave	$20,840,910	$16,672,728
Jefferson County	383	Springville Road, Widen 2 to 4 Lanes. From CR-10 (Chalkville Mt. Rd.) to CR-32 (Clayton Rd.)	2	4	6.30	No	500000042	CN	Additional Roadway Lanes	$37,923,285	$30,338,628

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Sponsor	MAP (MPO) ID	Non-Exempt Project Descriptions	Lane Before	Lane After	Length	Regional Significant	ALDOT Project #	Scope	Type of Work	Total Cost	Federal Cost
							Total Costs of Visionary Plan Capacity Projects=			**$5,700,458,206**	**$5,024,378,822**
Jefferson County	390	Allison-Bonnet Memorial Drive(CR-56), From Hueytown Rd.(CR-46) to Brooklane Drive	2	4	2.10	No	500000029	CN	Additional Roadway Lanes	$8,508,429	$0
Jefferson County	390	Warrior River Rd (CR-46), From NBL East to Hueytown Rd	2	4	1.60	No	500000028	CN	Additional Roadway Lanes	$6,482,613	$0
Jefferson County	406	Academy Drive From US-11 to Old Tuscaloosa Hwy. Widen and Realign 2 to 3 Lanes	2	2	1.75	No	500000051	CN	Additional Roadway Lanes	$3,925,993	$0
Jefferson County	406	Academy Drive, From Old Tuscaloosa Hwy.To CR-18 (Eastern Valley Rd). New Road 0 to 3 Lanes	2	2	1.50	No	500000052	CN	Additional Roadway Lanes	$4,083,032	$0
Jefferson County	409	Old Rocky Ridge Rd.. From Altadena Rd to Dolly Creek LN.. Widen 2 to 4 Lanes.	2	4	0.15	No	500000055	CN	Additional Roadway Lanes	$1,298,757	$0
Jefferson County	413	Lakeshore Parkway. From Wildwood North to Oxmoor Rd. Widen 4 to 6 Lanes	4	6	1.62	No	500000059	CN	Additional Roadway Lanes	$6,481,663	$0
Jefferson County	414	Lakeshore Parkway. From Oxmoor Rd. to Industrial Drive Widen 4 to 6 Lanes	4	6	0.55	No	500000060	CN	Additional Roadway Lanes	$3,925,993	$0
Jefferson County	416	Brooklane Drive (CR-51), From Davey Allison Blvd. to Allison-Bonnet Memorial Drive. Widen 2 to 5 Lanes.	2	4	0.85	No	500000062	CN	Additional Roadway Lanes	$1,940,451	$0
Jefferson County	1188	Acton Rd from International Park Dr. to Camp Honner Rd	2	2	1.30	No	500000582	PE	Add lanes from 2 to 3	$300,000	$240,000
Jefferson County	1188	Acton Rd from International Park Dr. to Camp Honner Rd	2	2	1.30	No	500000583	CN	Add lanes from 2 to 3	$2,700,000	$2,160,000
Shelby County	9	SR-70 from US-31 to SR-25 in Columbiana	2	4	6.50	No	100009116	CN	Widening	$6,523,122	$5,218,498
Shelby County	424	CR-17, From Junction SR-261/CR-52 Helena South to CR-12 (Butler Rd.), Widen 2 to 5 Lanes	2	4	6.00	No	500000074	CN	Additional Roadway Lanes	$43,624,926	$20,960,000
Shelby County	427	CR-11 From CR-36 to CR-280. Widen 2 to 5 Lanes	2	4	4.37	No	500000077	CN	Additional Roadway Lanes	$27,599,724	$22,079,779
Shelby County	428	CR-12 (Smokey Rd.) From CR-107 East to CR-87.Widen 2 to 4 Lanes	2	4	1.55	No	500000079	CN	Additional Roadway Lanes	$9,670,438	$7,736,350
Shelby County	429	CR-52 From SR-261 East To Johnson St. Widen 2 To 5 Lanes.	2	4	2.20	No	500000081	CN	Additional Roadway Lanes	$15,546,931	$0
Shelby County	430	CR-26, From US-31 East To SR-70. Widen 2 To 4 Lanes	2	4	9.00	No	500000082	CN	Additional Roadway Lanes	$45,056,889	$0
Shelby County	431	CR-47, From US-280 South to SR-25. Widen 2 to 4 Lanes	2	4	11.50	No	500000083	CN	Additional Roadway Lanes	$56,895,562	$45,516,449
Shelby County	431	CR-47, From SR-25 South to SR-145. Widen 2 to 4 Lanes	2	4	7.80	No	500000084	CN	Additional Roadway Lanes	$47,404,106	$37,923,285
Shelby County	434	CR-87 From CR-12 North .55 Miles. Widen 2 To 4 Lanes,	2	4	0.55	No	500000088	CN	Additional Roadway Lanes	$2,591,155	$2,072,924
Shelby County	436	CR-22 From CR-12 To The Intersection Of SR-70 And US-31 .Widen 2 To 5 Lane	2	4	1.76	No	500000090	CN	Additional Roadway Lanes	$22,028,923	$0
Shelby County	1153	CR-12 (Smokey Rd.) From CR-87 East to CR-22.Widen 2 to 4 Lanes	2	4	1.30	No	500000080	CN	Additional Roadway Lanes	$8,611,114	$6,888,891
Vestavia Hills /Birmingham	1120	Cahaba River Road from Key Drive to US-280	2	4	4.02	No	500000573	CN	Additional Roadway Lanes	$10,000,000	$0
							Total Costs of Visionary Plan Capacity Projects=			**$5,700,458,206**	**$5,024,378,822**

Appendix G

Abbreviations and Acronyms

Abbreviations and Acronyms

ADA - Americans with Disabilities Act of 1990: Federal law that requires public facilities (including transportation services) to be accessible to persons with disabilities. An individual having a disability is a person who has a physical or mental impairment that substantially limits one or more major life activities.

ADT - Average Daily Traffic: The number of vehicles passing a fixed point in a day, averaged over a number of days. The number of count days included in the average varies with the intended use of data.

AADT – Annual Average Daily Traffic: The ADT averaged over the entire year based on an adjustment factor.

ALDOT –Alabama Department of Transportation: the funding and implementing agency of transportation projects within the state. The Bureau of Transportation Planning and Modal Programs within the Department has MPO program funding oversight, often applied in combination with local funding, for transportation projects across the state.

BJCTA –Birmingham Jefferson County Transit Authority: The public transit agency serving the City of Birmingham and Jefferson County

BRT – Bus Rapid Transit: A high speed bus system operated within an exclusive right-of-way. BRT incorporates exclusive transit ways, modern stations, on-board fare collection, high-tech vehicles and frequent service. BRT systems can be built incrementally and designed for vehicles - rather than people to transfer from local bus routes to high speed lines.

CAA - Clean Air Act, 42 USC 7401: 1990 amendments to the federal Clean Air Act which classify non-attainment areas and provide for rules dealing with air pollution in such areas; specifically brought transportation decisions into the context of air quality control.

CFR - Code of Federal Regulations: the codification of the general and permanent rules published in the Federal Register by the departments and agencies of the Federal Govement.

CMAQ - Congestion Mitigation and Air Quality Improvement Program: A categorical funding program created under ISTEA, continued under SAFETEA-LU, and renewed under MAP-21 which directs funding to projects that contribute to meeting national air quality standards for ozone and carbon monoxide in non-attainment areas.

CMP - Congestion Management Process (previously known as Congestion Management System): Addresses congestion management through the metropolitan planning process that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy of new and existing transportation facilities and shall include methods to monitor and evaluate the performance of the multi-modal transportation system, identify causes of congestion, identify and evaluate alternative actions, provide information supporting the implementation of actions, and evaluate the efficiency and effectiveness of implementation actions.

CN – Construction (phase of a project): The phase of a project after the preliminary environmental and engineering work is completed, where the project is being built and the improvements are prepared for implementation.

DOT - Department of Transportation: Agency responsible for transportation at the local, state, or federal level.

EA – Environmental Assessment (phase of project) Determine the significance of the environmental effects and to look at alternative means to achieve the agency's objectives.

EIA – Environmental Impact Assessment: The process of identifying, predicting, evaluating, and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made. The purpose of the assessment is to ensure that decision-makers consider environmental impacts before deciding whether to proceed with new projects.

EIS - Environmental Impact Statement: A National Environmental Policy Act (NEPA) document that explains the purpose and need for a project, presents project alternatives, analyzes the likely impact of each, explains the choice of a preferred alternative, and finally details measures to be taken in order to mitigate the impacts of the preferred alternative.

EJ - Environmental Justice: Derived from Title VI of the Civil Rights Act of 1964, and established by Executive Order, EJ requires federally funded plans and programs to assess their impact, either positive or negative, on traditionally underserved (e.g., low income or minority) communities or segments of the population. The goal of EJ is to ensure public involvement of low income and minority groups in decision making to prevent disproportionately high and adverse impacts on low income and minority groups, and to ensure that these groups receive equal benefits from transportation improvements.

EPA – U.S. Environmental Protection Agency: An agency of the federal government of the United States charged with protecting human health and with safeguarding the natural environment: air, water, and land.

FAST – Fixing America's Surface Transportation: Is the most recent transportation legislation, signed into law by President Obama in December 2015.

FHWA - Federal Highway Administration: Division of the U.S. Department of Transportation responsible for administrating federal highway transportation programs under title 23 U.S.C.

Financial Constraint: A requirement that all projects must have complete funding, that the cost of each project is available or is reasonably expected to be available and that is clearly demonstrated in the appropriate long range financially constrained side or in the fully funded TIP.

FTA - Federal Transit Administration: Federal entity responsible for transit planning and programs under title 49 U.S.C.

FY - Fiscal Year: A federal fiscal or budget year; runs from October 1 through September 30 for the MPO, the federal government, and the State of Alabama.

GIS – Geographic Information System: A system for capturing, storing, analyzing, and managing data which is spatially referenced to the earth. GIS is a tool that allows users to create interactive queries (user created searches), analyze the spatial information, edit data, maps, and present the results of all these operations.

HPMS: FHWA's Highway Performance Monitoring System.

HOV - High Occupancy Vehicle: In Alabama, vehicles carrying two (2) or more people receive this designation and may travel on freeways, expressways, and other large volume roads in lanes designated for high occupancy vehicles. Motorcycles are also authorized to use these lanes.

IAC – Interagency Consultation group: A group of officials that consists of representatives from the various state, federal, and local agencies.

IM – Interstate Maintenance: A funding category created by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), the IM authorizes funding for activities that include the reconstruction of bridges, interchanges, and over crossings along existing Interstate routes, including the acquisition of right-of-way where necessary, but shall not include the construction of new travel lanes other than high occupancy vehicle lanes or auxiliary lanes.

ISTEA - Intermodal Surface Transportation Efficiency Act of 1991: Replaced first by TEA-21, then SAFETEA-LU, then MAP-21, currently FAST Act.

ITS - Intelligent Transportation System: Use of computer and communications technology to facilitate the flow of information between travelers and system operators to improve mobility and transportation productivity, enhance safety, maximize the use of existing transportation facilities, conserve energy resources, and reduce adverse environmental effects; includes concepts such as *freeway management systems*, *automated fare collection* and *transit information kiosks.*

Intergovernmental Agreement: Legal instrument describing tasks to be accomplished and/or funds to be paid between government agencies.

LRT – Light Rail Transit: A particular class of urban and suburban passenger railway that utilizes equipment and infrastructure that is typically less massive than that used for rapid transit systems, with modern light rail vehicles usually running along the system.

LRTP/RTP – Long-Range Transportation Plan/Regional Transportation Plan: A document resulting from regional or statewide collaboration and consensus on a region or state's transportation system and serving as the defining vision for the region's or state's transportation systems and services. In metropolitan areas, the plan indicates all of the transportation improvements scheduled for funding over the next 20 years. It is fiscally constrained, that is, a given program or project can reasonably expect to receive funding within the time allotted for its implementation.

MAP-21 – **Moving Ahead for Progress in the 21st Century:** The previous transportation legislation before the FAST Act, signed into law by President Obama in July of 2012.

MOVES - MOtor Vehicle Emission Simulator: EPA's State-of-the-Science emission modeling system to estimate mobile source emissions. The MOVES2014b released December 2018 is the latest version.

MPA – Metropolitan Planning Area: Metropolitan Planning Organizations are required to define the urbanized area and the area expected to be urbanized by the forecast year of the long-range transportation plan in their study area based upon the most recent decennial U.S. Census.

MPO - Metropolitan Planning Organization: The forum for cooperative transportation decision-making; required for urbanized areas with populations over 50,000.

MVEB - Motor Vehicle Emission Budget: the maximum amount of emissions allowed from mobile source approved by EPA.

NAAQS - National Ambient Air Quality Standards: Standards established by the United States Environmental Protection Agency under authority of the Clean Air Act (42 U.S.C. 7401 et seq.) that apply for outdoor air throughout the country.

NEPA – National Environmental Policy Act of 1969: Passed in 1970, NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions.

NHS - National Highway System: The NHS will consist of 155,000 (plus or minus 15%) miles of road and represents one category of roads eligible for federal funds under ISTEA.

NOx – Nitrous Oxide: The third largest greenhouse gas, nitrous oxide attacks ozone in the stratosphere, aggravating the excess amount of UV light striking the Earth's surface. Also, combines with VOCs to create ground-level ozone.

Obligated Funds: Funds that have been legally authorized and committed by a federal agency to pay for the federal share of the project cost.

Officials: People who have governmental decision-making, planning, or administrative responsibilities that relate to MPO activities.

Ozone: Ground level is not emitted directly into the air, but is created by chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOC) in the presence of sunlight. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of NOx and VOC.

PE – Preliminary Engineering (phase of project): A process to begin developing the design of the facilities and system, to analyze the function and operation of the system, evaluation of cost efficiencies and preparation for the final design of the project.

$PM_{2.5}$: - particulate matter smaller than 2.5 microns in diameter

PPP – Public Participation Plan: A plan on the method and process of gather input from the public.

RPO – Rural Planning Organization: The forum for cooperative transportation decision-making for a rural area.

ROW - Right-of-Way: Real property that is used for transportation purposes; defines the extent of the corridor that can be used for the road and associated drainage.

RTDM - Regional Travel Demand Model: A tool for forecasting impacts of urban developments on travel patterns, as well as testing various transportation alternative solutions to traffic patterns. The travel patterns are determined from U. S. Census results and in simple terms tell where residents live and where they go to work or school on a regional wide basis.

SAFETEA-LU - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users: Legislation enacted August 10, 2005 as Public Law 109-59. SAFETEA-LU authorizes the federal surface transportation programs for highways, highway safety, and transit; superseded by MAP-21, July 2012.

SIP – State Implementation Plan (for air quality): The regulations and other materials for meeting clean air standards and associated Clean Air Act requirements. The SIP is prepared by the Alabama Department of Environmental Management (ADEM). Pollutant budgets for the SIP are used by MPOs to estimate various pollution levels.

SR – State Route: A roadway owned, financed, and maintained by a state.

STA – State gas tax fund: Also called motor fuel excise tax, this is a tax charged by the gallon and collected as consumers pay at the pump. The tax goes primarily towards basic operating costs, highway maintenance contracts, resurfacing, bridges, major reconstruction, new construction, consultant contracts, right-of-way purchases, and to match federal funds.

STIP - State Transportation Improvement Program: The ALDOT Five Year Work Program as prescribed by federal law.

STP – Surface Transportation Program (L-STP or U-STP): A program funded by the National Highway Trust Fund. **L-STP** provides funding to areas of 5,000 to 50,000 in population for improvements on routes functionally classified as urban collectors or higher. **U-STP** provides funding to census designated urbanized areas over 50,000 in population (i.e., MPO areas based on US Census) for improvements on functionally classified routes.

TAP – Transportation Alternatives Program: A new program established under MAP-21 to provide for a variety of alternative transportation projects, including many activities that were previously eligible under separately funded programs.

TCM - Transportation Control Measure: Required measures in SIP to reduce mobile source emissions.

TDM – Transportation Demand Management: A method of planning for and implementing transportation improvement in a manner that reduces traffic congestion and pollution by influencing changes in travel behavior.

TEA-21 - Transportation Equity Act for the 21st Century: Federal legislation that authorized funds for all modes of transportation and guidelines on the use of those funds. Successor to ISTEA, the landmark legislation clarified the role of the MPOs in the local priority setting process. TEA-21 emphasized increased public involvement, simplicity, flexibility, fairness, and higher funding levels for transportation.

TIP - Transportation Improvement Program: A funded priority list of transportation projects developed by a metropolitan planning organization that is to be carried out within the four (4) year period following its adoption; must include documentation of federal and state funding sources for each project and be consistent with adopted MPO long range transportation plans and local government comprehensive plans.

TMA - Transportation Management Area: An area designated by the U.S. Department of Transportation given to all urbanized areas with a population over 200,000 (or other area when requested by the governor and MPO); these areas must comply with special transportation planning requirements regarding congestion management systems, project selection and certification requirements.

TSM - Transportation Systems Management: Strategies to improve the efficiency of the transportation system through operational improvements, such as the use of bus reserved lanes, signalization, access management, turn restrictions, etc., on roads classified as urban collectors or higher.

TTC – Transportation Technical Committee: A standing committee of most metropolitan planning organizations (MPOs); function is to provide advice on plans or actions of the MPO from planners, engineers and other staff members (not general citizens).

UPWP - Unified Planning Work Program: Developed by Metropolitan Planning Organizations (MPOs); identifies and determines the estimated funding for carrying out the activities using allocated funds. All transportation and planning activities anticipated within the next one to two years, including a schedule for the completion of the identified tasks and activities.

USC - United States Code: Code of Laws of the United States of America.

VMT - Vehicle Miles Traveled: This is an output of the travel demand model and is a measure of traffic flow over a highway segment.

VOC – Volatile Organic Compounds: Organic chemical compounds that have high enough vapor pressures under normal conditions to significantly vaporize and enter the atmosphere. Included among these compounds are dry-cleaning solvents and some constituents of petroleum fuels.