2023 Air Quality Conformity Determination Report

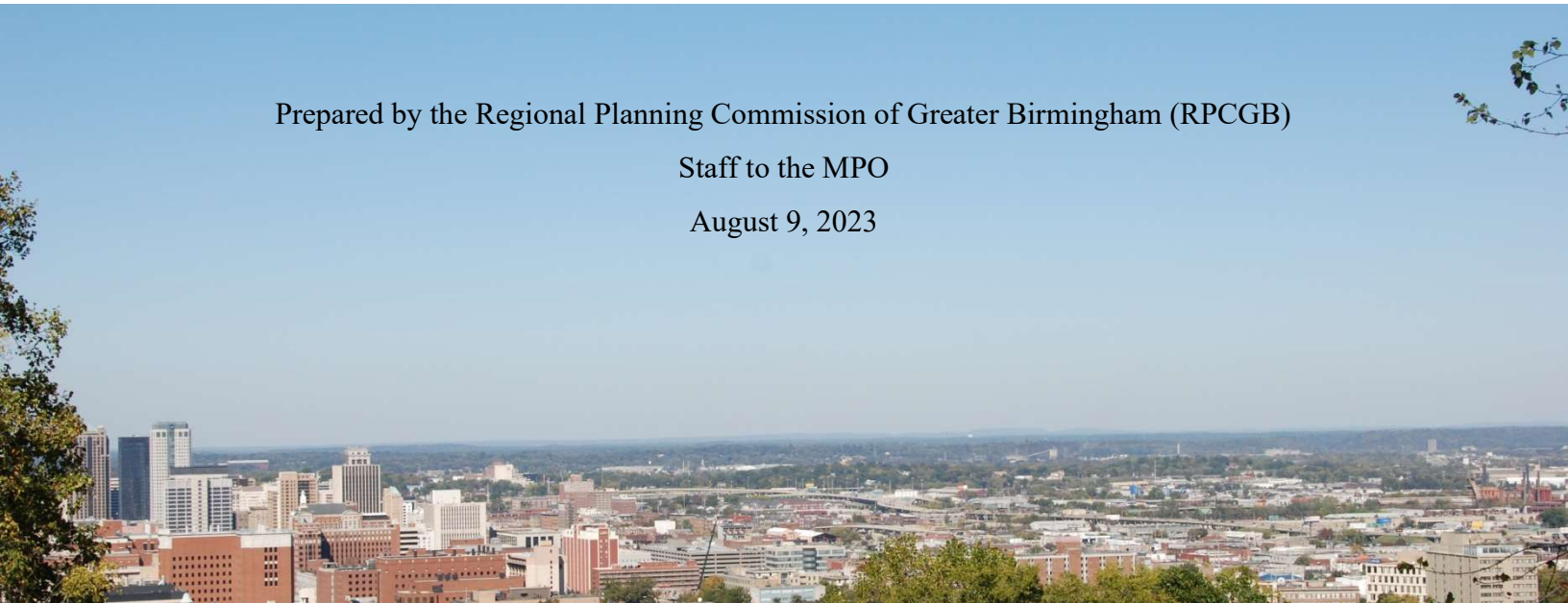
for the FY2024-2027 Transportation Improvement Program and the 2050 Regional Transportation Plan

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

August 9, 2023



BIRMINGHAM METROPOLITAN PLANNING ORGANIZATION (MPO)

2023 Air Quality Conformity Determination Report

This document is posted at

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

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Date Adopted: August 9, 2023

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 2023-1
2023 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, 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 2023 Air Quality Conformity Determination Report for the FY 2024-2027 Transportation Improvement Program and the 2050 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; and

WHEREAS, the results of a public involvement meeting, held on April 19, 2023 in accordance with Birmingham MPO public involvement procedures, have been documented in a report entitled *Public Involvement Documentation;* and

WHEREAS, the Transportation Citizens Committee, Transportation Technical Committee, and Advisory Committee recommend adoption of the 2023 Air Quality Conformity Determination Report.

NOW THEREFORE, BE IT RESOLVED, that the Birmingham MPO adopts the 2023 Air Quality Conformity Determination Report for the FY 2024-2027 Transportation Improvement Program and the 2050 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 9th day of August 2023.

Birmingham MPO Chair, Vice Chair, or Secretary

Charles Ball, Executive Director, RPCGB

Table of Contents

Title and MPO Contacts i

MPO and Advisory Committee Officers ii

Resolution 08-09-23-1 vi

Table of Contents viii

1.0 Overview **1-1**
1.1 Introduction 1-1
1.2 Applicable Pollutants 1-5
1.3 Interagency Consultation 1-5
1.4 Motor Vehicle Emissions Budgets 1-6

2.0 Birmingham Maintenance Area Emissions Estimates for the Annual $PM_{2.5}$ Standard and the 24-hour $PM_{2.5}$ Standard **2-1**
2.1 Latest Planning Assumptions 2-1
2.2 Vehicle Miles Traveled Estimates 2-2
2.2.1 Vehicle Miles Traveled by Travel Demand Model for Jefferson and Shelby Counties 2-2
2.2.2 Vehicle Miles Traveled by Off-Model Methodology for Walker County Donut Area 2-5
2.3 Emissions Estimates by Motor Vehicle Emissions Simulator 2-8

3.0 Other Conformity Requirements **3-1**
3.1 Other Conformity Requirements 3-1
3.2 Quality Assurance and Interagency Consultation 3-1

4.0 Conformity Determination **4-1**
4.1 Conformity Determination for the Annual $PM_{2.5}$ Standard 4-1
4.1.1 Emissions Conformity Test for the 1997 1-Hour Ground-Level Ozone Standard 4-1
4.1.2 Emissions Conformity Test for the 8-Hour Ground-Level Ozone Standard 4-3
4.2 Conformity Determination for the Annual $PM_{2.5}$ Standard 4-4
4.3 Conformity Determination for the 24-hour $PM_{2.5}$ Standard 4-6

5.0 Public Involvement **5-1**

Appendix A: Technical Information A-1

Appendix B: U.S. DOT and U.S. EPA letters Concurring with Conformity Determinations on LRTP and TIP B-1

Appendix C: Interagency Consultation Group Meeting Minutes C-1

Appendix D: Conformity Checklists D-1

Appendix E: U.S. EPA's Redesignations of the 1997/2006 Ground-Level Ozone, the1997 Annual and the 2006 24-hour $PM_{2.5}$ Nonattainment Areas to Attainment Areas and 2024 Motor Vehicle Emissions Budgets E-1

Appendix F: Non-Exempt Projects (Highway Capacity Projects) of 2050 Regional Transportation Plan, Sorted by Conformity Analysis Year, then by Sponsor, and then by MAP ID F-1
Visionary Roadway Project of 2050 Regional Transportation Plan Sorted by Sponsor and then by MAP ID F-8

Appendix G: Abbreviations and Acronyms G-1

List of Tables

1.4.1 The MVEB for Birmingham Areas 1997 Ozone Standards in US shot tons/day 1-7

1.4.2 The 1997 Annual 24-hour $PM_{2.5}$ Standard Budgets 1-7

1.4.3 The 2006 24-hour $PM_{2.5}$ Standard Budgets 1-7

2.2.1.1 VMT based on Model Assignments 2-3

2.2.1.2 VMT Adjustment Factors 2-4

2.2.1.3 Adjusted Weekday VMT based on Model VMT and VMT Adjustment 2-5

2.2.2.1 Average Daily VMT in Walker County Donut Area by Road Type 2-6

2.2.2.2 Daily VMT in Walker County Donut Area by Vehicle Type 2-6

2.2.2.3 Annual VMT in Walker County Donut Area Based on MOVES Convertor 2-7

2.3.1 Daily Emissions for the Ground-Level Standards 2-9

2.3.2 Annual and Daily Emissions for $PM_{2.5}$ Standards 2-13

4.1.1 Emission Conformity Test for the Ground-level Ozone, 1-Hour Standard in tons/day .. 4-2

4.1.2 Emission Conformity Test for the Ground-level Ozone, 8-Hour Standard in tons/day .. 4-3

4.2 Direct $PM_{2.5}$ and NOx for the Annual $PM_{2.5}$ Standard, short tons per year 4-5

4.3 Direct $PM_{2.5}$ and NOx for the 24-Hour Standard, short tons per day 4-6

List of Figures

1.1 Annual and 24-hour $PM_{2.5}$ and Ground-Level Ozone Maintenance Areas 1-4

4.1.1.1 VOC Emissions vs. Budgets, 1-Hour Ground-Level Ozone Standard 4-2

4.1.1.2 NOx Emissions vs. Budgets, 1-Hour Ground-Level Ozone Standard 4-2

4.1.2.1 VOC Emissions vs. Budgets, 8-Hour Ground-Level Ozone Standard 4-3

4.1.2.2 NOx Emissions vs. Budgets, 8-Hour Ground-Level Ozone Standard 4-4

4.2.1 Annual Direct $PM_{2.5}$, short tons per year for the Annual $PM_{2.5}$ Standard 4-5

4.2.2 Annual Direct NOx, short tons per year for the Annual $PM_{2.5}$ Standard 4-5

4.3.1 Direct $PM_{2.5}$, short tons per year for the 24-hour $PM_{2.5}$ Standard 4-7

4.3.2 NOx, short tons per day for the 24-hour $PM_{2.5}$ Standard 4-7

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, which 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 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 Birmingham area for Birmingham Metropolitan Planning air quality conformity area is comprised of Jefferson and Shelby Counties for the ground-level Ozone standards and Jefferson and Shelby Counties as well as a donut area of Walker County for $PM_{2.5}$ standards. See Figure 1.1.

The Birmingham area was redesignated as attainment maintenance areas, that are effective on February 21, 2013 for the 1997 annual $PM_{2.5}$ NAAQS. On October 24, 2016, the 1997 Annual PM2.5 standard was revoked (81 FR 58010). Therefore, transportation conformity

is no longer required for the 1997 Annual $PM_{2.5}$ standard in the Birmingham area. However, the conformity test for the 1997 Annual $PM_{2.5}$ is included in this report as a voluntary measure.

The Birmingham area is currently in attainment of the 2006 24-hour $PM_{2.5}$ NAAQS effective on February 25, 2013. The transportation conformity requirements for the 24-hour $PM_{2.5}$ standard under 40 CFR 93.109(b) continue to apply until 2026.

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. Transportation conformity is no longer required for the 1-hour ozone standard in the Birmingham area. However, conformity test for one-hour Ozone standard is included in this report as a voluntary measure.

On April 15, 2004, EPA issued new non-attainment area designations for the 8-hour ozone standard and again Jefferson and Shelby Counties were classified as non-attainment (69 FR 23858). This designation took effect on 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.

On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in *South Coast Air Quality Mgmt. District v. EPA* ("*South Coast II*," 882 F.3d 1138) held that transportation conformity determinations must be made in areas that were either nonattainment or maintenance for the 1997 ozone national ambient air quality standard and attainment for the 2008 ozone NAAQS when the 1997 ozone NAAQS was revoked. These conformity determinations are required in these areas after February 16, 2019. The 1997 Birmingham 8-hour ozone Area was a maintenance at the time of the 1997 ozone NAAQS revocation on April 6, 2015 and was also designated attainment for the 2008 and 2015 ozone NAAQS on May 21, 2012 (77 FR 30088) and November 16, 2017 (82 FR 54232), respectively. Per EPA's Transportation Conformity Guidance for the South Coast II Court Decision, no regional emissions analysis is needed in accordance with 93.109(c) when a standard has been revoked.

On April 6, 2022 (87 FR 19806), EPA approved a second 10-year Limited Maintenance Plan for the 1997 8-hour ozone standard for Birmingham Area. Because of the approved limited maintenance plan, the Birmingham MPO is no longer required to complete a regional emissions analysis for the 1997 8-hour ozone standard pursuant to 93.109(e). However, the transportation conformity for the 1997 8-hour ozone standard is illustrated in this report as a voluntary measure.

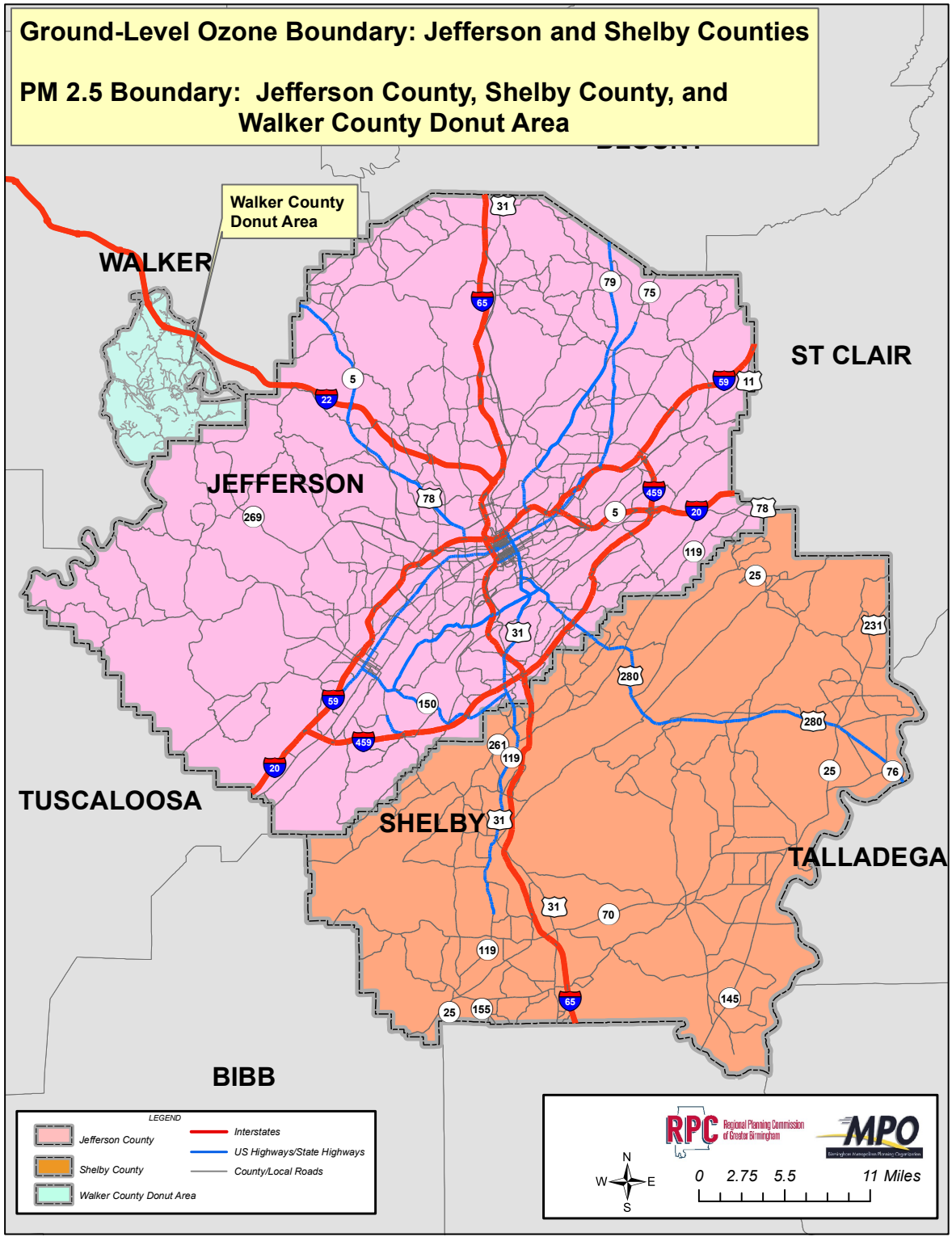
This report demonstrates, through the FY 2024-2027 Transportation Improvement TIP and the 2050 RTP, which is the MPO's Long Range Transportation Plan (LRTP) with

horizontal planning year of 2050, that the Birmingham Metropolitan Planning Area meets the air quality conformity requirements for the 24-hour $PM_{2.5}$ standard.

Although the transportation conformity is not required for the 1978 1-hour ground-level Ozone standard, 1997 8-hour ground-level Ozone standard, and the annual $PM_{2.5}$ standard, conformity tests are still included this report as voluntary measures in this report.

The RTP has at least a 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 2024-2027 TIP and the 2050 RTP. The Birmingham MPO's RTP is now being updated with a new horizon year of 2050 and a base year 2021 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 number of emissions allowed from mobile sources. ADEM oversees 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 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 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 time frame of the conformity determination provided they are not more than ten years apart. ADEM has the 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 2050 should be selected as

analysis years since 2024 is the approved budget year and 2050 is the last year of the new 2050RTP. The years 2034 and 2044 are also selected as intermediate years between 2024 and 2045 so that analysis years are no more than ten years apart.

The years 2024, 2034, 2044, and 2050 are selected as analysis years for the 1997 ground-level Ozone 1-hour standard, the 1997/2006 ground-level Ozone 8-hour standards, and 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 or/and local road VMT based on observed traffic counts.
- Set up input files for Motor Vehicle Emissions Simulator (the latest version, MOVES3.1, has been used to calculate emission inventory).

The Cube Voyager of travel demand model is used to estimate VMT for base year 2021 and future years, 2024, 2034, 2044, and 2050. Observed traffic is calculated to get VMTs in 2021 as the latest data sets. VMT adjustment factors are based on VMT observed and modeling projected VMT in 2021. These adjustment VMT factors are applied to all future modeling projected VMT. 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 the years 2021, 2024, 2034, 2044 and 2050 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 the 2020 Census and projections to the year 2050, 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, 2021, 2024, 2034, 2044, and 2050.

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 2050 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 2021 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 the years 2024, 2034, and 2044 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 conformity analysis years, 2024, 2034, 2044, and 2050, are developed with the estimated date when projects open traffic before the end of calendar year accordingly. 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. 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, projected VMT from Cube Voyager of RPCGB's travel demand model has been used for air quality modeling. 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 sources of VMT are major contributors for emissions. 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. 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 of Observed and Modeled (1)*	2021 Weekday VMT based on Modeling (2)	2024 Weekday VMT based on Modeling (3)	2034 Weekday VMT based on Modeling (4)	2044 Weekday VMT based on Modeling (5)	2050 Weekday VMT based on Modeling (6)
Jefferson County						
Freeway - rural restricted	0.75851	568,725	566,065	596,435	631,490	655,205
Arterial - rural unrestricted	0.86203	249,652	258,855	279,249	298,339	311,840
Collector/local road - rural unrestricted	1.04700	527,954	550,922	541,102	551,323	559,600
Ramp - rural restricted	1.09069	4,625	4,745	4,871	5,058	5,203
Freeway/Expressway - urban restricted	0.90472	10,895,026	11,022,549	11,507,336	11,851,247	12,140,785
Arterial - urban unrestricted	0.95247	7,197,249	7,498,057	7,420,834	7,529,575	7,743,297
Collector/local road - urban unrestricted	0.96070	4,831,909	5,096,097	5,069,857	5,143,028	5,284,441
Ramp - urban restricted	1.02355	914,758	944,375	965,447	984,449	967,092
Subtotal for Jefferson County		**25,189,898**	**25,941,665**	**26,385,131**	**26,994,509**	**27,667,463**
Shelby County						
Freeway - rural restricted	1.00000	0	0	0	0	0
Arterial - rural unrestricted	1.03066	790,276	837,736	897,273	994,446	1,067,023
Collector/local road - rural unrestricted	1.07219	354,801	419,211	452,485	527,663	609,077
Ramp - rural restricted	1.00000	0	0	0	0	0
Freeway/Expressway - urban restricted	0.87918	1,786,746	1,834,039	1,943,267	2,055,144	2,153,724
Arterial - urban unrestricted	0.96038	2,328,466	2,433,986	2,613,378	2,795,555	2,923,794
Collector/local road - urban unrestricted	1.04216	1,490,500	1,579,810	1,721,881	1,920,227	2,086,420
Ramp - urban restricted	1.01866	60,665	64,222	70,672	75,902	78,861
Subtotal for Shelby County		**6,811,454**	**7,169,004**	**7,698,956**	**8,368,937**	**8,918,899**
TOTAL for Both Counties		***32,001,352***	***33,110,669***	***34,084,087***	***35,363,446***	***36,586,362***

*: VMTadjustment factor: VMT based on observed AADT 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 ALDOT traffic count data sets in 2021 for arterials, freeways, and interstates for the Birmingham Metropolitan Planning Area. Observed average daily traffic counts for local roads and collectors in 2021 have been used to calculate factors of classified roadways. The VMT adjustment factor is calculated based on VMT observed VMT divided by Model VMT in 2021. Table 2.2.1.2 illustrates the VMT adjustment factors.

Table 2.2.1.2 VMT Adjustment Factors

County and Road Type	2021 Weekday VMT based on Observed AADT (A)	2021 Weekday VMT based on Modeling (B)	VMT Adjustment Factor between VMTs Observed and Modeled (1)=(A)/(B)
Jefferson County			
Freeway - rural restricted	333,181	439,259	0.75851
Arterial - rural unrestricted	51,944	60,258	0.86203
Collector/local road - rural unrestricted	107,540	102,713	1.04700
Ramp -rural restricted	3,668	3,363	1.09069
Freeway/Expressway - urban restricted	5,369,806	5,935,350	0.90472
Arterial - urban unrestricted	1,413,759	1,484,304	0.95247
Collector/local road - urban unrestricted	561,007	583,957	0.96070
Ramp -urban restricted	582,042	568,651	1.02355
Sub-total for Jefferson County	8,422,947	9,177,855	91.8%
Shelby County			
Freeway - rural restricted	0	0	1.00000
Arterial - rural unrestricted	205,998	199,870	1.03066
Collector/local road - rural unrestricted	46,797	43,646	1.07219
Ramp -rural restricted	0	0	1.00000
Freeway/Expressway - urban restricted	1,027,490	1,168,696	0.87918
Arterial - urban unrestricted	458,965	477,901	0.96038
Collector/local road - urban unrestricted	120,044	115,188	1.04216
Ramp -urban restricted	52,636	51,672	1.01866
Sub-total for Shelby County	1,911,930	2,056,973	92.9%
TOTAL for both Counties	10,334,877	11,234,828	92.0%

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 Modeling VMT and VMT Adjustment Factors

County and Road Type		Adjusted 2021 Model Weekday VMT (7)=(1)x(2)	Adjusted 2024 Model Weekday VMT (8)=(1)x(3)	Adjusted 2034 Model Weekday VMT (9)=(1)x(4)	Adjusted 2040 Model Weekday VMT (10)=(1)x(5)	Adjusted 2045 Model Weekday VMT11)=(1)x (6)
Jefferson County						
Freeway - rural restricted		431,382	429,364	452,400	478,990	496,978
Arterial - rural unrestricted		215,207	223,140	240,720	257,176	268,814
Collector/local road - rural unrestricted		552,765	576,813	566,531	577,232	585,898
Ramp - rural restricted		5,044	5,175	5,313	5,517	5,675
Freeway/Expressway - urban restricted		9,856,904	9,972,276	10,410,871	10,722,013	10,983,962
Arterial - urban unrestricted		6,855,183	7,141,695	7,068,142	7,171,715	7,375,279
Collector/local road - urban unrestricted		4,642,011	4,895,816	4,870,608	4,940,903	5,076,758
Ramp - urban restricted		936,299	966,614	988,182	1,007,631	989,866
Subtotal for Jefferson County		**23,494,796**	**24,210,893**	**24,602,766**	**25,161,177**	**25,783,231**
Shelby County						
Freeway - rural restricted		0	0	0	0	0
Arterial - rural unrestricted		814,506	863,421	924,783	1,024,936	1,099,738
Collector/local road - rural unrestricted		380,416	449,476	485,152	565,757	653,049
Ramp - rural restricted		0	0	0	0	0
Freeway/Expressway - urban restricted		1,570,865	1,612,444	1,708,474	1,806,834	1,893,503
Arterial - urban unrestricted		2,236,204	2,337,543	2,509,827	2,684,786	2,807,944
Collector/local road - urban unrestricted		1,553,335	1,646,410	1,794,471	2,001,178	2,174,378
Ramp - urban restricted		61,797	65,420	71,990	77,318	80,332
Subtotal for Shelby County		**6,617,123**	**6,974,714**	**7,494,698**	**8,160,809**	**8,708,944**
TOTAL for Both Counties		***30,111,919***	***31,185,608***	***32,097,465***	***33,321,986***	***34,492,174***

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. 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 2021 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 areas. 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 by Road Type

Road Types	Road Type ID in MOVES	VMT2021	VMT2024	VMT2034	VMT2044	VMT2050
Off Network	1	0	0	0	0	0
Freeway, rural	2	137,618	143,884	166,906	193,616	211,655
Other Arterials, rural	3	25,457	26,230	28,978	32,014	33,987
Local Road, rural	3	10,744	11,073	12,241	13,533	14,373
Freeway, urban	4	0	0	0	0	0
Other Arterial, urban	5	0	0	0	0	0
Local Road, urban	5	0	0	0	0	0
Total		173,820	181,186	208,125	239,164	260,015

Table 2.2.2.2 Daily VMT in Walker County Donut Area by Vehicle Type

DAILY VMT BY HPMS VEHICLE TYPE	**Walker County Donut Area**			
	2024	**2034**	**2044**	**2050**
Motorcycles 10	1,190	1,359	1,553	1,683
Light-DutyVehicles 25	138,991	159,409	182,907	198,678
Buses 40	1,163	1,336	1,535	1,669
Single UnitTrucks 50	9,844	11,353	13,098	14,272
CombinationTrucks 60	29,998	34,667	40,071	43,713
TOTAL	181,186	208,125	239,164	260,015

Table 2.2.2.3 Annual VMT in Walker County Donut Area based on MOVES Convertor

ANNUAL VMT BY HPMS VEHICLE TYPE	Walker County Donut Area			
	2024	2034	2044	2050
Motorcycles 10	436,066	498,103	569,262	616,902
Light-DutyVehicles 25	50,796,256	58,258,476	66,846,111	72,609,817
Buses 40	425,153	488,305	561,062	609,935
Single UnitTrucks 50	3,597,677	4,149,264	4,786,688	5,215,873
CombinationTrucks 60	10,963,198	12,669,596	14,644,351	15,975,428
TOTAL	66,218,349	76,063,743	87,407,474	95,027,954

2.3 Emissions Estimates by Motor Vehicle Emissions Simulator

Motor Vehicle Emissions Simulator (MOVES) is the EPA modeling tool for estimating air pollution emissions from mobile sources. The emissions estimate of this report uses MOVES3.1. This one released in November 2022 is the latest version. 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 minimum time period for emission inventory was set by hour, 24 hours a day for all months and by weekdays/weekends. 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 Data sets based on Motor Division of Alabama State Revenue Department
- Average Speed Distribution – average speed data specific to vehicle type, road type, and time of day from RPCGB's travel demand modeling
- 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
- 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 MOVES3.

Twelve run specs were developed representing analysis years, 2024, 2034, 2044, and 2050 for Jefferson, Shelby, and Walker counties respectively. 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 2024, 2034, 2044, and 2050 from MOVES is illustrated in 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	
2024	1	2	8.96	4.90	2.58	1.63	11.54	6.53	
2024	1	5	11.47	5.78	3.31	1.92	14.79	7.70	Maximum NOx
2024	2	2	8.52	4.75	2.45	1.59	10.97	6.34	16.26
2024	2	5	10.92	5.61	3.15	1.86	14.07	7.47	
2024	3	2	9.51	5.35	2.72	1.77	12.23	7.12	
2024	3	5	12.20	6.24	3.50	2.06	15.70	8.30	Maximum VOC
2024	4	2	9.67	5.52	2.78	1.83	12.45	7.35	10.33
2024	4	5	12.41	6.41	3.57	2.11	15.98	8.52	
2024	5	2	9.85	6.04	2.83	2.00	12.68	8.04	
2024	5	5	12.63	7.00	3.63	2.30	16.26	9.31	
2024	6	2	9.24	6.41	2.65	2.12	11.89	8.53	
2024	6	5	11.84	7.40	3.41	2.43	15.25	9.83	
2024	7	2	9.42	6.74	2.71	2.19	12.12	8.93	
2024	7	5	12.06	7.77	3.48	2.51	15.54	10.29	
2024	8	2	9.48	6.73	2.74	2.22	12.22	8.94	
2024	8	5	12.15	7.78	3.52	2.55	15.67	10.33	
2024	9	2	8.99	6.10	2.59	2.00	11.58	8.09	
2024	9	5	11.52	7.04	3.32	2.30	14.85	9.33	
2024	10	2	9.44	5.71	2.74	1.88	12.17	7.58	
2024	10	5	12.10	6.62	3.52	2.17	15.62	8.79	
2024	11	2	9.59	5.25	2.77	1.76	12.36	7.01	
2024	11	5	12.30	6.17	3.56	2.05	15.86	8.23	
2024	12	2	9.08	5.17	2.64	1.72	11.72	6.90	
2024	12	5	11.66	6.06	3.39	2.00	15.05	8.06	

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	4.94	3.52	1.54	1.20	6.49	4.72	
2034	1	5	6.35	4.08	1.99	1.40	8.34	5.48	Maximum NOx
2034	2	2	4.70	3.42	1.46	1.17	6.16	4.59	9.02
2034	2	5	6.04	3.97	1.89	1.36	7.93	5.32	
2034	3	2	5.20	3.71	1.61	1.27	6.82	4.98	
2034	3	5	6.71	4.26	2.09	1.45	8.80	5.70	Maximum VOC
2034	4	2	5.28	3.84	1.64	1.31	6.93	5.15	6.76
2034	4	5	6.81	4.38	2.13	1.49	8.94	5.87	
2034	5	2	5.33	4.09	1.66	1.40	6.99	5.49	
2034	5	5	6.87	4.67	2.15	1.59	9.02	6.26	
2034	6	2	4.96	4.26	1.54	1.46	6.50	5.72	
2034	6	5	6.39	4.85	2.00	1.64	8.39	6.50	
2034	7	2	5.04	4.45	1.57	1.50	6.61	5.95	
2034	7	5	6.50	5.06	2.04	1.69	8.53	6.75	
2034	8	2	5.07	4.43	1.58	1.51	6.66	5.94	
2034	8	5	6.54	5.05	2.06	1.71	8.60	6.76	
2034	9	2	4.85	4.09	1.51	1.39	6.36	5.48	
2034	9	5	6.25	4.65	1.96	1.57	8.21	6.22	
2034	10	2	5.14	3.90	1.61	1.33	6.75	5.22	
2034	10	5	6.63	4.45	2.09	1.51	8.73	5.95	
2034	11	2	5.27	3.71	1.65	1.28	6.92	4.98	
2034	11	5	6.79	4.28	2.14	1.47	8.93	5.75	
2034	12	2	4.98	3.60	1.56	1.23	6.54	4.84	
2034	12	5	6.42	4.14	2.03	1.41	8.45	5.55	

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	
2044	1	2	4.49	3.13	1.51	1.08	6.00	4.21	
2044	1	5	5.78	3.62	1.96	1.26	7.74	4.88	Maximum NOx
2044	2	2	4.27	3.04	1.43	1.05	5.70	4.09	8.30
2044	2	5	5.49	3.52	1.86	1.22	7.35	4.73	
2044	3	2	4.72	3.23	1.58	1.12	6.29	4.36	
2044	3	5	6.09	3.70	2.05	1.28	8.14	4.98	Maximum VOC
2044	4	2	4.78	3.33	1.61	1.16	6.38	4.48	5.78
2044	4	5	6.17	3.79	2.09	1.32	8.26	5.11	
2044	5	2	4.80	3.51	1.61	1.22	6.41	4.74	
2044	5	5	6.20	4.00	2.10	1.39	8.30	5.39	
2044	6	2	4.45	3.64	1.49	1.27	5.94	4.91	
2044	6	5	5.75	4.13	1.95	1.43	7.70	5.56	
2044	7	2	4.52	3.80	1.52	1.31	6.04	5.11	
2044	7	5	5.84	4.30	1.98	1.47	7.82	5.78	
2044	8	2	4.55	3.78	1.53	1.32	6.08	5.10	
2044	8	5	5.88	4.30	2.00	1.49	7.88	5.78	
2044	9	2	4.36	3.50	1.46	1.21	5.82	4.71	
2044	9	5	5.63	3.96	1.91	1.36	7.54	5.33	
2044	10	2	4.64	3.36	1.57	1.16	6.21	4.52	
2044	10	5	6.00	3.83	2.05	1.32	8.05	5.15	
2044	11	2	4.79	3.26	1.61	1.13	6.40	4.40	
2044	11	5	6.17	3.77	2.09	1.31	8.27	5.08	
2044	12	2	4.52	3.14	1.53	1.09	6.04	4.23	
2044	12	5	5.83	3.60	1.99	1.24	7.82	4.85	

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	
2050	1	2	4.54	3.09	1.60	1.09	6.14	4.18	
2050	1	5	5.84	3.59	2.07	1.27	7.91	4.85	Maximum NOx
2050	2	2	4.31	3.00	1.52	1.05	5.83	4.05	8.49
2050	2	5	5.55	3.48	1.97	1.22	7.52	4.70	
2050	3	2	4.76	3.18	1.67	1.12	6.43	4.30	
2050	3	5	6.15	3.64	2.18	1.28	8.32	4.93	Maximum VOC
2050	4	2	4.82	3.27	1.70	1.16	6.52	4.43	5.70
2050	4	5	6.23	3.73	2.22	1.32	8.45	5.05	
2050	5	2	4.84	3.45	1.71	1.23	6.55	4.67	
2050	5	5	6.26	3.92	2.23	1.39	8.49	5.32	
2050	6	2	4.48	3.57	1.58	1.27	6.07	4.84	
2050	6	5	5.80	4.05	2.06	1.44	7.86	5.48	
2050	7	2	4.55	3.72	1.61	1.31	6.17	5.03	
2050	7	5	5.89	4.22	2.10	1.48	7.99	5.70	
2050	8	2	4.58	3.71	1.63	1.32	6.21	5.03	
2050	8	5	5.93	4.21	2.12	1.49	8.05	5.70	
2050	9	2	4.39	3.43	1.55	1.21	5.95	4.64	
2050	9	5	5.68	3.88	2.03	1.37	7.71	5.25	
2050	10	2	4.68	3.30	1.67	1.16	6.35	4.46	
2050	10	5	6.06	3.76	2.18	1.33	8.23	5.08	
2050	11	2	4.83	3.22	1.71	1.14	6.54	4.35	
2050	11	5	6.24	3.72	2.22	1.31	8.46	5.03	
2050	12	2	4.56	3.09	1.62	1.09	6.18	4.18	
2050	12	5	5.89	3.55	2.11	1.25	7.99	4.79	

NOx, Primary Exhaust $PM_{2.5}$ Total, Brake wear $PM_{2.5}$, and Tire wear $PM_{2.5}$ are pollutants calculated in the MOVES3 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 inventories of NOx and Direct $PM_{2.5}$ for $PM_{2.5}$ Standards by county and analysis year from MOVES3 are illustrated in 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	8.9583	0.2816	2.5806	0.0923	0.2714	0.0074	11.8103	0.3814	Maximum	8	94.4825	3.0509
2024	1	5	11.4746	0.3609	3.3109	0.1186	0.2093	0.0054	14.9948	0.4849	Daily NOx	23	344.8809	11.1522
2024	2	2	8.5208	0.2668	2.4519	0.0869	0.2635	0.0072	11.2361	0.3610	16.48	8	89.8890	2.8880
2024	2	5	10.9184	0.3423	3.1466	0.1118	0.2013	0.0052	14.2664	0.4593	Tons/Day	21	299.5945	9.6452
2024	3	2	9.5095	0.2909	2.7210	0.0939	0.2798	0.0078	12.5103	0.3926		10	125.1027	3.9264
2024	3	5	12.1985	0.3741	3.4975	0.1211	0.2200	0.0058	15.9160	0.5009		21	334.2361	10.5191
2024	4	2	9.6745	0.2940	2.7785	0.0949	0.2824	0.0079	12.7354	0.3967	Maximum	8	101.8830	3.1738
2024	4	5	12.4078	0.3784	3.5707	0.1225	0.2225	0.0058	16.2010	0.5067	Daily $PM_{2.5}$	22	356.4222	11.1471
2024	5	2	9.8511	0.3129	2.8264	0.1009	0.2799	0.0081	12.9574	0.4219	0.57	8	103.6592	3.3754
2024	5	5	12.6253	0.4018	3.6312	0.1300	0.2229	0.0061	16.4794	0.5379	Tons/Day	23	379.0269	12.3722
2024	6	2	9.2365	0.3142	2.6536	0.1011	0.2589	0.0082	12.1491	0.4235		10	121.4910	4.2348
2024	6	5	11.8406	0.4028	3.4086	0.1299	0.2067	0.0062	15.4559	0.5388		20	309.1181	10.7766
2024	7	2	9.4156	0.3288	2.7093	0.1057	0.2586	0.0084	12.3834	0.4429		8	99.0675	3.5430
2024	7	5	12.0630	0.4214	3.4787	0.1358	0.2081	0.0064	15.7497	0.5636		23	362.2441	12.9633
2024	8	2	9.4825	0.3326	2.7398	0.1069	0.2591	0.0085	12.4815	0.4480		9	112.3337	4.0316
2024	8	5	12.1489	0.4263	3.5184	0.1374	0.2089	0.0064	15.8763	0.5701		22	349.2778	12.5427
2024	9	2	8.9917	0.3013	2.5851	0.0969	0.2570	0.0080	11.8338	0.4062		9	106.5042	3.6559
2024	9	5	11.5246	0.3865	3.3206	0.1246	0.2036	0.0060	15.0489	0.5171		21	316.0263	10.8590
2024	10	2	9.4386	0.3049	2.7355	0.0981	0.2711	0.0081	12.4452	0.4111		8	99.5612	3.2884
2024	10	5	12.1037	0.3919	3.5152	0.1265	0.2153	0.0060	15.8343	0.5244		23	364.1879	12.0623
2024	11	2	9.5897	0.2963	2.7733	0.0955	0.2822	0.0078	12.6452	0.3996		9	113.8071	3.5961
2024	11	5	12.2997	0.3813	3.5639	0.1233	0.2213	0.0058	16.0849	0.5103		21	337.7837	10.7159
2024	12	2	9.0827	0.2878	2.6384	0.0928	0.2691	0.0077	11.9901	0.3883		9	107.9113	3.4951
2024	12	5	11.6551	0.3699	3.3917	0.1195	0.2108	0.0057	15.2576	0.4951		22	335.6678	10.8923
TOTAL											Total Tons/Year		**5,364.16**	**177.91**

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
2034	1	2	4.9426	0.1938	1.5425	0.0699	0.1167	0.0021	6.6018	0.2658	Maximum	9	59.4160	2.3924
2034	1	5	6.3513	0.2477	1.9931	0.0896	0.1052	0.0021	8.4496	0.3393	Daily NOx	22	185.8912	7.4654
2034	2	2	4.6964	0.1830	1.4629	0.0654	0.1120	0.0020	6.2714	0.2504	9.14	8	50.1711	2.0033
2034	2	5	6.0379	0.2342	1.8912	0.0840	0.1005	0.0020	8.0296	0.3202	Tons/Day	20	160.5924	6.4034
2034	3	2	5.2038	0.1901	1.6124	0.0679	0.1232	0.0023	6.9395	0.2603		8	55.5157	2.0826
2034	3	5	6.7062	0.2442	2.0908	0.0877	0.1121	0.0022	8.9092	0.3341		23	204.9109	7.6839
2034	4	2	5.2834	0.1925	1.6440	0.0688	0.1248	0.0023	7.0523	0.2637	Maximum	10	70.5231	2.6368
2034	4	5	6.8112	0.2478	2.1323	0.0890	0.1137	0.0022	9.0573	0.3390	Daily $PM_{2.5}$	20	181.1454	6.7792
2034	5	2	5.3302	0.2054	1.6559	0.0733	0.1250	0.0025	7.1111	0.2812	0.38	8	56.8891	2.2498
2034	5	5	6.8740	0.2633	2.1501	0.0945	0.1144	0.0024	9.1385	0.3602	Tons/Day	23	210.1846	8.2843
2034	6	2	4.9570	0.2055	1.5401	0.0731	0.1154	0.0025	6.6125	0.2811		8	52.8999	2.2486
2034	6	5	6.3922	0.2625	1.9995	0.0938	0.1058	0.0024	8.4976	0.3587		22	186.9464	7.8917
2034	7	2	5.0404	0.2149	1.5701	0.0765	0.1162	0.0026	6.7266	0.2940		10	67.2662	2.9397
2034	7	5	6.4969	0.2745	2.0380	0.0981	0.1069	0.0025	8.6417	0.3751		21	181.4765	7.8780
2034	8	2	5.0735	0.2174	1.5843	0.0774	0.1167	0.0026	6.7745	0.2974		8	54.1958	2.3793
2034	8	5	6.5398	0.2778	2.0566	0.0993	0.1074	0.0025	8.7039	0.3795		23	200.1887	8.7293
2034	9	2	4.8471	0.1972	1.5083	0.0702	0.1138	0.0024	6.4692	0.2697		9	58.2227	2.4276
2034	9	5	6.2528	0.2522	1.9588	0.0902	0.1039	0.0023	8.3156	0.3447		21	174.6271	7.2378
2034	10	2	5.1409	0.1977	1.6130	0.0706	0.1208	0.0024	6.8747	0.2707		9	61.8725	2.4366
2034	10	5	6.6331	0.2539	2.0942	0.0911	0.1105	0.0023	8.8378	0.3473		22	194.4311	7.6413
2034	11	2	5.2725	0.1988	1.6476	0.0703	0.1238	0.0023	7.0440	0.2714		8	56.3516	2.1714
2034	11	5	6.7902	0.2557	2.1350	0.0910	0.1126	0.0022	9.0378	0.3488		22	198.8308	7.6744
2034	12	2	4.9803	0.1894	1.5629	0.0674	0.1178	0.0022	6.6610	0.2590		10	66.6102	2.5900
2034	12	5	6.4191	0.2430	2.0265	0.0869	0.1071	0.0022	8.5528	0.3320		21	179.6084	6.9730
TOTAL											Total Tons/Year		**2,968.77**	**119.20**

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
2044	1	2	4.4938	0.1881	1.5091	0.0722	0.1040	0.0020	6.1069	0.2623	Maximum	10	61.0687	2.6231
2044	1	5	5.7812	0.2402	1.9559	0.0926	0.1003	0.0020	7.8374	0.3349	Daily NOx	21	164.5855	7.0329
2044	2	2	4.2685	0.1775	1.4310	0.0676	0.0994	0.0019	5.7989	0.2470	8.41	8	46.3908	1.9759
2044	2	5	5.4942	0.2270	1.8556	0.0869	0.0956	0.0019	7.4455	0.3159	Tons/Day	21	156.3546	6.6332
2044	3	2	4.7159	0.1828	1.5765	0.0705	0.1111	0.0022	6.4035	0.2555		8	51.2277	2.0440
2044	3	5	6.0873	0.2347	2.0510	0.0911	0.1075	0.0022	8.2458	0.3280		23	189.6532	7.5432
2044	4	2	4.7783	0.1850	1.6052	0.0715	0.1126	0.0022	6.4961	0.2587	Maximum	9	58.4651	2.3284
2044	4	5	6.1713	0.2380	2.0893	0.0925	0.1090	0.0022	8.3695	0.3327	Daily $PM_{2.5}$	21	175.7599	6.9859
2044	5	2	4.8002	0.1973	1.6108	0.0762	0.1133	0.0024	6.5242	0.2758	0.37	9	58.7180	2.4826
2044	5	5	6.2043	0.2528	2.0996	0.0982	0.1098	0.0023	8.4138	0.3533	Tons/Day	22	185.1033	7.7731
2044	6	2	4.4500	0.1972	1.4924	0.0760	0.1045	0.0024	6.0469	0.2755		8	48.3749	2.2044
2044	6	5	5.7513	0.2517	1.9456	0.0976	0.1014	0.0023	7.7983	0.3516		22	171.5634	7.7362
2044	7	2	4.5202	0.2062	1.5200	0.0795	0.1056	0.0025	6.1458	0.2882		10	61.4580	2.8818
2044	7	5	5.8400	0.2632	1.9813	0.1021	0.1026	0.0025	7.9239	0.3677		21	166.4021	7.7224
2044	8	2	4.5490	0.2087	1.5328	0.0804	0.1061	0.0025	6.1879	0.2916		8	49.5034	2.3325
2044	8	5	5.8774	0.2663	1.9982	0.1033	0.1032	0.0025	7.9789	0.3721		23	183.5136	8.5572
2044	9	2	4.3576	0.1892	1.4642	0.0729	0.1028	0.0023	5.9246	0.2644		8	47.3968	2.1156
2044	9	5	5.6348	0.2419	1.9095	0.0938	0.0996	0.0023	7.6438	0.3379		22	168.1639	7.4341
2044	10	2	4.6419	0.1897	1.5726	0.0734	0.1094	0.0023	6.3239	0.2653		10	63.2393	2.6533
2044	10	5	6.0023	0.2434	2.0494	0.0947	0.1061	0.0023	8.1579	0.3405		21	171.3149	7.1497
2044	11	2	4.7869	0.1921	1.6113	0.0729	0.1114	0.0022	6.5097	0.2672		8	52.0774	2.1372
2044	11	5	6.1737	0.2470	2.0948	0.0943	0.1078	0.0022	8.3763	0.3435		22	184.2783	7.5559
2044	12	2	4.5153	0.1823	1.5270	0.0699	0.1059	0.0021	6.1482	0.2543		9	55.3338	2.2891
2044	12	5	5.8289	0.2339	1.9867	0.0902	0.1025	0.0021	7.9181	0.3262		22	174.1988	7.1753
TOTAL											Total Tons/Year		**2,744.15**	**117.37**

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**
2050	1	2	4.5369	0.1904	1.5998	0.0763	0.1101	0.0021	6.2468	0.2688	Maximum	10	62.4681	2.6881
2050	1	5	5.8399	0.2433	2.0739	0.0980	0.1063	0.0021	8.0201	0.3434	Daily NOx	21	168.4218	7.2106
2050	2	2	4.3093	0.1796	1.5173	0.0715	0.1052	0.0020	5.9317	0.2532	8.61	8	47.4539	2.0254
2050	2	5	5.5498	0.2299	1.9678	0.0920	0.1014	0.0020	7.6190	0.3239	Tons/Day	20	152.3794	6.4783
2050	3	2	4.7592	0.1852	1.6736	0.0752	0.1177	0.0023	6.5504	0.2627		8	52.4032	2.1013
2050	3	5	6.1468	0.2379	2.1775	0.0971	0.1140	0.0022	8.4383	0.3372		23	194.0812	7.7567
2050	4	2	4.8206	0.1875	1.7042	0.0762	0.1193	0.0023	6.6442	0.2660	Maximum	9	59.7978	2.3941
2050	4	5	6.2300	0.2412	2.2183	0.0986	0.1156	0.0023	8.5639	0.3421	Daily $PM_{2.5}$	21	179.8427	7.1848
2050	5	2	4.8397	0.1999	1.7099	0.0812	0.1200	0.0025	6.6696	0.2837	0.38	9	60.0262	2.5529
2050	5	5	6.2599	0.2562	2.2290	0.1048	0.1165	0.0024	8.6054	0.3634	Tons/Day	22	189.3195	7.9954
2050	6	2	4.4842	0.1998	1.5831	0.0811	0.1107	0.0025	6.1780	0.2834		8	49.4241	2.2673
2050	6	5	5.7998	0.2551	2.0642	0.1042	0.1076	0.0025	7.9717	0.3618		22	175.3765	7.9604
2050	7	2	4.5542	0.2090	1.6120	0.0848	0.1118	0.0026	6.2780	0.2964		10	62.7803	2.9641
2050	7	5	5.8884	0.2669	2.1016	0.1090	0.1088	0.0026	8.0989	0.3784		21	170.0764	7.9463
2050	8	2	4.5830	0.2114	1.6254	0.0858	0.1124	0.0026	6.3208	0.2999		8	50.5667	2.3991
2050	8	5	5.9261	0.2700	2.1194	0.1103	0.1094	0.0026	8.1549	0.3828		23	187.5616	8.8053
2050	9	2	4.3922	0.1918	1.5537	0.0778	0.1089	0.0024	6.0547	0.2720		8	48.4378	2.1759
2050	9	5	5.6838	0.2452	2.0264	0.1001	0.1056	0.0024	7.8159	0.3477		22	171.9498	7.6487
2050	10	2	4.6819	0.1922	1.6694	0.0783	0.1160	0.0024	6.4673	0.2730		10	64.6726	2.7296
2050	10	5	6.0583	0.2468	2.1758	0.1012	0.1126	0.0024	8.3467	0.3503		21	175.2804	7.3572
2050	11	2	4.8320	0.1945	1.7098	0.0774	0.1180	0.0023	6.6598	0.2742		8	53.2781	2.1939
2050	11	5	6.2355	0.2502	2.2229	0.1002	0.1143	0.0023	8.5727	0.3527		22	188.5998	7.7584
2050	12	2	4.5568	0.1847	1.6205	0.0744	0.1122	0.0022	6.2895	0.2613		9	56.6053	2.3520
2050	12	5	5.8861	0.2370	2.1085	0.0960	0.1087	0.0022	8.1033	0.3352		22	178.2733	7.3745
TOTAL											Total Tons/Year		**2,799.08**	**120.32**

3.0 Other Conformity Requirements

3.1 Other Conformity Requirements

There are no transportation control measures (TCMs) for either the ground-level Ozone standards or the annual/the 24-hour $PM_{2.5}$ standards in the State Implementation Plan (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 2024-2027 TIP and the 2050 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 2024-2027 TIP and the 20505 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 MOVES3 is delineated below for each modeled year and for specific pollutants. For the ground-level Ozone standards, the modeled emissions for Jefferson County and Shelby County are combined. The ozone-forming emissions of Volatile Organic Compounds (VOC) and Oxides of Nitrogen (NOx) in 2024, 2034, 2044, and 2050 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 the 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 MOVES3 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 10.33 tons per day and 16.26 tons per day in 2024. The highest 10.33 tons per day VOC and 16.26 tons per day NOx are no-greater-than budgets, the 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 MOVES3 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 Conformity Test for The Ground-Level Ozone, 1-Hour Standard in tons/day

Emissions	2024	2034	2044	2050
Output for VOC	**10.33**	**6.76**	**5.78**	**5.70**
Budget for VOC*	23.00	23.00	23.00	23.00
Status for VOC	Pass	Pass	Pass	Pass
Output for NOx	**16.26**	**9.02**	**8.30**	**8.49**
Budget for NOx	41.00	41.00	41.00	41.00
Status for NOx	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

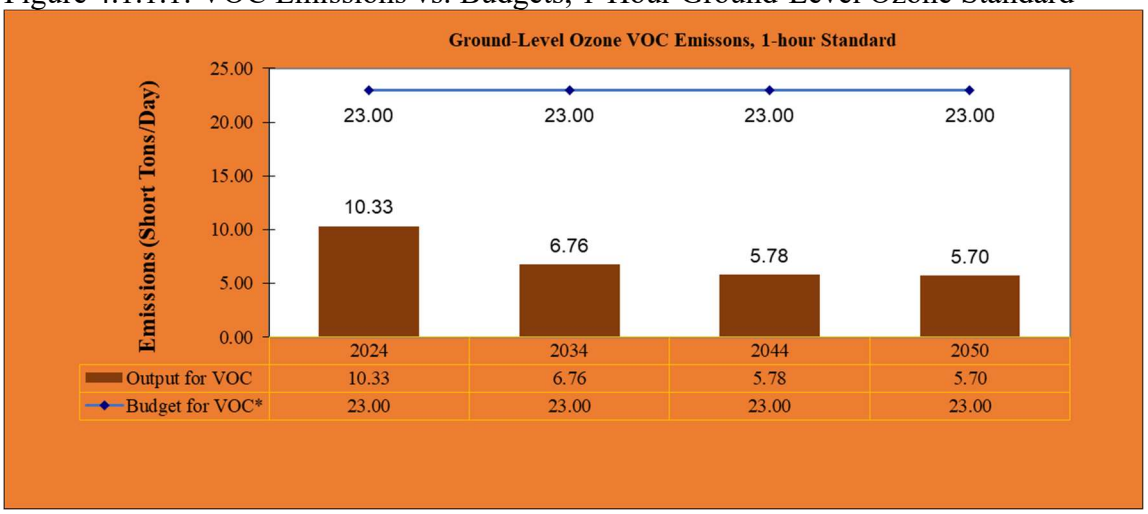
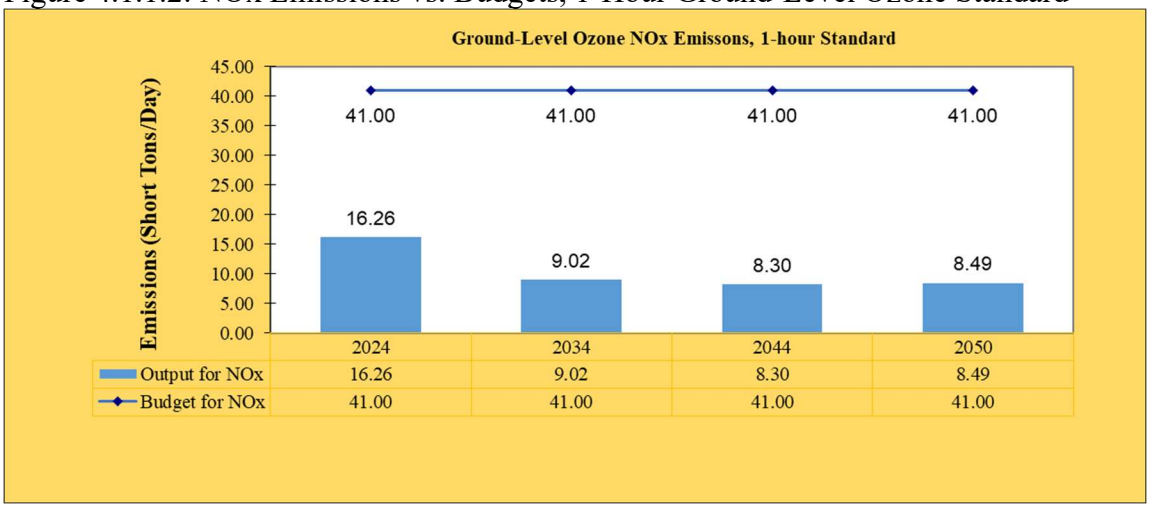


Figure 4.1.1.2: NOx Emissions vs. Budgets, 1-Hour Ground-Level Ozone Standard



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 10.33 tons per day and 16.26 tons per day in 2024. These highest 10.33 tons per day VOC and 16.26 tons per day NOx are no-greater-than budgets, the 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 MOVES3 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 Conformity Test for The Ground-Level Ozone, 8-hour Standard in tons/day

Emissions	2024	2034	2044	2050
Output for VOC	**10.33**	**6.76**	**5.78**	**5.70**
Budget for VOC*	23.00	23.00	23.00	23.00
Status for VOC	Pass	Pass	Pass	Pass
Output for NOx	**16.26**	**9.02**	**8.30**	**8.49**
Budget for NOx	42.00	42.00	42.00	42.00
Status for NOx	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

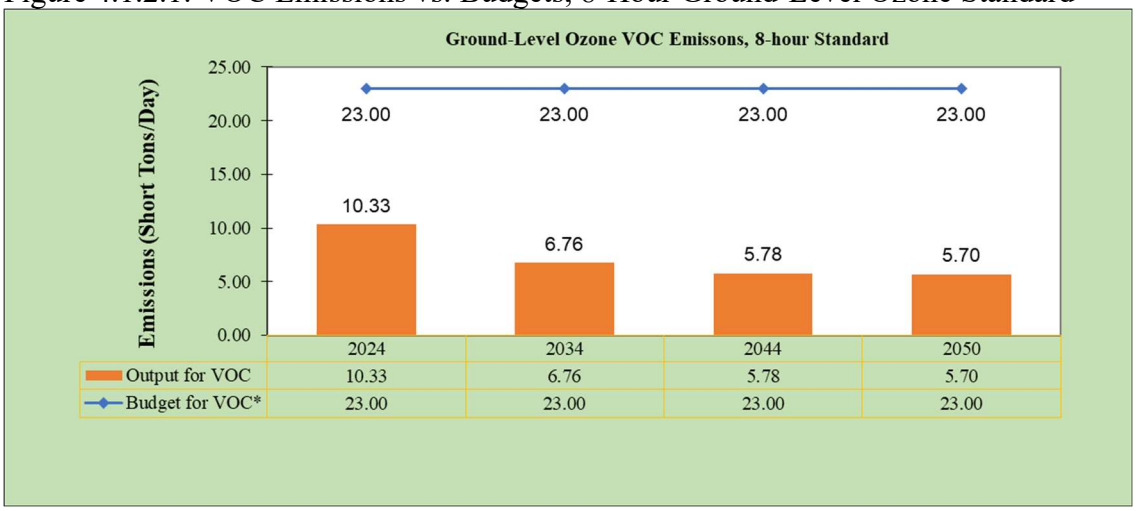
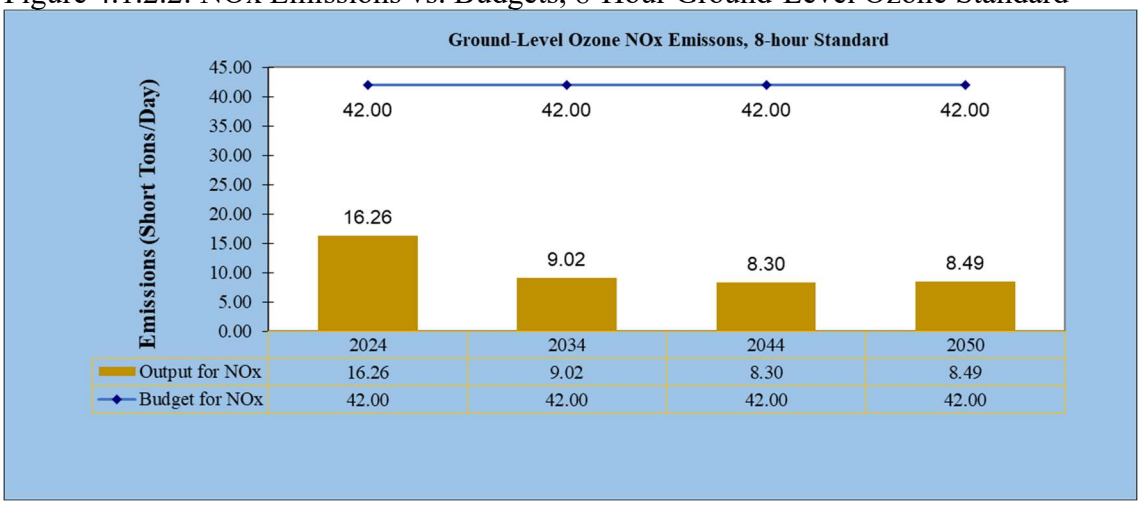


Figure 4.1.2.2: NOx Emissions vs. Budgets, 8-Hour Ground-Level Ozone Standard



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, 2044, and 2050 is 177.91 tons per year and fewer than 442.07 tons per year of the 2024 MVEB. The highest NOx in 2024, 2034, 2044, and 2050 is 5,364.16 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	2044	2050
$PM_{2.5}$	**177.91**	**119.20**	**117.37**	**120.32**
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	**5,364.16**	**2,968.77**	**2,744.15**	**2,799.08**
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

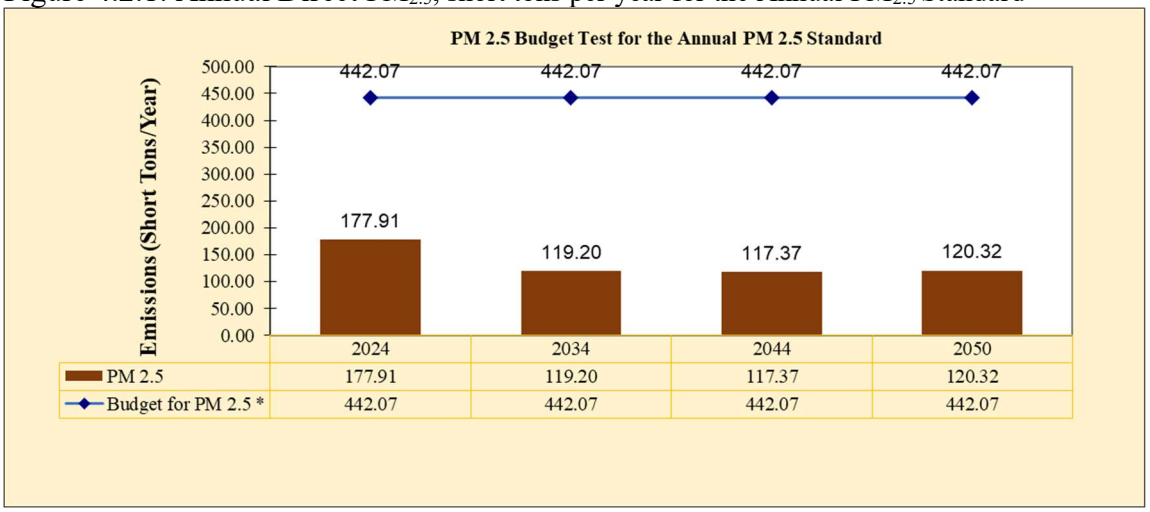
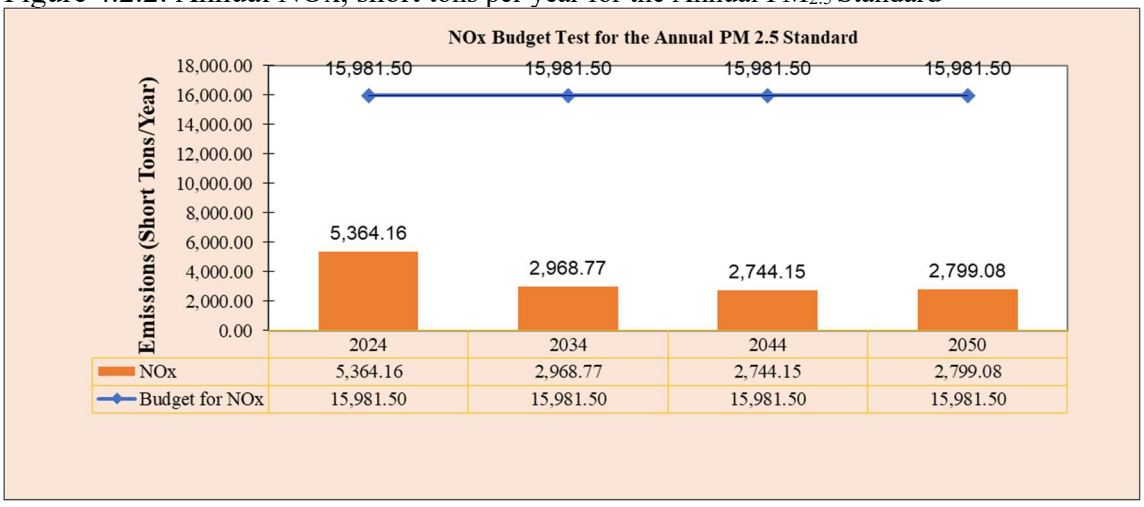


Figure 4.2.2: Annual NOx, short tons per year for the Annual $PM_{2.5}$ Standard



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, 2044, and 2050 is 0.57 tons per day and fewer than 1.21 tons per day of the 2024 MVEB. The highest NOx in 2024, 2034, 2044, and 2050 is 16.48 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	2044	2050
$PM_{2.5}$	**0.57**	**0.38**	**0.37**	**0.38**
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	**16.48**	**9.14**	**8.41**	**8.61**
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

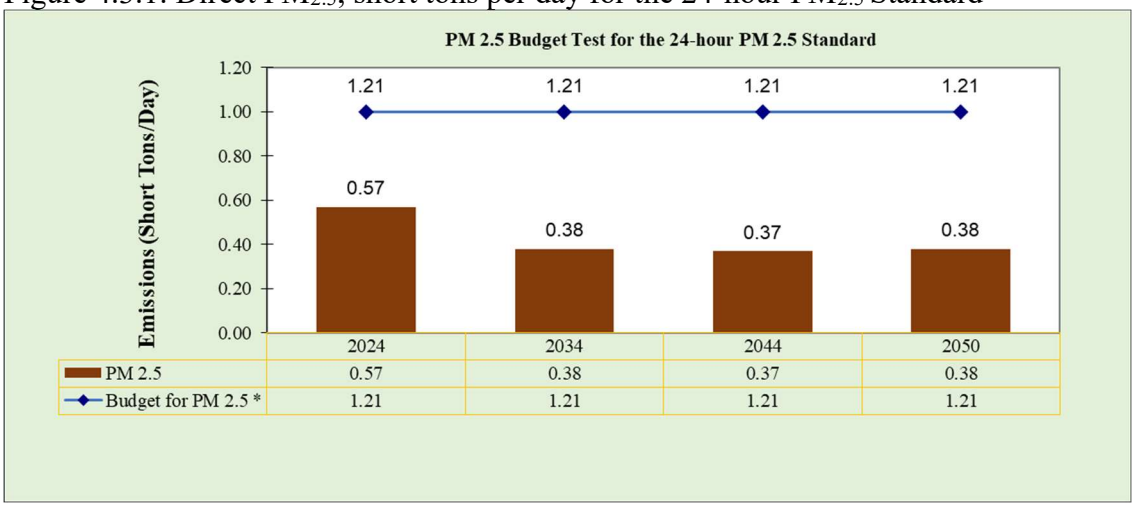
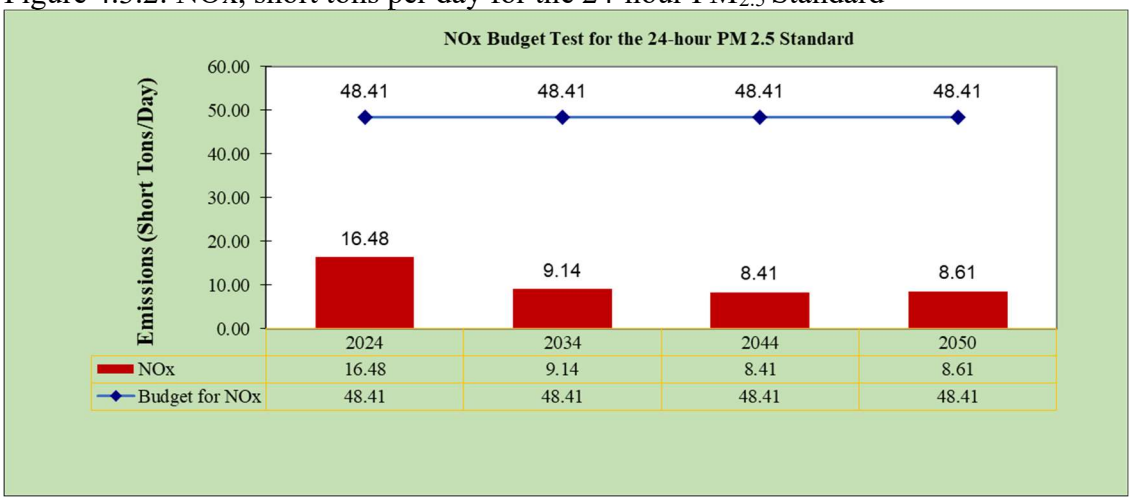


Figure 4.3.2: NOx, short tons per day for the 24-hour $PM_{2.5}$ Standard



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 2024-2027 TIP and the 2050 RTP was held on April 19, 2023. The meeting marks the beginning of the 21-day comment period. A separate document titled, *Public Involvement Meeting Documentation Wednesday, April 19, 2023*, is published by the RPCGB and available at http://www.rpcgb.org/public-involvement. This document describes the outreach and notification procedures used to meet the Infrastructure Investment and Jobs Act (IIJA) 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 2050 Regional Transportation Plan (RTP, a long range transportation plan) and Birmingham MPO FY 2024-2027 Transportation Improvement Program (TIP). The analysis years for the air model are 2024, 2034, 2044, and 2050.

The latest MOVES, the version MOVES3.1 released in November 2022 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.

Onroad Vehicles

The following fuel types and vehicles type are selected for Jefferson County (Shelby and Walker Counties without CNG-Transit Bus)

Combination Long-haul Truck - Diesel Fuel
Combination Short-haul Truck - Compressed Natural Gas (CNG)
Combination Short-haul Truck - Diesel Fuel
Combination Short-haul Truck - Gasoline
Light Commercial Truck - Diesel Fuel
Light Commercial Truck - Electricity
Light Commercial Truck - Ethanol (E-85)
Light Commercial Truck - Gasoline
Motor Home - Compressed Natural Gas (CNG)
Motor Home - Diesel Fuel
Motor Home - Gasoline
Motorcycle - Gasoline
Other Buses - Compressed Natural Gas (CNG)
Other Buses - Diesel Fuel
Other Buses - Gasoline
Passenger Car - Diesel Fuel
Passenger Car - Electricity
Passenger Car - Ethanol (E-85)
Passenger Car - Gasoline
Passenger Truck - Diesel Fuel
Passenger Truck - Electricity
Passenger Truck - Ethanol (E-85)
Passenger Truck - Gasoline
Refuse Truck - Compressed Natural Gas (CNG)
Refuse Truck - Diesel Fuel
Refuse Truck - Gasoline
School Bus - Compressed Natural Gas (CNG)
School Bus - Diesel Fuel
School Bus - Gasoline
Single Unit Long-haul Truck - Compressed Natural Gas (CNG)
Single Unit Long-haul Truck - Diesel Fuel
Single Unit Long-haul Truck - Gasoline
Single Unit Short-haul Truck - Compressed Natural Gas (CNG)
Single Unit Short-haul Truck - Diesel Fuel
Single Unit Short-haul Truck - Gasoline
Transit Bus - Compressed Natural Gas (CNG)
Transit Bus - Diesel Fuel
Transit Bus - Gasoline

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)

General Output
Create Jeff_2024Out_2050RTP_20230124 as database for 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 Emissions Detail
Select Time: Hour and Geographic: COUNTY in Output Aggregation box
Check nothing in for All Vehicle/Equipment Categories
Check Road Type in Onroad box
Check nothing in Nonroad box

2. Create Input Database, County Data Manager

Type localhost as server in Domain Input Database box.
Create Jeff_2024In_2050RTP_20230124 as database in Domain Input Database; this is a sample for Jefferson County
Description as Jefferson County 2024 County level inventory conformity analysis
Click button: Enter/Edit Data

After clicking Enter/Edit Data, County Data Manager (CDM) panel pops up. CDM 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.

-Hoteling, as default

-Idle, as default

-I/M Programs, Check no I/M Programs. Not applicable for Birmingham ground-level Ozone, the annual and 24-hour $PM_{2.5}$ maintenance areas.

-Retrofit Data, as default

-Generic, as default

-Tools, as default

-Road Type Distribution, calculated from RPCGB's travel demand model by MOVES' road types.

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.

sourceTypeID	roadTypeID	roadTypeVMTFraction
11	1	0
11	2	0.0150365
11	3	0.0550761
11	4	0.2636142
11	5	0.6662732
21	1	0
21	2	0.0146684
21	3	0.0303694
21	4	0.4438484
21	5	0.5111138
31	1	0
31	2	0.0146684
31	3	0.0303694
31	4	0.4438484
31	5	0.5111138
32	1	0
32	2	0.0156837
32	3	0.0458459
32	4	0.3734202
32	5	0.5650501
41	1	0
41	2	0.0250498
41	3	0.0468353
41	4	0.5025036
41	5	0.4256113
42	1	0
42	2	0.0250498
42	3	0.0468353
42	4	0.5025036
42	5	0.4256113
43	1	0
43	2	0.0250498
43	3	0.0468353
43	4	0.5025036
43	5	0.4256113
51	1	0
51	2	0.0326666
51	3	0.031931
51	4	0.5774125
51	5	0.3579899
52	1	0
52	2	0.0326666
52	3	0.031931
52	4	0.5774125
52	5	0.3579899
53	1	0
53	2	0.0326666
53	3	0.031931
53	4	0.5774125
53	5	0.3579899
54	1	0
54	2	0.0326666
54	3	0.031931
54	4	0.5774125
54	5	0.3579899
61	1	0
61	2	0.0507958
61	3	0.0240111
61	4	0.6986284
61	5	0.2265648
62	1	0
62	2	0.0507958
62	3	0.0240111
62	4	0.6986284
62	5	0.2265648

-Source Type Population, the vehicle population by vehicle type for calendar year 2021 based on County vehicle registration. The vehicle registration is obtained from Alabama Revenue Department. The source type population for vehicles in calendar year beyond 2021 was estimated based on 2017 nationwide data sets and projection methodologies provided by the MOVES. The school bus information in 2019 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	10988
2024	21	373722
2024	31	351691
2024	32	8436
2024	41	609
2024	42	137
2024	43	792
2024	51	130
2024	52	2582
2024	53	110
2024	54	1168
2024	61	13368
2024	62	13810

-Starts, as default

-Vehicle Type VMT, vehicle miles traveled distributed by vehicle type and by County.
The weekday VMT in 2024 from modeling after adjusted based on the observed VMT are as the following table in the MOVES VMT convertor.

2) Enter your AADVMT values by HPMS type below:		
HPMSVtypeID	yearID	AADVMT
10	2024	161834
25	2024	21496084
40	2024	111021
50	2024	799465
60	2024	1642489

The Annual VMT in 2024 for Jefferson by HPMS type are calculated based on MOVES VMT convertor with the weekday VMT above as the following table.

HPMSVTypeID	yearID	HPMSBaseYearVMT
10	2024	55,575,572
25	2024	7,360,606,960
40	2024	38,015,387
50	2024	273,749,751
60	2024	562,414,808

The Birmingham Area air quality boundaries include Jefferson County, Shelby County, and a small portion of Walker County (Donut area). There are observed traffic counts in 2021 which can be used to calculate these observed VMT. A base year 2021 is as part of 2050 Birmingham MPO Regional Transportation Plan. The highway network and all social demographic data for forecast modeling exists for Jefferson and Shelby Counties in 2021. Cube Voyager, a travel demand modeling program, has been used to estimate the average weekday VMT. Comparing the modeling VMT and observed VMT to obtain VMT adjustment factors, adjusted weekday VMT can be calculated through these modeling VMT in 2021 as well other future years and adjusted VMT factors. Based on MOVES road type and HPMS factors, all VMT can be converted into HPMS type VMY for each year. The HPMS type weekday VMT can be converted into HPMS type Annual VMT based on MOVES VMT convertor. For the Walker County donut area, an off-model methodology has been introduced to estimate VMT. All off-model calculations are listed in final pages of this appendix.

VMT Adjustment factors

County and Road Type	2021 Weekday VMT based on Observed AADT (A)	2021 Weekday VMT based on Modeling (B)	VMT Adjustment Factor between VMTs Observed and Modeled (1)=(A)/(B)
Jefferson County			
Freeway - rural restricted	333,181	439,259	0.75851
Arterial - rural unrestricted	51,944	60,258	0.86203
Collector/local road - rural unrestricted	107,540	102,713	1.04700
Ramp -rural restricted	3,668	3,363	1.09069
Freeway/Expressway - urban restricted	5,369,806	5,935,350	0.90472
Arterial - urban unrestricted	1,413,759	1,484,304	0.95247
Collector/local road - urban unrestricted	561,007	583,957	0.96070
Ramp -urban restricted	582,042	568,651	1.02355
Sub-total for Jefferson County	8,422,947	9,177,855	91.8%
Shelby County			
Freeway - rural restricted	0	0	1.00000
Arterial - rural unrestricted	205,998	199,870	1.03066
Collector/local road - rural unrestricted	46,797	43,646	1.07219
Ramp -rural restricted	0	0	1.00000
Freeway/Expressway - urban restricted	1,027,490	1,168,696	0.87918
Arterial - urban unrestricted	458,965	477,901	0.96038
Collector/local road - urban unrestricted	120,044	115,188	1.04216
Ramp -urban restricted	52,636	51,672	1.01866
Sub-total for Shelby County	1,911,930	2,056,973	92.9%
TOTAL for both Counties	10,334,877	11,234,828	92.0%

Weekday VMT from Modeling

County and Road Type	VMT Adjustment Factor of Observed and Modeled (1)*	2021 Weekday VMT based on Modeling (2)	2024 Weekday VMT based on Modeling (3)	2034 Weekday VMT based on Modeling (4)	2044 Weekday VMT based on Modeling (5)	2050 Weekday VMT based on Modeling (6)
Jefferson County						
Freeway - rural restricted	0.75851	568,725	566,065	596,435	631,490	655,205
Arterial - rural unrestricted	0.86203	249,652	258,855	279,249	298,339	311,840
Collector/local road - rural unrestricted	1.04700	527,954	550,922	541,102	551,323	559,600
Ramp - rural restricted	1.09069	4,625	4,745	4,871	5,058	5,203
Freeway/Expressway - urban restricted	0.90472	10,895,026	11,022,549	11,507,336	11,851,247	12,140,785
Arterial - urban unrestricted	0.95247	7,197,249	7,498,057	7,420,834	7,529,575	7,743,297
Collector/local road - urban unrestricted	0.96070	4,831,909	5,096,097	5,069,857	5,143,028	5,284,441
Ramp - urban restricted	1.02355	914,758	944,375	965,447	984,449	967,092
Subtotal for Jefferson County		**25,189,898**	**25,941,665**	**26,385,131**	**26,994,509**	**27,667,463**
Shelby County						
Freeway - rural restricted	1.00000	0	0	0	0	0
Arterial - rural unrestricted	1.03066	790,276	837,736	897,273	994,446	1,067,023
Collector/local road - rural unrestricted	1.07219	354,801	419,211	452,485	527,663	609,077
Ramp - rural restricted	1.00000	0	0	0	0	0
Freeway/Expressway - urban restricted	0.87918	1,786,746	1,834,039	1,943,267	2,055,144	2,153,724
Arterial - urban unrestricted	0.96038	2,328,466	2,433,986	2,613,378	2,795,555	2,923,794
Collector/local road - urban unrestricted	1.04216	1,490,500	1,579,810	1,721,881	1,920,227	2,086,420
Ramp - urban restricted	1.01866	60,665	64,222	70,672	75,902	78,861
Subtotal for Shelby County		**6,811,454**	**7,169,004**	**7,698,956**	**8,368,937**	**8,918,899**
TOTAL for Both Counties		***32,001,352***	***33,110,669***	***34,084,087***	***35,363,446***	***36,586,362***

*: VMTadjustment factor: VMT based on observed AADT divided by VMT based on RPCGB's travel demand model projection.

Adjusted Weekday VMT based on Modeling VMT and VMT Adjustment Factors

County and Road Type		Adjusted 2021 Model Weekday VMT (7)=(1)x(2)	Adjusted 2024 Model Weekday VMT (8)=(1)x(3)	Adjusted 2034 Model Weekday VMT (9)=(1)x(4)	Adjusted 2040 Model Weekday VMT (10)=(1)x(5)	Adjusted 2045 Model Weekday VMT11)=(1)x (6)
Jefferson County						
Freeway - rural restricted		431,382	429,364	452,400	478,990	496,978
Arterial - rural unrestricted		215,207	223,140	240,720	257,176	268,814
Collector/local road - rural unrestricted		552,765	576,813	566,531	577,232	585,898
Ramp - rural restricted		5,044	5,175	5,313	5,517	5,675
Freeway/Expressway - urban restricted		9,856,904	9,972,276	10,410,871	10,722,013	10,983,962
Arterial - urban unrestricted		6,855,183	7,141,695	7,068,142	7,171,715	7,375,279
Collector/local road - urban unrestricted		4,642,011	4,895,816	4,870,608	4,940,903	5,076,758
Ramp - urban restricted		936,299	966,614	988,182	1,007,631	989,866
Subtotal for Jefferson County		**23,494,796**	**24,210,893**	**24,602,766**	**25,161,177**	**25,783,231**
Shelby County						
Freeway - rural restricted		0	0	0	0	0
Arterial - rural unrestricted		814,506	863,421	924,783	1,024,936	1,099,738
Collector/local road - rural unrestricted		380,416	449,476	485,152	565,757	653,049
Ramp - rural restricted		0	0	0	0	0
Freeway/Expressway - urban restricted		1,570,865	1,612,444	1,708,474	1,806,834	1,893,503
Arterial - urban unrestricted		2,236,204	2,337,543	2,509,827	2,684,786	2,807,944
Collector/local road - urban unrestricted		1,553,335	1,646,410	1,794,471	2,001,178	2,174,378
Ramp - urban restricted		61,797	65,420	71,990	77,318	80,332
Subtotal for Shelby County		**6,617,123**	**6,974,714**	**7,494,698**	**8,160,809**	**8,708,944**
TOTAL for Both Counties		***30,111,919***	***31,185,608***	***32,097,465***	***33,321,986***	***34,492,174***

HPMS Vehicle Type Distributions by Road Types

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	0.0056	0.7359	0.0064	0.0601	0.192	100%
Other Arterials, rural, 3	0.0097	0.878	0.0065	0.0322	0.0736	100%
Local Road, rural, 33	0.0117	0.9101	0.0065	0.0318	0.0399	100%
Freeway, urban, 4	0.0039	0.8439	0.0051	0.0422	0.1049	100%
Other Arterial, urban, 5	0.0079	0.9332	0.0036	0.0204	0.0349	100%
Local Road, urban, 55	0.0105	0.9313	0.0044	0.0287	0.0251	100%

Model Weekday VMT By HPMS Vehicle Types for Jefferson County

WEEKDAY VMT BY HPMS VEHICLE TYPE (PER WEEKDAY)	Jefferson County			
	2024	2034	2044	2050
Motorcycles 10	161,834	162,963	166,243	170,546
Light-DutyVehicles 25	21,496,084	21,815,430	22,300,441	22,854,456
Buses 40	111,021	113,188	115,904	118,728
Single UnitTrucks 50	799,465	818,292	838,854	858,951
CombinationTrucks 60	1,642,489	1,692,894	1,739,734	1,780,550
TOTAL	24,210,893	24,602,767	25,161,176	25,783,231

Model Annual VMT By HPMS Vehicle Types for Jefferson County

ANNUAL VMT BY HPMS VEHICLE TYPE (PER YEAR)	Jefferson County			
	2024	2034	2044	2050
Motorcycles 10	55,575,572	55,963,283	57,089,671	58,567,368
Light-DutyVehicles 25	7,360,606,960	7,469,956,197	7,636,031,811	7,825,735,511
Buses 40	38,015,387	38,757,403	39,687,405	40,654,388
Single UnitTrucks 50	273,749,751	280,196,420	287,237,182	294,118,720
CombinationTrucks 60	562,414,808	579,674,296	595,713,070	609,689,129
TOTAL	8,290,362,478	8,424,547,599	8,615,759,139	8,828,765,116

Model Weekday VMT By HPMS Vehicle Types for Shelby County

WEEKDAY VMT BY HPMS VEHICLE TYPE (PER WEEKDAY)	Shelby County			
	2024	2034	2044	2050
Motorcycles 10	55,932	60,260	66,132	71,020
Light-DutyVehicles 25	6,297,798	6,769,393	7,373,966	7,871,001
Buses 40	32,750	35,176	38,419	41,136
Single UnitTrucks 50	207,839	223,043	242,709	259,161
CombinationTrucks 60	380,395	406,827	439,585	466,627
TOTAL	6,974,714	7,494,699	8,160,811	8,708,945

Model Annual VMT By HPMS Vehicle Types for Shelby County

ANNUAL VMT BY HPMS VEHICLE TYPE (PER YEAR)	Shelby County			
	2024	2034	2044	2050
Motorcycles 10	19,193,583	20,693,945	22,710,455	24,389,048
Light-DutyVehicles 25	2,154,892,817	2,317,949,689	2,524,965,266	2,695,158,092
Buses 40	11,206,254	12,044,832	13,155,287	14,085,632
Single UnitTrucks 50	71,114,019	76,373,532	83,107,489	88,740,920
CombinationTrucks 60	130,159,923	139,304,147	150,521,016	159,780,635
TOTAL	2,386,566,596	2,566,366,145	2,794,459,513	2,982,154,326

-RunSpec Summary, a summary report for all inputs by MOVES

-Database, a dataset holder including all CDM input file information, Jeff_2024in_2050rtp_20230124

-Age Distribution, local information collected through Alabama Revenue Department for year 2021. Based on MOVES vehicle age distribution guideline, these vehicle age distributions in 2021 can be selected as the one for future years. The following table is a sample of portion of the input file.

sourceTypeID	yearID	ageID	ageFraction
11	2024	0	0.027961362
11	2024	1	0.050584647
11	2024	2	0.055414337
11	2024	3	0.05439756
11	2024	4	0.042450432
11	2024	5	0.046263345
11	2024	6	0.044229792
11	2024	7	0.038637519
11	2024	8	0.044229792
11	2024	9	0.034570412
11	2024	10	0.024911032
11	2024	11	0.02236909
11	2024	12	0.04473818
11	2024	13	0.04168785
11	2024	14	0.057956279
11	2024	15	0.04778851
11	2024	16	0.047280122
11	2024	17	0.041942044
11	2024	18	0.03990849
11	2024	19	0.0350788
11	2024	20	0.027452974
11	2024	21	0.022114896
11	2024	22	0.021352313
11	2024	23	0.016268429
11	2024	24	0.014234875
11	2024	25	0.01448907
11	2024	26	0.008896797
11	2024	27	0.010930351
11	2024	28	0.010676157
11	2024	29	0.006354855
11	2024	30	0.00482969
21	2024	0	0.023632191
21	2024	1	0.030395749
21	2024	2	0.044204678
21	2024	3	0.050927976
21	2024	4	0.056685052
21	2024	5	0.06397198

-Average Speed Distribution, The Average Speed Distribution Importer in MOVES calls for a speed distribution in Vehicle Hours Traveled (VHT) in 16 speed bins as the following table, by each road type, source type, and hour of the day included in the analysis.

Speed Bin ID	Average Bin Speed	Speed Bin Range
1	2.5	speed < 2.5mph
2	5	2.5mph <= speed < 7.5mph
3	10	7.5mph <= speed < 12.5mph
4	15	12.5mph <= speed < 17.5mph
5	20	17.5mph <= speed <22.5mph
6	25	22.5mph <= speed < 27.5mph
7	30	27.5mph <= speed < 32.5mph
8	35	32.5mph <= speed < 37.5mph
9	40	37.5mph <= speed < 42.5mph
10	45	42.5mph <= speed < 47.5mph
11	50	47.5mph <= speed < 52.5mph
12	55	52.5mph <= speed < 57.5mph
13	60	57.5mph <= speed < 62.5mph
14	65	62.5mph <= speed < 67.5mph
15	70	67.5mph <= speed < 72.5mph
16	75	72.5mph <= speed

Average speeds are to post-process the output from a travel demand model. Speed is estimated primarily to allocate travel across the roadway network. MOVES uses distributions of 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.

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)

The RPCGB's Travel demand model includes time of day modeling in four periods above, two peak hour periods and two off-peak hour periods for a weekday which stand for 24-hour period. The speeds in off-peak periods are used to estimate the average speeds in weekends. Speed fractions of each hour for weekends and weekdays are allocated with VHT for each speed bin by vehicle type and by road type.

The following table illustrates the average speed distributions in 2024 for Jefferson County.

sourceTypeID	roadTypeID	hourDayID	avgSpeedBinID	avgSpeedFraction
11	2	12	1	0
11	2	12	2	0
11	2	12	3	0
11	2	12	4	0
11	2	12	5	0
11	2	12	6	0
11	2	12	7	0
11	2	12	8	0
11	2	12	9	0
11	2	12	10	0
11	2	12	11	0
11	2	12	12	0
11	2	12	13	0.21693993
11	2	12	14	0.57471079
11	2	12	15	0.20834928
11	2	12	16	0
11	2	22	1	0
11	2	22	2	0
11	2	22	3	0
11	2	22	4	0
11	2	22	5	0
11	2	22	6	0
11	2	22	7	0
11	2	22	8	0
11	2	22	9	0
11	2	22	10	0
11	2	22	11	0
11	2	22	12	0
11	2	22	13	0.21693993
11	2	22	14	0.57471079
11	2	22	15	0.20834928
11	2	22	16	0
11	2	32	1	0
11	2	32	2	0
11	2	32	3	0
11	2	32	4	0
11	2	32	5	0
11	2	32	6	0
11	2	32	7	0
11	2	32	8	0
11	2	32	9	0
11	2	32	10	0
11	2	32	11	0
11	2	32	12	0
11	2	32	13	0.21693993
11	2	32	14	0.57471079
11	2	32	15	0.20834928
11	2	32	16	0
11	2	42	1	0
11	2	42	2	0
11	2	42	3	0

-Fuel, default/local datasets based on MOVES3 database. There are four input files, Fuel Supply, Fuel Formulation, Fuel Usage Fraction, and avft. See table below as sample of portion of the input files.

fuelRegionID	fuelYearID	monthGroupID	fuelFormulationID	marketShare	marketShareCV
100000000	2024	1	90	1	0.5
100000000	2024	1	9049	1	0.5
100000000	2024	1	25003	1	0.5
100000000	2024	1	27001	1	0.5
100000000	2024	1	28001	1	0.5
100000000	2024	2	90	1	0.5
100000000	2024	2	9049	1	0.5
100000000	2024	2	25003	1	0.5
100000000	2024	2	27001	1	0.5
100000000	2024	2	28001	1	0.5
100000000	2024	3	90	1	0.5
100000000	2024	3	9049	1	0.5
100000000	2024	3	25003	1	0.5
100000000	2024	3	27001	1	0.5
100000000	2024	3	28001	1	0.5
100000000	2024	4	90	1	0.5
100000000	2024	4	9050	1	0.5
100000000	2024	4	25003	1	0.5
100000000	2024	4	27001	1	0.5
100000000	2024	4	28001	1	0.5
100000000	2024	5	90	1	0.5
100000000	2024	5	9048	1	0.5
100000000	2024	5	25003	1	0.5
100000000	2024	5	27002	1	0.5

FuelSupply | FuelFormulation | FuelUsageFraction | avft | County | Engin

-Meteorology Data, local information collected through Alabama Department of Environmental Management for year 2021. The temperature and humidity datasets in 2021 have been used for year 2021 and beyond. The following table is the sample of portion of the input file.

monthID	zoneID	hourID	temperature	relHumidity
1	10730	1	43.2	75.1
1	10730	2	42.5	75.8
1	10730	3	42.1	76.1
1	10730	4	41.5	77.0
1	10730	5	41.6	76.5
1	10730	6	41.3	76.5
1	10730	7	41.0	77.6
1	10730	8	40.7	79.6
1	10730	9	42.5	77.4
1	10730	10	45.3	72.0
1	10730	11	47.7	66.2
1	10730	12	49.6	61.0
1	10730	13	51.3	56.7
1	10730	14	52.7	54.2
1	10730	15	53.5	52.6
1	10730	16	53.7	51.9
1	10730	17	53.0	51.9
1	10730	18	50.8	55.5
1	10730	19	48.4	59.9
1	10730	20	46.5	65.0
1	10730	21	45.4	67.1
1	10730	22	44.8	69.0

For the Walker County donut area, the off-model is 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 ALDOT 2021 traffic counts. AADT for all other years is based on 2021 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. AADT and VMT are illustrated in the following Table.

Road Type	AADT2021	AADT2041	Length Miles	Growth Rate	AADT2024	AADT2034	AADT2044	AADT2050	VMT2021	VMT2024	VMT2034	VMT2044	VMT2050
I-22 Freeway	26231	35333	1.2987928	1.50%	27,430	31,835	36,948	40,401	34,069	35,625	41,347	47,987	52,473
I-22 Freeway	26973	36333	3.7832923	1.50%	28,206	32,736	37,993	41,545	102,047	106,710	123,849	143,740	157,177
I-22 Ramp	659	804	0.1869896	1.00%	679	750	828	879	123	127	140	155	164
I-22 Ramp	605	738	0.2746432	1.00%	623	688	760	807	166	171	189	209	222
I-22 Ramp	901	1099	0.2899747	1.00%	928	1,025	1,132	1,202	261	269	297	328	348
I-22 Ramp	916	1118	0.3303205	1.00%	944	1,043	1,152	1,223	303	312	344	381	404
I-22 Ramp	500	610	0.3208375	1.00%	515	569	628	667	160	165	183	202	214
I-22 Ramp	467	570	0.3270154	1.00%	481	532	587	623	153	157	174	192	204
I-22 Ramp	414	505	0.3619821	1.00%	427	471	520	552	150	154	171	188	200
I-22 Ramp	469	572	0.3980166	1.00%	483	534	589	625	187	192	212	235	249
AL 269	1591	1941	1.5005158	1.00%	1,639	1,811	2,000	2,123	2,387	2,460	2,717	3,001	3,185
AL 269	2159	2634	2.4008047	1.00%	2,224	2,457	2,714	2,881	5,183	5,340	5,899	6,515	6,916
AL 269	2192	2674	4.6235777	1.00%	2,258	2,494	2,755	2,924	10,135	10,442	11,533	12,738	13,520
CR 20	3691	4503	0.8690278	1.00%	3,803	4,200	4,639	4,925	3,208	3,305	3,650	4,032	4,280
CR 61	1131	1389	1.7551105	1.03%	1,166	1,293	1,432	1,524	1,985	2,047	2,269	2,514	2,674
CR 61	893	1089	2.8655644	1.00%	920	1,016	1,122	1,191	2,559	2,636	2,911	3,215	3,412
Local Roads	180	220	59.691129	1.01%	186	205	227	241	10,744	11,073	12,241	13,533	14,373

All roadway segments with daily VMT for Walker County donut area are regrouped by restrict and unrestricted types 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 converted to annual VMT via MOVES VMT convertor. The daily/annual VMT by road type is listed as following tables.

Road Types	Road Type ID in MOVES	VMT2021	VMT2024	VMT2034	VMT2044	VMT2050
Off Network	1	0	0	0	0	0
Freeway, rural, 2	2	137,618	143,884	166,906	193,616	211,655
Other Arterials, rural, 3	3	25,457	26,230	28,978	32,014	33,987
Local Road, rural, 33	3	10,744	11,073	12,241	13,533	14,373
Freeway, urban, 4	4	0	0	0	0	0
Other Arterial, urban, 5	5	0	0	0	0	0
Local Road, urban, 55	5	0	0	0	0	0
Total		173,820	181,186	208,125	239,164	260,015

Fraction Factor between HPMS and MOVES based on MOVES

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	0.0056	0.7359	0.0064	0.0601	0.192	100%
Other Arterials, rural, 3	0.0097	0.878	0.0065	0.0322	0.0736	100%
Local Road, rural, 33	0.0117	0.9101	0.0065	0.0318	0.0399	100%
Freeway, urban, 4	0.0039	0.8439	0.0051	0.0422	0.1049	100%
Other Arterial, urban, 5	0.0079	0.9332	0.0036	0.0204	0.0349	100%
Local Road, urban, 55	0.0105	0.9313	0.0044	0.0287	0.0251	100%

Walker County Donut Area 2024 Daily VMT

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	806	105,884	921	8,647	27,626	143,884
Other Arterials, rural, 3	254	23,030	170	845	1,930	26,230
Local Road, rural, 33	130	10,077	72	352	442	11,073
Freeway, urban, 4	0	0	0	0	0	0
Other Arterial, urban, 5	0	0	0	0	0	0
Local Road, urban, 55	0	0	0	0	0	0
Total	1,190	138,991	1,163	9,844	29,998	181,186

Walker County Donut Area 2034 Daily VMT

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	935	122,826	1,068	10,031	32,046	166,906
Other Arterials, rural, 3	281	25,443	188	933	2,133	28,978
Local Road, rural, 33	143	11,141	80	389	488	12,241
Freeway, urban, 4	0	0	0	0	0	0
Other Arterial, urban, 5	0	0	0	0	0	0
Local Road, urban, 55	0	0	0	0	0	0
Total	1,359	159,409	1,336	11,353	34,667	208,125

Walker County Donut Area 2044 Daily VMT

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	1,084	142,482	1,239	11,636	37,174	193,616
Other Arterials, rural, 3	311	28,108	208	1,031	2,356	32,014
Local Road, rural, 33	158	12,317	88	430	540	13,533
Freeway, urban, 4	0	0	0	0	0	0
Other Arterial, urban, 5	0	0	0	0	0	0
Local Road, urban, 55	0	0	0	0	0	0
Total	1,553	182,907	1,535	13,098	40,071	239,164

Walker County Donut Area 2050 Daily VMT

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	1,185	155,757	1,355	12,720	40,638	211,655
Other Arterials, rural, 3	330	29,840	221	1,094	2,501	33,987
Local Road, rural, 33	168	13,081	93	457	573	14,373
Freeway, urban, 4	0	0	0	0	0	0
Other Arterial, urban, 5	0	0	0	0	0	0
Local Road, urban, 55	0	0	0	0	0	0
Total	1,683	198,678	1,669	14,272	43,713	260,015

Daily VMT By HPMS Vehicle Types for Walker County Donut Area

DAILY VMT BY HPMS VEHICLE TYPE	Walker County Donut Area			
	2024	2034	2044	2050
Motorcycles 10	1,190	1,359	1,553	1,683
Light-DutyVehicles 25	138,991	159,409	182,907	198,678
Buses 40	1,163	1,336	1,535	1,669
Single UnitTrucks 50	9,844	11,353	13,098	14,272
CombinationTrucks 60	29,998	34,667	40,071	43,713
TOTAL	181,186	208,125	239,164	260,015

The daily vehicle type VMT is converted to the annual vehicle type VMT as the input format 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 VMT By HPMS Vehicle Types for Walker County Donut Area based on MOVES Convertor illustrate in the following table.

ANNUAL VMT BY HPMS VEHICLE TYPE	Walker County Donut Area			
	2024	2034	2044	2050
Motorcycles 10	436,066	498,103	569,262	616,902
Light-DutyVehicles 25	50,796,256	58,258,476	66,846,111	72,609,817
Buses 40	425,153	488,305	561,062	609,935
Single UnitTrucks 50	3,597,677	4,149,264	4,786,688	5,215,873
CombinationTrucks 60	10,963,198	12,669,596	14,644,351	15,975,428
TOTAL	66,218,349	76,063,743	87,407,474	95,027,954

Road Type Distributions in Walker County Donut Area can be calculated based on daily VMT by road types and vehicle types. All roads in the donut area are in rural area. VMT distributions will be between freeways and non-freeway in rural area. The following table illustrates the road type VMT distributions by HPMS vehicle types in 2024, 2034, 2044, and 2050.

Walker County Donut Area 2024 Daily VMT

HPMS Vehicle Type % in Number for each Roadway Type	Motorcycle	Light Duty Vehicle	Bus	Single Unit Truck	Combination Truck
	10	25=21+31+32	40=41+42+43	50=51+52+53+54	60=61+62
Off Network, 1	0.00000	0.00000	0.00000	0.00000	0.00000
Freeway, rural, 2	0.67726	0.76181	0.79158	0.87843	0.92092
Non-Freeway rual, 3	0.32274	0.23819	0.20842	0.12157	0.07908
Freeway, urban, 4	0.00000	0.00000	0.00000	0.00000	0.00000
Non-Freeway urban, 5	0.00000	0.00000	0.00000	0.00000	0.00000
Total	1.00	1.00	1.00	1.00	1.00

Walker County Donut Area 2034 Daily VMT

HPMS Vehicle Type % in Number for each Roadway Type	Motorcycle	Light Duty Vehicle	Bus	Single Unit Truck	Combination Truck
	10	25=21+31+32	40=41+42+43	50=51+52+53+54	60=61+62
Off Network, 1	0.00000	0.00000	0.00000	0.00000	0.00000
Freeway, rural, 2	0.68777	0.77051	0.79948	0.88353	0.92439
Non-Freeway rual, 3	0.31223	0.22949	0.20052	0.11647	0.07561
Freeway, urban, 4	0.00000	0.00000	0.00000	0.00000	0.00000
Non-Freeway urban, 5	0.00000	0.00000	0.00000	0.00000	0.00000
Total	1.00	1.00	1.00	1.00	1.00

Walker County Donut Area 2044 Daily VMT

HPMS Vehicle Type % in Number for each Roadway Type	Motorcycle	Light Duty Vehicle	Bus	Single Unit Truck	Combination Truck
	10	25=21+31+32	40=41+42+43	50=51+52+53+54	60=61+62
Off Network, 1	0.00000	0.00000	0.00000	0.00000	0.00000
Freeway, rural, 2	0.69811	0.77899	0.80715	0.88844	0.92772
Non-Freeway rual, 3	0.30189	0.22101	0.19285	0.11156	0.07228
Freeway, urban, 4	0.00000	0.00000	0.00000	0.00000	0.00000
Non-Freeway urban, 5	0.00000	0.00000	0.00000	0.00000	0.00000
Total	1.00	1.00	1.00	1.00	1.00

Walker County Donut Area 2050 Daily VMT

HPMS Vehicle Type % in Number for each Roadway Type	Motorcycle	Light Duty Vehicle	Bus	Single Unit Truck	Combination Truck
	10	25=21+31+32	40=41+42+43	50=51+52+53+54	60=61+62
Off Network, 1	0.00000	0.00000	0.00000	0.00000	0.00000
Freeway, rural, 2	0.70422	0.78397	0.81165	0.89129	0.92966
Non-Freeway rual, 3	0.29578	0.21603	0.18835	0.10871	0.07034
Freeway, urban, 4	0.00000	0.00000	0.00000	0.00000	0.00000
Non-Freeway urban, 5	0.00000	0.00000	0.00000	0.00000	0.00000
Total	1.00	1.00	1.00	1.00	1.00

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 2024, 2034, 2044, and 2050 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 reports by County from MOVES3.1.

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					
2024	1	2	8	8.96	0.20	0.05	0.03	0.28	4.90
2024	1	5	23	11.47	0.26	0.07	0.04	0.36	5.78
2024	2	2	8	8.52	0.19	0.05	0.03	0.27	4.75
2024	2	5	21	10.92	0.24	0.06	0.03	0.34	5.61
2024	3	2	10	9.51	0.20	0.06	0.03	0.29	5.35
2024	3	5	21	12.20	0.26	0.07	0.04	0.37	6.24
2024	4	2	8	9.67	0.20	0.06	0.03	0.29	5.52
2024	4	5	22	12.41	0.26	0.08	0.04	0.38	6.41
2024	5	2	8	9.85	0.22	0.06	0.03	0.31	6.04
2024	5	5	23	12.63	0.28	0.08	0.04	0.40	7.00
2024	6	2	10	9.24	0.22	0.06	0.03	0.31	6.41
2024	6	5	20	11.84	0.28	0.08	0.04	0.40	7.40
2024	7	2	8	9.42	0.23	0.06	0.04	0.33	6.74
2024	7	5	23	12.06	0.29	0.08	0.05	0.42	7.77
2024	8	2	9	9.48	0.23	0.07	0.04	0.33	6.73
2024	8	5	22	12.15	0.29	0.09	0.05	0.43	7.78
2024	9	2	9	8.99	0.21	0.06	0.03	0.30	6.10
2024	9	5	21	11.52	0.27	0.08	0.04	0.39	7.04
2024	10	2	8	9.44	0.21	0.06	0.03	0.30	5.71
2024	10	5	23	12.10	0.27	0.08	0.04	0.39	6.62
2024	11	2	9	9.59	0.21	0.06	0.03	0.30	5.25
2024	11	5	21	12.30	0.27	0.07	0.04	0.38	6.17
2024	12	2	9	9.08	0.20	0.06	0.03	0.29	5.17
2024	12	5	22	11.66	0.26	0.07	0.04	0.37	6.06

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	4.94	0.12	0.05	0.03	0.19	3.52
2034	1	5	22	6.35	0.15	0.07	0.04	0.25	4.08
2034	2	2	8	4.70	0.11	0.05	0.03	0.18	3.42
2034	2	5	20	6.04	0.14	0.06	0.03	0.23	3.97
2034	3	2	8	5.20	0.10	0.06	0.03	0.19	3.71
2034	3	5	23	6.71	0.13	0.07	0.04	0.24	4.26
2034	4	2	10	5.28	0.10	0.06	0.03	0.19	3.84
2034	4	5	20	6.81	0.13	0.07	0.04	0.25	4.38
2034	5	2	8	5.33	0.11	0.06	0.03	0.21	4.09
2034	5	5	23	6.87	0.14	0.08	0.04	0.26	4.67
2034	6	2	8	4.96	0.11	0.06	0.03	0.21	4.26
2034	6	5	22	6.39	0.14	0.08	0.04	0.26	4.85
2034	7	2	10	5.04	0.12	0.06	0.04	0.21	4.45
2034	7	5	21	6.50	0.15	0.08	0.05	0.27	5.06
2034	8	2	8	5.07	0.12	0.06	0.04	0.22	4.43
2034	8	5	23	6.54	0.15	0.08	0.05	0.28	5.05
2034	9	2	9	4.85	0.11	0.06	0.03	0.20	4.09
2034	9	5	21	6.25	0.13	0.08	0.04	0.25	4.65
2034	10	2	9	5.14	0.10	0.06	0.03	0.20	3.90
2034	10	5	22	6.63	0.13	0.08	0.04	0.25	4.45
2034	11	2	8	5.27	0.11	0.06	0.03	0.20	3.71
2034	11	5	22	6.79	0.14	0.07	0.04	0.26	4.28
2034	12	2	10	4.98	0.10	0.06	0.03	0.19	3.60
2034	12	5	21	6.42	0.13	0.07	0.04	0.24	4.14

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					
2044	1	2	10	4.49	0.11	0.05	0.03	0.19	3.13
2044	1	5	21	5.78	0.14	0.07	0.04	0.24	3.62
2044	2	2	8	4.27	0.10	0.05	0.03	0.18	3.04
2044	2	5	21	5.49	0.13	0.06	0.04	0.23	3.52
2044	3	2	8	4.72	0.09	0.06	0.03	0.18	3.23
2044	3	5	23	6.09	0.12	0.07	0.04	0.23	3.70
2044	4	2	9	4.78	0.09	0.06	0.03	0.19	3.33
2044	4	5	21	6.17	0.12	0.08	0.04	0.24	3.79
2044	5	2	9	4.80	0.10	0.06	0.03	0.20	3.51
2044	5	5	22	6.20	0.13	0.08	0.04	0.25	4.00
2044	6	2	8	4.45	0.10	0.06	0.04	0.20	3.64
2044	6	5	22	5.75	0.13	0.08	0.05	0.25	4.13
2044	7	2	10	4.52	0.10	0.07	0.04	0.21	3.80
2044	7	5	21	5.84	0.13	0.08	0.05	0.26	4.30
2044	8	2	8	4.55	0.11	0.07	0.04	0.21	3.78
2044	8	5	23	5.88	0.13	0.09	0.05	0.27	4.30
2044	9	2	8	4.36	0.10	0.06	0.03	0.19	3.50
2044	9	5	22	5.63	0.12	0.08	0.04	0.24	3.96
2044	10	2	10	4.64	0.09	0.06	0.03	0.19	3.36
2044	10	5	21	6.00	0.12	0.08	0.04	0.24	3.83
2044	11	2	8	4.79	0.10	0.06	0.03	0.19	3.26
2044	11	5	22	6.17	0.13	0.07	0.04	0.25	3.77
2044	12	2	9	4.52	0.09	0.06	0.03	0.18	3.14
2044	12	5	22	5.83	0.12	0.07	0.04	0.23	3.60

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					
2050	1	2	10	4.54	0.11	0.05	0.03	0.19	3.09
2050	1	5	21	5.84	0.14	0.07	0.04	0.24	3.59
2050	2	2	8	4.31	0.10	0.05	0.03	0.18	3.00
2050	2	5	20	5.55	0.13	0.07	0.04	0.23	3.48
2050	3	2	8	4.76	0.09	0.06	0.03	0.19	3.18
2050	3	5	23	6.15	0.12	0.08	0.04	0.24	3.64
2050	4	2	9	4.82	0.09	0.06	0.03	0.19	3.27
2050	4	5	21	6.23	0.12	0.08	0.04	0.24	3.73
2050	5	2	9	4.84	0.10	0.06	0.04	0.20	3.45
2050	5	5	22	6.26	0.13	0.08	0.05	0.26	3.92
2050	6	2	8	4.48	0.10	0.06	0.04	0.20	3.57
2050	6	5	22	5.80	0.12	0.08	0.05	0.26	4.05
2050	7	2	10	4.55	0.10	0.07	0.04	0.21	3.72
2050	7	5	21	5.89	0.13	0.09	0.05	0.27	4.22
2050	8	2	8	4.58	0.10	0.07	0.04	0.21	3.71
2050	8	5	23	5.93	0.13	0.09	0.05	0.27	4.21
2050	9	2	8	4.39	0.09	0.06	0.03	0.19	3.43
2050	9	5	22	5.68	0.12	0.08	0.04	0.25	3.88
2050	10	2	10	4.68	0.09	0.06	0.04	0.19	3.30
2050	10	5	21	6.06	0.12	0.08	0.05	0.25	3.76
2050	11	2	8	4.83	0.10	0.06	0.03	0.19	3.22
2050	11	5	22	6.24	0.13	0.08	0.04	0.25	3.72
2050	12	2	9	4.56	0.09	0.06	0.03	0.18	3.09
2050	12	5	22	5.89	0.12	0.08	0.04	0.24	3.55

Emissions for Shelby 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					
2024	1	2	8	2.58	0.06	0.02	0.01	0.09	1.63
2024	1	5	23	3.31	0.08	0.03	0.01	0.12	1.92
2024	2	2	8	2.45	0.06	0.02	0.01	0.09	1.59
2024	2	5	21	3.15	0.08	0.03	0.01	0.11	1.86
2024	3	2	10	2.72	0.06	0.02	0.01	0.09	1.77
2024	3	5	21	3.50	0.08	0.03	0.01	0.12	2.06
2024	4	2	8	2.78	0.06	0.02	0.01	0.09	1.83
2024	4	5	22	3.57	0.08	0.03	0.01	0.12	2.11
2024	5	2	8	2.83	0.07	0.02	0.01	0.10	2.00
2024	5	5	23	3.63	0.09	0.03	0.01	0.13	2.30
2024	6	2	10	2.65	0.07	0.02	0.01	0.10	2.12
2024	6	5	20	3.41	0.08	0.03	0.01	0.13	2.43
2024	7	2	8	2.71	0.07	0.03	0.01	0.11	2.19
2024	7	5	23	3.48	0.09	0.03	0.01	0.14	2.51
2024	8	2	9	2.74	0.07	0.03	0.01	0.11	2.22
2024	8	5	22	3.52	0.09	0.03	0.01	0.14	2.55
2024	9	2	9	2.59	0.06	0.02	0.01	0.10	2.00
2024	9	5	21	3.32	0.08	0.03	0.01	0.12	2.30
2024	10	2	8	2.74	0.06	0.02	0.01	0.10	1.88
2024	10	5	23	3.52	0.08	0.03	0.01	0.13	2.17
2024	11	2	9	2.77	0.06	0.02	0.01	0.10	1.76
2024	11	5	21	3.56	0.08	0.03	0.01	0.12	2.05
2024	12	2	9	2.64	0.06	0.02	0.01	0.09	1.72
2024	12	5	22	3.39	0.08	0.03	0.01	0.12	2.00

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	1.54	0.04	0.02	0.01	0.07	1.20
2034	1	5	22	1.99	0.05	0.03	0.01	0.09	1.40
2034	2	2	8	1.46	0.04	0.02	0.01	0.07	1.17
2034	2	5	20	1.89	0.05	0.03	0.01	0.08	1.36
2034	3	2	8	1.61	0.03	0.02	0.01	0.07	1.27
2034	3	5	23	2.09	0.04	0.03	0.01	0.09	1.45
2034	4	2	10	1.64	0.03	0.02	0.01	0.07	1.31
2034	4	5	20	2.13	0.04	0.03	0.01	0.09	1.49
2034	5	2	8	1.66	0.04	0.03	0.01	0.07	1.40
2034	5	5	23	2.15	0.05	0.03	0.01	0.09	1.59
2034	6	2	8	1.54	0.04	0.03	0.01	0.07	1.46
2034	6	5	22	2.00	0.05	0.03	0.01	0.09	1.64
2034	7	2	10	1.57	0.04	0.03	0.01	0.08	1.50
2034	7	5	21	2.04	0.05	0.04	0.01	0.10	1.69
2034	8	2	8	1.58	0.04	0.03	0.01	0.08	1.51
2034	8	5	23	2.06	0.05	0.04	0.02	0.10	1.71
2034	9	2	9	1.51	0.03	0.03	0.01	0.07	1.39
2034	9	5	21	1.96	0.04	0.03	0.01	0.09	1.57
2034	10	2	9	1.61	0.03	0.03	0.01	0.07	1.33
2034	10	5	22	2.09	0.04	0.03	0.01	0.09	1.51
2034	11	2	8	1.65	0.04	0.02	0.01	0.07	1.28
2034	11	5	22	2.14	0.05	0.03	0.01	0.09	1.47
2034	12	2	10	1.56	0.03	0.02	0.01	0.07	1.23
2034	12	5	21	2.03	0.04	0.03	0.01	0.09	1.41

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					
2044	1	2	10	1.51	0.04	0.02	0.01	0.07	1.08
2044	1	5	21	1.96	0.05	0.03	0.01	0.09	1.26
2044	2	2	8	1.43	0.03	0.02	0.01	0.07	1.05
2044	2	5	21	1.86	0.04	0.03	0.01	0.09	1.22
2044	3	2	8	1.58	0.03	0.03	0.01	0.07	1.12
2044	3	5	23	2.05	0.04	0.04	0.01	0.09	1.28
2044	4	2	9	1.61	0.03	0.03	0.01	0.07	1.16
2044	4	5	21	2.09	0.04	0.04	0.01	0.09	1.32
2044	5	2	9	1.61	0.03	0.03	0.01	0.08	1.22
2044	5	5	22	2.10	0.04	0.04	0.02	0.10	1.39
2044	6	2	8	1.49	0.03	0.03	0.01	0.08	1.27
2044	6	5	22	1.95	0.04	0.04	0.02	0.10	1.43
2044	7	2	10	1.52	0.04	0.03	0.01	0.08	1.31
2044	7	5	21	1.98	0.04	0.04	0.02	0.10	1.47
2044	8	2	8	1.53	0.04	0.03	0.01	0.08	1.32
2044	8	5	23	2.00	0.04	0.04	0.02	0.10	1.49
2044	9	2	8	1.46	0.03	0.03	0.01	0.07	1.21
2044	9	5	22	1.91	0.04	0.04	0.02	0.09	1.36
2044	10	2	10	1.57	0.03	0.03	0.01	0.07	1.16
2044	10	5	21	2.05	0.04	0.04	0.02	0.09	1.32
2044	11	2	8	1.61	0.03	0.03	0.01	0.07	1.13
2044	11	5	22	2.09	0.04	0.04	0.01	0.09	1.31
2044	12	2	9	1.53	0.03	0.03	0.01	0.07	1.09
2044	12	5	22	1.99	0.04	0.04	0.01	0.09	1.24

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					
2050	1	2	10	1.60	0.04	0.03	0.01	0.08	1.09
2050	1	5	21	2.07	0.05	0.04	0.01	0.10	1.27
2050	2	2	8	1.52	0.03	0.03	0.01	0.07	1.05
2050	2	5	20	1.97	0.04	0.03	0.01	0.09	1.22
2050	3	2	8	1.67	0.03	0.03	0.01	0.08	1.12
2050	3	5	23	2.18	0.04	0.04	0.02	0.10	1.28
2050	4	2	9	1.70	0.03	0.03	0.01	0.08	1.16
2050	4	5	21	2.22	0.04	0.04	0.02	0.10	1.32
2050	5	2	9	1.71	0.03	0.03	0.01	0.08	1.23
2050	5	5	22	2.23	0.04	0.04	0.02	0.10	1.39
2050	6	2	8	1.58	0.03	0.03	0.01	0.08	1.27
2050	6	5	22	2.06	0.04	0.04	0.02	0.10	1.44
2050	7	2	10	1.61	0.04	0.04	0.01	0.08	1.31
2050	7	5	21	2.10	0.05	0.05	0.02	0.11	1.48
2050	8	2	8	1.63	0.04	0.04	0.01	0.09	1.32
2050	8	5	23	2.12	0.05	0.05	0.02	0.11	1.49
2050	9	2	8	1.55	0.03	0.03	0.01	0.08	1.21
2050	9	5	22	2.03	0.04	0.04	0.02	0.10	1.37
2050	10	2	10	1.67	0.03	0.03	0.01	0.08	1.16
2050	10	5	21	2.18	0.04	0.04	0.02	0.10	1.33
2050	11	2	8	1.71	0.04	0.03	0.01	0.08	1.14
2050	11	5	22	2.22	0.05	0.04	0.02	0.10	1.31
2050	12	2	9	1.62	0.03	0.03	0.01	0.07	1.09
2050	12	5	22	2.11	0.04	0.04	0.02	0.10	1.25

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 (TPD) based on MOVES output					
2024	1	2	8	0.27	0.01	0.00	0.00	0.01	0.04
2024	1	5	23	0.21	0.00	0.00	0.00	0.01	0.04
2024	2	2	8	0.26	0.01	0.00	0.00	0.01	0.04
2024	2	5	21	0.20	0.00	0.00	0.00	0.01	0.03
2024	3	2	10	0.28	0.01	0.00	0.00	0.01	0.04
2024	3	5	21	0.22	0.01	0.00	0.00	0.01	0.04
2024	4	2	8	0.28	0.01	0.00	0.00	0.01	0.04
2024	4	5	22	0.22	0.01	0.00	0.00	0.01	0.04
2024	5	2	8	0.28	0.01	0.00	0.00	0.01	0.05
2024	5	5	23	0.22	0.01	0.00	0.00	0.01	0.04
2024	6	2	10	0.26	0.01	0.00	0.00	0.01	0.05
2024	6	5	20	0.21	0.01	0.00	0.00	0.01	0.05
2024	7	2	8	0.26	0.01	0.00	0.00	0.01	0.05
2024	7	5	23	0.21	0.01	0.00	0.00	0.01	0.05
2024	8	2	9	0.26	0.01	0.00	0.00	0.01	0.05
2024	8	5	22	0.21	0.01	0.00	0.00	0.01	0.05
2024	9	2	9	0.26	0.01	0.00	0.00	0.01	0.05
2024	9	5	21	0.20	0.01	0.00	0.00	0.01	0.04
2024	10	2	8	0.27	0.01	0.00	0.00	0.01	0.05
2024	10	5	23	0.22	0.01	0.00	0.00	0.01	0.04
2024	11	2	9	0.28	0.01	0.00	0.00	0.01	0.04
2024	11	5	21	0.22	0.01	0.00	0.00	0.01	0.04
2024	12	2	9	0.27	0.01	0.00	0.00	0.01	0.04
2024	12	5	22	0.21	0.01	0.00	0.00	0.01	0.04

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	0.12	0.00	0.00	0.00	0.00	0.02
2034	1	5	22	0.11	0.00	0.00	0.00	0.00	0.02
2034	2	2	8	0.11	0.00	0.00	0.00	0.00	0.02
2034	2	5	20	0.10	0.00	0.00	0.00	0.00	0.02
2034	3	2	8	0.12	0.00	0.00	0.00	0.00	0.03
2034	3	5	23	0.11	0.00	0.00	0.00	0.00	0.03
2034	4	2	10	0.12	0.00	0.00	0.00	0.00	0.03
2034	4	5	20	0.11	0.00	0.00	0.00	0.00	0.03
2034	5	2	8	0.12	0.00	0.00	0.00	0.00	0.03
2034	5	5	23	0.11	0.00	0.00	0.00	0.00	0.03
2034	6	2	8	0.12	0.00	0.00	0.00	0.00	0.03
2034	6	5	22	0.11	0.00	0.00	0.00	0.00	0.03
2034	7	2	10	0.12	0.00	0.00	0.00	0.00	0.03
2034	7	5	21	0.11	0.00	0.00	0.00	0.00	0.03
2034	8	2	8	0.12	0.00	0.00	0.00	0.00	0.03
2034	8	5	23	0.11	0.00	0.00	0.00	0.00	0.03
2034	9	2	9	0.11	0.00	0.00	0.00	0.00	0.03
2034	9	5	21	0.10	0.00	0.00	0.00	0.00	0.03
2034	10	2	9	0.12	0.00	0.00	0.00	0.00	0.03
2034	10	5	22	0.11	0.00	0.00	0.00	0.00	0.03
2034	11	2	8	0.12	0.00	0.00	0.00	0.00	0.02
2034	11	5	22	0.11	0.00	0.00	0.00	0.00	0.02
2034	12	2	10	0.12	0.00	0.00	0.00	0.00	0.02
2034	12	5	21	0.11	0.00	0.00	0.00	0.00	0.02

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					
2044	1	2	10	0.10	0.00	0.00	0.00	0.00	0.02
2044	1	5	21	0.10	0.00	0.00	0.00	0.00	0.02
2044	2	2	8	0.10	0.00	0.00	0.00	0.00	0.02
2044	2	5	21	0.10	0.00	0.00	0.00	0.00	0.02
2044	3	2	8	0.11	0.00	0.00	0.00	0.00	0.02
2044	3	5	23	0.11	0.00	0.00	0.00	0.00	0.02
2044	4	2	9	0.11	0.00	0.00	0.00	0.00	0.02
2044	4	5	21	0.11	0.00	0.00	0.00	0.00	0.02
2044	5	2	9	0.11	0.00	0.00	0.00	0.00	0.03
2044	5	5	22	0.11	0.00	0.00	0.00	0.00	0.03
2044	6	2	8	0.10	0.00	0.00	0.00	0.00	0.03
2044	6	5	22	0.10	0.00	0.00	0.00	0.00	0.03
2044	7	2	10	0.11	0.00	0.00	0.00	0.00	0.03
2044	7	5	21	0.10	0.00	0.00	0.00	0.00	0.03
2044	8	2	8	0.11	0.00	0.00	0.00	0.00	0.03
2044	8	5	23	0.10	0.00	0.00	0.00	0.00	0.03
2044	9	2	8	0.10	0.00	0.00	0.00	0.00	0.03
2044	9	5	22	0.10	0.00	0.00	0.00	0.00	0.03
2044	10	2	10	0.11	0.00	0.00	0.00	0.00	0.02
2044	10	5	21	0.11	0.00	0.00	0.00	0.00	0.02
2044	11	2	8	0.11	0.00	0.00	0.00	0.00	0.02
2044	11	5	22	0.11	0.00	0.00	0.00	0.00	0.02
2044	12	2	9	0.11	0.00	0.00	0.00	0.00	0.02
2044	12	5	22	0.10	0.00	0.00	0.00	0.00	0.02

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					
2050	1	2	10	0.11	0.00	0.00	0.00	0.00	0.02
2050	1	5	21	0.11	0.00	0.00	0.00	0.00	0.02
2050	2	2	8	0.11	0.00	0.00	0.00	0.00	0.02
2050	2	5	20	0.10	0.00	0.00	0.00	0.00	0.02
2050	3	2	8	0.12	0.00	0.00	0.00	0.00	0.02
2050	3	5	23	0.11	0.00	0.00	0.00	0.00	0.02
2050	4	2	9	0.12	0.00	0.00	0.00	0.00	0.02
2050	4	5	21	0.12	0.00	0.00	0.00	0.00	0.02
2050	5	2	9	0.12	0.00	0.00	0.00	0.00	0.03
2050	5	5	22	0.12	0.00	0.00	0.00	0.00	0.03
2050	6	2	8	0.11	0.00	0.00	0.00	0.00	0.03
2050	6	5	22	0.11	0.00	0.00	0.00	0.00	0.03
2050	7	2	10	0.11	0.00	0.00	0.00	0.00	0.03
2050	7	5	21	0.11	0.00	0.00	0.00	0.00	0.03
2050	8	2	8	0.11	0.00	0.00	0.00	0.00	0.03
2050	8	5	23	0.11	0.00	0.00	0.00	0.00	0.03
2050	9	2	8	0.11	0.00	0.00	0.00	0.00	0.03
2050	9	5	22	0.11	0.00	0.00	0.00	0.00	0.03
2050	10	2	10	0.12	0.00	0.00	0.00	0.00	0.03
2050	10	5	21	0.11	0.00	0.00	0.00	0.00	0.02
2050	11	2	8	0.12	0.00	0.00	0.00	0.00	0.02
2050	11	5	22	0.11	0.00	0.00	0.00	0.00	0.02
2050	12	2	9	0.11	0.00	0.00	0.00	0.00	0.02
2050	12	5	22	0.11	0.00	0.00	0.00	0.00	0.02

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 1, 2023

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 August 19, 2023.

The Air Quality Conformity Determination addresses the planned transportation improvements from the Birmingham MPO's Regional Transportation Plan 2050, and the Birmingham MPO's Fiscal Year (FY) 2024-2027 Transportation Improvement Program (TIP) as updated in 2023. 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 ozone NAAQS in accordance with FHWA's *Updated Interim Guidance on Conformity Requirements for the 1997 Ozone NAAQS*.

Based on our review, we find the above-referenced documents meet the transportation conformity requirements at 40 CFR Part 93 and associated guidance.

FHWA and FTA appreciate the efforts of the Alabama Department of Transportation (ALDOT), Alabama Department of Environmental Management (ADEM), the Birmingham MPO in fully addressing the transportation conformity requirements.

If you have any questions regarding this determination, please contact Aaron Dawson at (334) 274-6341.

Sincerely yours,

Yvette G. Taylor

Dr. Yvette G. Taylor, PhD
Regional Administrator
Federal Transit Administration

Sincerely yours,

Jeffrey A. Shelley

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

By email

cc: Robert Sachnin, FTA Region 4
Ron Smith, FTA Region 4
Weston Freund, EPA Region 4
Brad Lindsey, ALDOT
Scott Tillman, Birmingham MPO

September 11, 2023

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

Dear Mr. Bartlett:

Thank you for your letter requesting our review of the transportation conformity determination for 1997 8-hour ozone and 2006 24-hour $PM_{2.5}$ standards for the New 2050 Regional Transportation Plan (RTP) and Fiscal Year FY 2024-2027 Transportation Improvement Program (TIP) for the Regional Planning Commission of Greater Birmingham (RPCGB). We have completed our review and recommend a finding of conformity for the New 2050 RTP and FY 2024-2027 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 New 2050 RTP and FY 2024-2027 TIP for the Birmingham maintenance area and concluded that all of the criteria have been met, 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), and those outlined in the May 6, 2005, conformity rule revision entitled, "Transportation Conformity Rule Amendments for the New $PM_{2.5}$ National Ambient Air Quality Standard: $PM_{2.5}$ Precursors," (70 FR 24280).

Thank you again for the opportunity to review the conformity determination for the RPCGB's New 2050 RTP and FY 2024-2027 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 me at (404) 562-9040 or Mr. Weston Freund of my staff at (404) 562-8773.

Sincerely,

Lynorae E. Benjamin
Manager
Air Planning and Implementation Branch

cc: Aaron Dawson, FHWA AL
Yvette Taylor, FTA Region 4
Brian Fair, ALDOT
Dale Hurst, ADEM
Scott Tillman, RPCGB
Jason Howanitz, JCDH

Appendix C

Interagency Consultation Group Meeting Minutes

Interagency Consultation
Alabama Transportation Conformity

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DATE: March 20th 2023
TIME: 10:00 am CST

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

1. **Introductions**
2. **Approval Past Month's Minutes**
3. **Birmingham MPO Air Quality Conformity, 2050 Regional Transportation Plan, and FY2024-2027 TIP draft documents**

Mike Kaczorowski of RPCGB began the meeting by asking for any comments of the draft documents that were sent to the group. Without hearing any immediate comments, Mike Kaczorowski told the IAC of an upcoming public involvement meeting scheduled for April 19th. He explaining that the three draft documents would be posted on the RPCGB website sometime before that date for public view. Following a 21 day public comment period the committees will review and respond to the comments and are planned to approve the drafts in July-August. After providing the next steps for the documents, he reiterated that if the group had any questions or comments on the drafts to please email them as soon as possible. Mr. Kaczorowski then asked if the IAC should vote to approve the draft documents. Ben Scheierman of ADEM was unsure on how to proceed and it was decided that a representative from each agency would send an email confirming that they have reviewed the documents and if they approve of them. Sonya Baker of ALDOT asked where the draft documents could be located. Mr. Kaczorowski said that the documents were emailed to the group on February 16th and that he would forward her the email. Vontra Giles of FHWA requested to be included in the email list and to be forwarded the email with the draft documents. Nicole Spivey of FTA also requested the draft documents so Mr. Kaczorowski said he would forward the email with the drafts out to the whole group. After the meeting concluded, the email containing the documents was forwarded to the IAC. Afterwards Mr. Kaczorowski sent out an additional email to the group extending the review deadline of the three draft documents to April 7th.

4. **Open Discussion**
5. **Next Call: April 17th 2023**

ADEM:
- ☐ Larry Brown
- ✓ Dale Hurst
- ☐ Lisa Edwards
- ✓ Anthony Smiley
- ✓ Ben Scheierman

ALDOT:
- ☐ Natasha Clay
- ☐ Michael Hora
- ✓ Sandra Bonner
- ☐ Bryan Fair
- ☐ Rita Hoke
- ☐ Diamond Pearson
- ☐ Curtis Pearson
- ✓ Amber Reed
- ✓ Sonya Baker

JCDH:
- ☐ Jason Howanitz
- ✓ Matt Lacke

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

FHWA-AL:
- ☐ Lynne Urquhart
- ☐ Aaron Dawson
- ✓ Vontra Giles

FTA:
- ☐ Carrie Walker
- ✓ Nicole Spivey

U.S. EPA Region 4:
- ☐ Lynorae Benjamin
- ☐ Dianna Myers
- ☐ Richard Wong
- ☐ Sarah Larocca
- ☐ Josue Ortiz

BJCTA:
- ☐ Wytangy Peak-Finney
- ☐ Gerald Alfred
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Interagency Consultation
Alabama Transportation Conformity

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DATE: January 30th, 2023
TIME: 10:00 am CST

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

1. **Introductions**
2. **Approval Past Month's Minutes**
3. **Birmingham MPO schedule for adoption of the Air Quality Conformity report, 2050 Regional Transportation Plan, and FY2024 to 2027 TIP**

Mike Kaczorowski of RPCGB began by sharing a project schedule document with key project dates for the drafts of the Air Quality Conformity report, 2050 Regional Transportation Plan, and FY2024 to 2027 TIP. The first of these dates was February 14th which is when the 30 day IAC review was to begin, and a Dropbox link containing the three draft documents was planned to be shared with the IAC group around that time. The next key date is March 20th, which is scheduled to be a tentative IAC conference call to receive any comments, as this is roughly around the end of the IAC comment period for these three documents. Mike Kaczorowski then quickly went over the other key dates which are: April 7th finalize the drafts and post on RPCGB website, April 19th public meetings to release all documents and begin 21 day public comment period, May 11th end of 21 day comment period, May/June respond to public comment and produce report, July/August MPO committee meetings to adopt, and finally in August submit all three documents to ALDOT for official submittal to federal agencies. Then Aaron Dawson of FHWA asked when the current conformity determination expires. Mike Kaczorowski answered saying it is on a four year time period, and since the TIP was adopted in September of 2019 it would expire in September 2023. Aaron Dawson then asked for a copy of the conformity determination letter to get the exact date and avoid falling into a grace period. Mike Kaczorowski offered to send the letter out to the IAC, so that the group would know when the hard deadline was.

4. **National Ambient Air Quality Standards (NAAQS) for PM – January 6, 2023, EPA announcement**

Mike Kaczorowski shared a forwarded AMPO email detailing the proposed changes to the annual PM2.5 primary health based NAAQS, and wanted to open up the topic for discussion. Saying that conformity should not change since the proposal is not focused on the 24-hour PM standard. Harry He of RPCGB said that was right and that the budget should not change. Bryan Fair of ALDOT asked if the budget was only under the 24-hour standard. Mike Kaczorowski said that was correct and that they were only required to show conformity with the 24-hour standard for the budget. Dale Hurst of ADEM agreed then stated that currently the annual PM standard is at 12, but that one monitor in Birmingham was a little over 11 and another was right around 11. Once the proposed NAAQS level change is approved, and if Birmingham is found in nonattainment, there might potentially be a new budget next time. Mike Kaczorowski then asked about the status of the Limited Maintenance Plan, which was discussed in March's call of last year, and how it would change conformity. Dianna Myers of EPA responded saying that the 24-hour PM2.5 Limited Maintenance Plan was originally submitted under PM10 guidance, and newly updated guidance had recently come out for PM2.5 causing the SIP to stall out. The EPA is still in the process of getting it approved and once finalized it will treat the 24-hour PM2.5 standard like the 1997 8-hour Ozone standard meaning that a regional emissions analysis will not be required to show conformity. Larry Brown of ADEM then let the group know that the proposed change to the PM NAAQS had been

ADEM:
- ✓ Larry Brown
- ✓ Dale Hurst
- ☐ Lisa Edwards
- ☐ Anthony Smiley
- ☐ Sabrina Blakely
- ✓ Ben Scheierman

ALDOT:
- ☐ Natasha Clay
- ☐ Michael Hora
- ☐ Sandra Bonner
- ✓ Bryan Fair
- ✓ Rita Hoke
- ☐ Diamond Pearson
- ✓ Curtis Pearson
- ✓ Amber Reed
- ☐ Sonya Baker

JCDH:
- ☐ Jason Howanitz
- ✓ Matt Lacke

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

FHWA-AL:
- ☐ Lynne Urquhart
- ✓ Aaron Dawson

FTA:
- ✓ Carrie Walker
- ✓ Nicole Spivey

U.S. EPA Region 4:
- ☐ Lynorae Benjamin
- ✓ Dianna Myers
- ✓ Richard Wong
- ✓ Sarah Larocca
- ✓ Josue Ortiz

BJCTA:
- ☐ Wytangy Peak-Finney
- ☐ Gerald Alfred
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published in the Federal Register on Friday January 27th. Richard Wong of EPA confirmed and said the 60 day comment period would end on March 28th.

5. Open Discussion

Bryan Fair began the open discussion by asking if the updated IAC Memorandum of Agreement was a part of the SIP. Dale Hurst answered saying yes it was and that ADEM was still waiting on a rulemaking to package it with for submittal. Explaining that the past few rulemakings were of high priority and were about very specific issues, so the MOA was left out of the package as to not cause any comment period complications. Aaron Dawson then shared a conformity determination letter from February 2019 and asked if it was the latest one. Scott Tillman of RPCGB said that was when they had to run a quick determination, but there were letters that came afterwards. Harry He said that there were two letters that were more recent. One letter from FHW dated October 7th 2019 and one from EPA dated October 1st 2019. Aaron Dawson thanked them for confirming the information. Mike Kaczorowski offered to share the letters with the whole group, and an email containing the conformity determination letters in question were sent out by Harry He shortly after the meeting. Lastly, Ben Scheierman of ADEM said that he would send out the IAC member list, so that it could be updated to reflect any personnel changes that have taken place.

6. Next Call: February 27th, 2023

Interagency Consultation
Alabama Transportation Conformity

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DATE: March 21, 2022
TIME: 10:00 am CST

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1. **Introductions**
2. **Approval Past Month's Minutes**
3. **Conformity Determination Template**

Dianna Myers of EPA began the call by explaining to the IAC how the conformity determination template can be used for 1997 areas that are not running a regional emission analysis for ozone. The template can also be tailored to use for the PM 2.5 standard as well, after the limited maintenance plan for the daily standard has been approved. Dianna Myers of EPA continued, saying that to use the template one must simply plug in whatever is applicable to the particular area, and that projects are to be listed in the appendix as exempt or nonexempt by RPC as a precaution against a future conformity lapse worst case scenario.

4. **Walker County Area**

Mike Kaczorowski of RPCGB told the IAC about the air quality conformity boundary for the 24-hour PM2.5 maintenance area, which encompasses all of Jefferson and Shelby County with only a "donut hole" portion of Walker County included. The reason for including the Walker County portion was due to the Gorgas coal fired power plant being located there. The power plant has been closed since 2019 however, so Mike Kaczorowski of RPCGB asked the IAC if the donut hole portion could be eliminated and if so what the next steps would be. Dale Hurst of ADEM answered saying that he agreed with the idea and said he had reached out to EPA for more answers and was awaiting a response. He also reached out to the people who regulate the facility and they were fairly certain the permits for that facility were surrendered, meaning that the possibility of the Gorgas plant reopening would be very unlikely. Dianna Myers of EPA said that once the limited maintenance plan was approved there wouldn't be any budgets to factor in, so there won't be a need to do a regional emissions analysis, and that the upcoming update to the long range plan should be the last time that any type of modeling is required for the area.

5. **Proposed Conformity Years**

Mike Kaczorowski of RPCGB had a proposal on which interim years to run for the next long range plan. The first budget year being 2024, the first interim year would be 2034, the next interim year is 2044, and the horizon year is set at 2050. In addition, a new TIP will be developed that will run from fiscal year 2024 to 2027, so that the first conformity year will also be the first year of the TIP. Bryan Fair of ALDOT asked about specific Northern Beltline projects being included. Mike Kaczorowski of RPCGB said that ALDOT had some flexibility in that first 10 year window between 2024 and 2034 and it was up to ALDOT to decide what Northern Beltline projects to put in the TIP for those first 4 years, and mentioned that RPC was in talks with the project sponsors in reviewing all of their capacity projects, timelines, funding, and fiscal constraints. The IAC agreed with the proposed conformity years.

6. **Open Discussion**
7. **Next Call: April 18th 2022**

ADEM:
- ☐ Larry Brown
- ✓ Dale Hurst
- ☐ Lisa Edwards
- ✓ Anthony Smiley
- ☐ Sabrina Blakely
- ✓ Ben Scheierman

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

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

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

FHWA-AL:
- ☐ Lynne Urquhart
- ✓ Aaron Dawson

FTA:
- ☐ Carrie Walker
- ☐ Nicole Spivey

U.S. EPA Region 4:
- ☐ Lynorae Benjamin
- ✓ Dianna Myers
- ☐ Richard Wong
- ☐ Sarah Larocca
- ☐ Josue Ortiz

BJCTA:
- ☐ Wytangy Peak-Finney
- ☐ Gerald Alfred
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Interagency Consultation
Alabama Transportation Conformity

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DATE: January 24, 2022
TIME: 10:00 am CST

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1. **Introductions**
2. **Approval Past Month's Minutes**
3. **PM2.5 Maintenance Plan Update**

   Dale Hurst of ADEM began the meeting by explaining to the RPC that their planning efforts would not change as a result of ADEM submitting the PM2.5 Limited Maintenance Plan to EPA. Dale continued, saying that the Clean Air Act requires an update to the twenty year maintenance plan eight years after it was originally submitted. Dianna Myers of EPA said that once the plan is approved the PM2.5 daily standard will be treated the same as the Ozone standard under the South Coast 2 decision. Mike Kaczorowski of RPCGB asked for clarification on the conformity and modeling requirements. Mike also asked when the Limited Maintenance Plan would be approved. Dale Hurst responded saying it was submitted in February 2021 and would likely be acted upon by EPA around August or so of this year, and that he would reach out to EPA Region 4 planning for further status updates. Dianna Myers added that the conformity requirements triggered when a state submits a Limited Maintenance Plan can be found at §93.109(e) in the conformity rules, and that she will share a template that was devised during the South Coast 2 decision that can be used to perform a conformity determination without modeling.
4. **IAC MOA**

   Dale Hurst of ADEM updated the group on the status of the IAC MOA saying that the status of the Regional Haze SIP, which was going to be packaged together with the MOA, is uncertain at this time and that he would speak to his supervisors to see if they might want to proceed with submitting the IAC MOA on its own, or potentially include it in a different rulemaking package. Bryan Fair of ALDOT asked about the timing of the signatures. Dale responded saying that would take place after the comment period had ended and if no changes were required to be made to the document. Lian Li of FHWA asked what the timeline of the completion date would be. Dale estimated that if things move forward soon the MOA could potentially be submitted to EPA by the end of the year.
5. **Open Discussion**
6. **Next Call: February 28, 2022**

ADEM:
- ☐ Larry Brown
- ✓ Dale Hurst
- ☐ Lisa Edwards
- ☐ Anthony Smiley
- ☐ Sabrina Blakely
- ✓ Ben Scheierman

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

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

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

FHWA-AL:
- ☐ Lynne Urquhart
- ✓ Lian Li
- ✓ Aaron Dawson

FTA:
- ☐ Carrie Walker
- ☐ Nicole Spivey

U.S. EPA Region 4:
- ☐ Lynorae Benjamin
- ✓ Dianna Myers
- ☐ Richard Wong
- ✓ Sarah Larocca
- ✓ Josue Ortiz

BJCTA:
- ✓ Wytangy Peak-Finney
- ☐ Gerald Alfred
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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 April 19, 2023*;"

__√__ 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 April 19, 2023*;"

__√__ 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].	
* * *	* * *	* * *	* * *	* * *

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

BILLING CODE P

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?
II. What are the actions EPA is taking?
III. Why is EPA taking these actions?
IV. What are the effects of these actions?
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 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]

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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:

Table of Contents

I. What is the background for the actions?
II. What are the actions EPA is taking?
III. Why is EPA taking these actions?
IV. What are the effects of these actions?

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 μg/m^3 for 2007–2009 and 29 μg/m^3 for 2008–2010 meet the NAAQS of 35 μg/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 μg/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) * * *

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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.

* * * * *

[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*).

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R04–OAR–2021–0010; FRL–9539–02–R4]

Air Plan Approval; Alabama; Birmingham Limited Maintenance Plan for the 1997 8-Hour Ozone NAAQS

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is approving a state implementation plan (SIP) revision submitted by the State of Alabama, through the Alabama Department of Environmental Management (ADEM), via a letter dated September 15, 2020. The SIP revision includes the 1997 8-hour ozone national ambient air quality standards (NAAQS) Limited Maintenance Plan (LMP) for the Birmingham, Alabama Area (hereinafter referred to as the ''Birmingham Area'' or ''Area''). The Birmingham Area is comprised of Jefferson and Shelby Counties. EPA is approving the Birmingham Area LMP because it provides for the maintenance of the 1997 8-hour ozone NAAQS within the Birmingham Area through the end of the second 10-year portion of the maintenance period. This action makes certain commitments related to maintenance of the 1997 8-hour ozone NAAQS in the Birmingham Area federally enforceable as part of the Alabama SIP.

DATES: This rule is effective May 6, 2022.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–R04–OAR–2021–0010. All documents in the docket are listed on the *www.regulations.gov* website. Although listed in the index, some information may not be 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 can either be retrieved electronically via *www.regulations.gov* or in hard copy at the Air Regulatory Management Section, Air Planning and Implementation Branch, Air and Radiation 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: Sarah LaRocca, Air Regulatory Management Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW, Atlanta, Georgia 30303–8960. The telephone number is (404) 562–8994. Ms. LaRocca can also be reached via electronic mail at *larocca.sarah@epa.gov*.

SUPPLEMENTARY INFORMATION:

I. Background

In 1979, under section 109 of the Clean Air Act (CAA or Act), EPA established primary and secondary NAAQS for ozone at 0.12 parts per million (ppm), averaged over a 1-hour period. *See* 44 FR 8202 (February 8, 1979). On July 18, 1997, EPA revised the primary and secondary NAAQS for ozone to set the acceptable level of ozone in the ambient air at 0.08 ppm, averaged over an 8-hour period. *See* 62 FR 38856 (July 18, 1997).[1] EPA set the 8-hour ozone NAAQS based on scientific evidence demonstrating that ozone causes adverse health effects at lower concentrations and over longer periods of time than was understood when the pre-existing 1-hour ozone NAAQS was set. EPA determined that the 8-hour NAAQS would be more protective of human health, especially for children and adults who are active outdoors, and individuals with a pre-existing respiratory disease, such as asthma.

Following promulgation of a new or revised NAAQS, EPA is required by the CAA to designate areas throughout the nation as attaining or not attaining the NAAQS. On April 15, 2004, EPA designated the Birmingham Area, which includes Jefferson and Shelby Counties, as nonattainment for the 1997 8-hour ozone NAAQS, and the designation became effective on June 15, 2004. *See* 69 FR 23858 (April 30, 2004). Similarly, on May 21, 2012, EPA designated areas as unclassifiable/attainment or nonattainment for the 2008 8-hour ozone NAAQS. EPA designated the Birmingham Area as unclassifiable/attainment for the 2008 8-hour ozone NAAQS. This designation became effective on July 20, 2012. *See* 77 FR 30088. On November 16, 2017, areas were designated for the 2015 8-hour ozone NAAQS. The Birmingham Area was again designated attainment/unclassifiable for the 2015 8-hour ozone NAAQS, with an effective date of January 16, 2018. *See* 82 FR 54232 (November 16, 2017).

A state may submit a request that EPA redesignate a nonattainment area that is attaining the NAAQS to attainment, and if the area has met other required criteria described in section 107(d)(3)(E) of the CAA, EPA may approve the redesignation request.[2] One of the criteria for redesignation is to have an approved maintenance plan under CAA section 175A. The maintenance plan must demonstrate that the area will continue to maintain the NAAQS for the period extending ten years after redesignation, and it must contain such additional measures as necessary to ensure maintenance and such contingency provisions as necessary to assure that violations of the NAAQS will be promptly corrected. Eight years after the effective date of redesignation, the state must also submit a second maintenance plan to ensure ongoing maintenance of the NAAQS for an additional ten years pursuant to CAA section 175A(b) (*i.e.,* ensuring maintenance for 20 years after redesignation).

EPA has published long-standing guidance for states on developing maintenance plans.[3] The Calcagni memo provides that states may generally demonstrate maintenance by either performing air quality modeling to show that the future mix of sources and emission rates will not cause a violation of the NAAQS or by showing that projected future emissions of a pollutant and its precursors will not exceed the level of emissions during a year when the area was attaining the NAAQS (*i.e.,* attainment year inventory). *See* Calcagni memo at page 9. EPA clarified in three subsequent

[1] In March 2008, EPA completed another review of the primary and secondary ozone NAAQS and tightened them further by lowering the level for both to 0.075 ppm. *See* 73 FR 16436 (March 27, 2008). Additionally, in October 2015, EPA completed a review of the primary and secondary ozone NAAQS and tightened them by lowering the level for both to 0.070 ppm. *See* 80 FR 65292 (October 26, 2015).

[2] Section 107(d)(3)(E) of the CAA sets out the requirements for redesignating a nonattainment area to attainment. They include attainment of the NAAQS, full approval of the applicable SIP pursuant to CAA section 110(k), determination that improvement in air quality is a result of permanent and enforceable reductions in emissions, demonstration that the state has met all applicable section 110 and part D requirements, and a fully approved maintenance plan under CAA section 175A.

[3] John Calcagni, Director, Air Quality Management Division, EPA Office of Air Quality Planning and Standards, ''Procedures for Processing Requests to Redesignate Areas to Attainment,'' September 4, 1992 (Calcagni memo).

guidance memos that certain areas could meet the CAA section 175A requirement to provide for maintenance by showing that the area was unlikely to violate the NAAQS in the future, using information such as the area's design value [4] being well below the standard and the area having a historically stable design value.[5] EPA refers to a maintenance plan containing this streamlined demonstration as an LMP.

EPA has interpreted CAA section 175A as permitting the LMP option because section 175A of the Act does not define how areas may demonstrate maintenance, and in EPA's experience implementing the various NAAQS, areas that qualify for an LMP and have approved LMPs have rarely, if ever, experienced subsequent violations of the NAAQS. As noted in the LMP guidance memoranda, states seeking an LMP must still submit the other maintenance plan elements outlined in the Calcagni memo, including: An attainment emissions inventory, provisions for the continued operation of the ambient air quality monitoring network, verification of continued attainment, and a contingency plan in the event of a future violation of the NAAQS. Moreover, a state seeking an LMP must still submit its section 175A maintenance plan as a revision to its SIP, with all attendant notice and comment procedures. While the LMP guidance memoranda were originally written with respect to certain NAAQS,[6] EPA has extended the LMP interpretation of section 175A to other NAAQS and pollutants not specifically covered by the previous guidance memos.[7]

In a notice of proposed rulemaking (NPRM), published on February 9, 2022, *see* 87 FR 7404, EPA proposed to approve Birmingham's LMP because the State made a showing that the Area's ozone concentrations are well below the 1997 8-hour ozone NAAQS and have been historically stable and that it met the other maintenance plan requirements. The details of Alabama's submission and the rationale for EPA's action are explained in the NPRM. Comments on the February 9, 2022, NPRM were due on or before March 11, 2022. EPA received only one comment, which was in support of the February 9, 2022, NPRM.

II. Final Action

EPA is taking final action to approve the Birmingham Area LMP for the 1997 8-hour ozone NAAQS, submitted by ADEM on September 17, 2020, as a revision to the Alabama SIP.[8] EPA is approving the Birmingham Area LMP because it includes a sufficient update of the various elements of the 1997 8-hour ozone NAAQS Maintenance Plan approved by EPA for the first 10-year portion of the maintenance period (including emissions inventory, assurance of adequate monitoring and verification of continued attainment, and contingency provisions) and retains the relevant provisions of the SIP under sections 110(k) and 175A of the CAA. EPA also finds that the Birmingham Area qualifies for the LMP option and that the Birmingham Area LMP is sufficient to provide for maintenance of the 1997 8-hour ozone NAAQS in the Birmingham Area over the second 10-year maintenance period (*i.e.*, through 2026).

III. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. *See* 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. This action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is 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.*);
- 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 CAA; and
- Does 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).

The SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it 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).

[4] The ozone design value for a monitoring site is the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentrations. The design value for an ozone area is the highest design value of any monitoring site in the area.

[5] *See* "Limited Maintenance Plan Option for Nonclassifiable Ozone Nonattainment Areas," from Sally L. Shaver, Office of Air Quality Planning and Standards (OAQPS), dated November 16, 1994; "Limited Maintenance Plan Option for Nonclassifiable CO Nonattainment Areas," from Joseph Paisie, OAQPS, dated October 6, 1995; and "Limited Maintenance Plan Option for Moderate PM_{10} Nonattainment Areas," from Lydia Wegman, OAQPS, dated August 9, 2001. Copies of these guidance memoranda can be found in the docket for this proposed rulemaking.

[6] The prior memos addressed: Unclassifiable areas under the 1-hour ozone NAAQS, nonattainment areas for the PM_{10} (particulate matter with an aerodynamic diameter less than 10 microns) NAAQS, and nonattainment for the carbon monoxide NAAQS.

[7] *See, e.g.*, 79 FR 41900 (July 18, 2014) (approval of the second ten-year LMP for the Grant County 1971 SO_2 maintenance area).

[8] The SIP revision was adopted by ADEM on September 16, 2020, and submitted by ADEM as a revision to the Alabama SIP on September 17, 2020, via a letter dated September 15, 2020.

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 June 6, 2022. 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 in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: March 30, 2022.

Daniel Blackman,

Regional Administrator, Region 4.

For the reasons stated in the preamble, EPA amends 40 CFR part 52 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.*

■ 2. In § 52.50(e), amend the table by adding an entry for "1997 8-Hour Ozone Second 10-Year Limited Maintenance Plan for the Birmingham 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 8-Hour Ozone Second 10-Year Limited Maintenance Plan for the Birmingham Area.	Jefferson County and Shelby County.	9/16/2020	4/6/2022, [Insert citation of publication].	

[FR Doc. 2022–07132 Filed 4–5–22; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 220223–0054; RTID 0648–XB928]

Fisheries of the Exclusive Economic Zone Off Alaska; Pacific Cod by Catcher Vessels Using Trawl Gear in the Bering Sea and Aleutian Islands Management Area

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 vessels using trawl gear in the Bering Sea and Aleutian Islands management area (BSAI). This action is necessary to prevent exceeding the B season apportionment of the 2022 Pacific cod total allowable catch (TAC) allocated to catcher vessels using trawl gear in the BSAI.

DATES: Effective 1200 hours, Alaska local time (A.l.t.), April 2, 2022, through 1200 hours, A.l.t., June 10, 2022.

FOR FURTHER INFORMATION CONTACT: Krista Milani, 907–581–2062.

SUPPLEMENTARY INFORMATION: NMFS manages the groundfish fishery in the BSAI exclusive economic zone according to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (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.

The B season apportionment of the 2022 Pacific cod TAC allocated to catcher vessels using trawl gear in the BSAI is 3,262 metric tons (mt) as established by the final 2022 and 2023 harvest specifications for groundfish in the BSAI (87 FR 11626, March 2, 2022).

In accordance with § 679.20(d)(1)(i), the Administrator, Alaska Region, NMFS (Regional Administrator), has determined that the B season apportionment of the 2022 Pacific cod TAC allocated to trawl catcher vessels in the BSAI will soon be reached. Therefore, the Regional Administrator is establishing a directed fishing allowance of 2,000 mt and is setting aside the remaining 1,262 mt as incidental catch 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 catcher vessels using trawl gear in the BSAI.

While this closure is effective the maximum retainable amounts at § 679.20(e) and (f) apply at any time during a trip.

Classification

NMFS issues this action pursuant to section 305(d) of the Magnuson-Stevens Act. This action is required by 50 CFR part 679, which was issued pursuant to section 304(b), and is exempt from review under Executive Order 12866.

Pursuant to 5 U.S.C. 553(b)(B), there is good cause to waive prior notice and an opportunity for public comment on this action, as notice and comment would be 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 closure of Pacific cod by catcher vessels using trawl gear in the BSAI. NMFS was unable to publish a notice providing time for public comment because the most recent, relevant data only became available as of March 31, 2022.

Appendix F

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

Table of Contents

Non-Exempt Projects (Highway Capacity Projects) - Map, 2050 Regional Transportation Plan F-1

TABLE 1. Non-Exempt Projects (Highway Capacity Projects) of 2050 Regional Transportation Plan
Sorted by Analysis Year, then by Sponsor, and then by MAP ID
Projects in Conformity Analysis Year 2024 ..... F-2
Projects in Conformity Analysis Year 2034 ..... F-2
Projects in Conformity Analysis Year 2044 ..... F-7
Projects in Conformity Analysis Year 2050 ..... F-7

Visionary Roadway Projects - Map, 2050 Regional Transportation Plan F-8

TABLE 2. Visionary Roadway Projects, 2050 Regional Transportation Plan Sorted by Sponsor and by Map ID
Projects by ALDOT F-9
Projects by Bessemer F-10
Projects by Birmingham F-10
Projects by Chelsea F-10
Projects by Gardendale F-10
Projects by Hoover F-10
Projects by Jefferson County F-10
Projects by Shelby County F-11
Projects by Vestavia Hills F-11

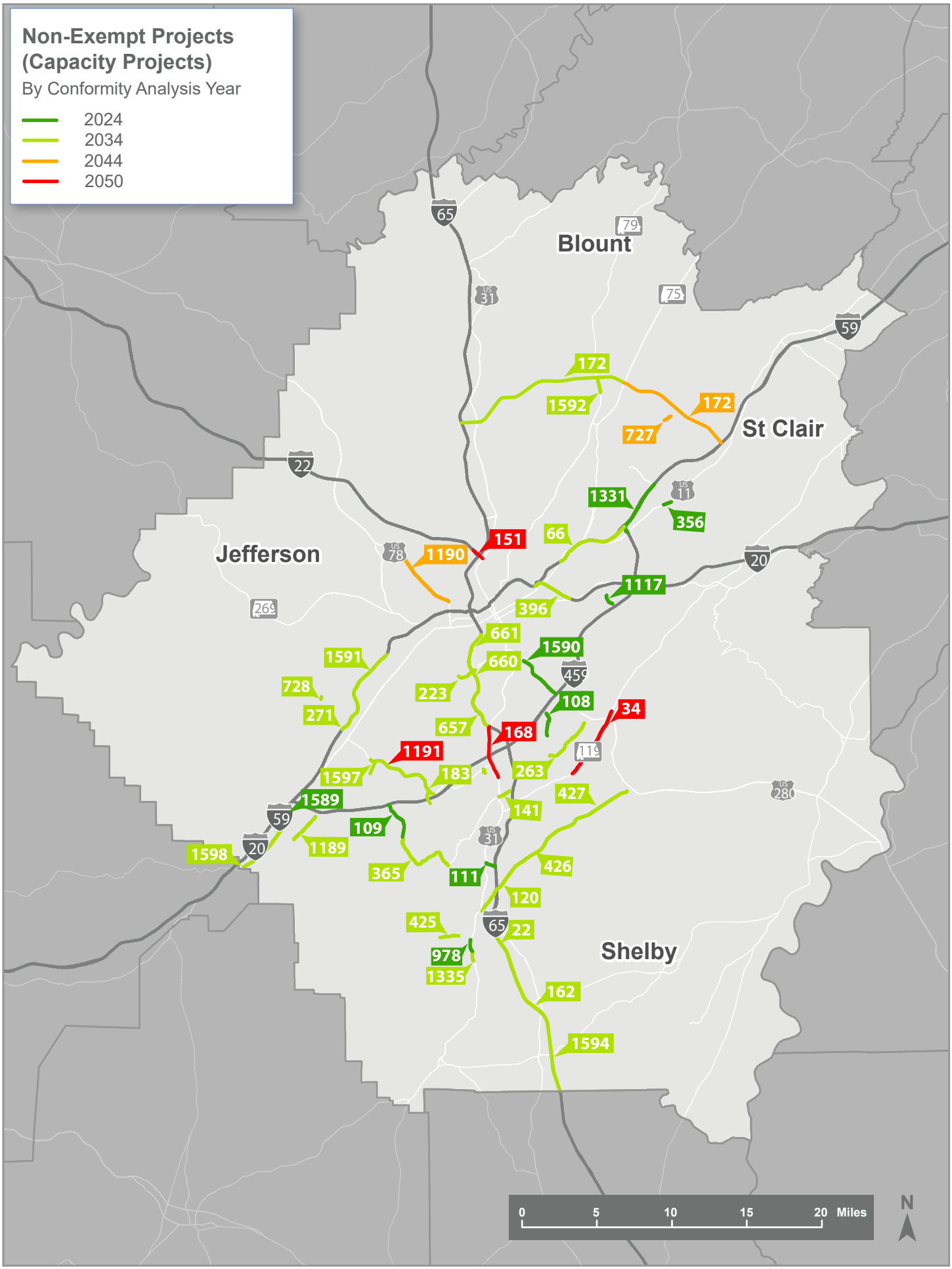
Non-Exempt Projects
(Capacity Projects)
By Conformity Analysis Year
2024
2034
2044
2050
Blount
St Clair
Jefferson
Shelby
172
1592
172
727
1331
356
66
151
1190
1117
396
661
1590
660
1591
728
223
108
34
271
657
168
1191
263
1597
183
427
1589
141
109
1189
1598
365
111
426
120
425
978
1335
162
1594
0
5
10
15
20 Miles
N

TABLE 1. Non-Exempt Projects (Highway Capacity Projects) of 2050 Regional Transportation Plan

Sorted by Conformity Analysis Year, then by Sponsor, and 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 (2021 $)	Federal Cost (2021 $)
														$2,548,547,478	**$2,017,789,069**	**$2,346,520,543**	**$1,856,679,578**
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	1	100063109	UT	Additional Roadway Lanes	STPBH	$1,000,000	$800,000	$1,000,000	$800,000
Alabaster	978	Additional Lanes on SR-119 from Butler Road to CR-26 (Fulton Springs Road) - Phase 1	2	4	1.06	2022	Yes	2024	2	100061118	CN	Additional Roadway Lanes	STPAA	$9,664,310	$7,731,448	$9,568,624	$7,654,899
ALDOT	111	Pelham TOPICS, Widen CR 52 from I-65 to US 31 from 3-lane to 4-lane	3	4	1.10	2023	Yes	2024	1	100039450	CN	Additional Roadway Lanes	STPBH	$561,262	$449,010	$550,203	$440,162
ALDOT	1331	Reconstruction and Lane Addition on I-59 from I-459 to CR-10 (Chalkville Mountain Road) and I-459 from .34 miles south of SR-7 (US-11) to I-59.	4	6	2.10	2022	Yes	2024	3	100064602	CN	Additional Roadway Lanes	IM, NH and Rebuild Alabama	$86,278,949	$77,651,054	$85,424,702	$76,882,232
ALDOT	1590	ADDITIONAL LANES ON SR-38 (US-280) FROM LAKESHORE DRIVE/SHADES CREEK PKWY TO I-459 AND BRIDGE REPLACEMENT (BIN 007402) ON PUMPHOUSE ROAD	6	8	5.60	2023	Yes	2024	3	100074881	CN	Widen	NHPP	$25,000,000	$20,000,000	$24,507,401	$19,605,921
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	2021	No	2024	1	100039839	CN	Turn Lanes	STPBH	$2,561,813	$2,049,450	$2,561,813	$2,049,450
Jefferson County	108	CR-29 (Caldwell Mill Rd), From Heatherwood Rd. (CR-370) to Acton Rd.(CR-2311) Widen and Bridge Replacement over	2	2	4.00	2024	No	2024	1	100007540	CN	Bridge Replacement	STPBH	$13,500,000	$10,800,000	$13,102,967	$10,482,374
Jefferson County	109	Morgan Rd (CR-52),I-459 to South Shades Crest Rd(CR-2)	2	4	2.47	2021	No	2024	1	100007542	CN	Additional Roadway Lanes	STPBH	$12,383,363	$9,906,690	$12,383,363	$9,906,690
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	$9,877,385	$0	$9,779,589	$0
Jefferson County	1589	McCashan Drive from I-20/59 to Old Tuscaloosa Hwy	2	4	0.85	2023	Yes	2024	16	500000602	CN	Widening	Local	$11,700,000	$0	$11,469,464	$0
Alabaster	1335	Additional Lanes on SR-119 from CR-80 (Mission Hills Road) to Butler Road - Phase 2	2	4	0.63	2022	Yes	2034	1	100074590	RW	Additional Roadway Lanes	STPBH	$2,000,000	$1,600,000	$1,980,198	$1,584,158

TABLE 1. Non-Exempt Projects (Highway Capacity Projects) of 2050 Regional Transportation Plan

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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 (2021 $)	Federal Cost (2021 $)
														$2,548,547,478	**$2,017,789,069**	**$2,346,520,543**	**$1,856,679,578**
Alabaster	1335	Additional Lanes on SR-119 from CR-80 (Mission Hills Road) to Butler Road - Phase 2	2	4	0.63	2024	Yes	2034	2	500000595	UT	Additional Roadway Lanes	STPAA	$1,000,000	$800,000	$970,590	$776,472
Alabaster	1335	Additional Lanes on SR-119 from CR-80 (Mission Hills Road) to Butler Road - Phase 2	2	4	0.63	2026	Yes	2034	2	500000596	CN	Additional Roadway Lanes	STPAA	$10,000,000	$8,000,000	$9,514,657	$7,611,726
ALDOT	22	I-65 Add Lanes From CR-87 (Exit 234) North to US-31 (Exit 238) in Alabaster	4	8	4.52	2027	Yes	2034	3	100044964	UT	Utility Adjustment	NHPP	$153,945	$123,156	$145,023	$116,019
ALDOT	22	I-65 Add Lanes From CR-87 (Exit 234) North to US-31 (Exit 238) in Alabaster	4	8	4.52	2027	Yes	2034	3	100044963	CN	Additional Roadway Lanes	NHPP	$86,362,296	$69,089,837	$81,357,189	$65,085,752
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	$2,040,200	$1,632,160
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	100045051	UT	Utility Adjustment	NHPP	$146,186	$116,949	$141,887	$113,509
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	$15,303,410	$39,060,867	$14,416,504	$36,797,104
ALDOT	141	Additional Lanes on CR-17 (Valleydale Rd.) and SR-261 From Riverchase Parkway East to Bearden Road	2	4	3.35	2023	Yes	2034	3	100046238	UT	Utility Adjustment	NHPP	$691,127	$552,902	$677,509	$542,007
ALDOT	141	Additional Lanes on CR-17 (Valleydale Rd.) and SR-261 From Riverchase Parkway East to Bearden Road	2	4	3.35	2023	No	2034	2	100046437	UT	Utility Adjustment	STPAA	$1,726,056	$1,380,845	$1,692,046	$1,353,637
ALDOT	141	Additional Lanes on CR-17 (Valleydale Rd.) and SR-261 From Riverchase Parkway East to Bearden Road	2	4	3.35	2024	Yes	2034	3	100046239	CN	Additional Roadway Lanes	NHPP	$3,935,830	$3,148,664	$3,820,078	$3,056,062
ALDOT	141	Additional Lanes on CR-17 (Valleydale Rd.) and SR-261 From Riverchase Parkway East to Bearden Road	2	4	3.35	2024	No	2034	2	100009265	CN	Additional Roadway Lanes	STPAA	$27,965,274	$22,372,219	$27,142,819	$21,714,256

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														$2,548,547,478	**$2,017,789,069**	**$2,346,520,543**	**$1,856,679,578**
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	$83,337	$66,670
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	$43,101,649	$34,481,319
ALDOT	172	SR-959 (Birmingham Northern Beltline) Construct a 4-Lane Expressway from SR-75 to SR-79	0	4	2.78	2023	Yes	2034	4	100048415	CN	New Road	Appalachian Development	$100,200,000	$100,200,000	$98,225,664	$98,225,664
ALDOT	172	SR-959 (Birmingham Northern Beltline) Construct a 4-Lane Expressway from US-31 to SR-79	0	4	8.83	2027	Yes	2034	4	100076394	CN	New Road	Appalachian Development	$375,088,109	$375,088,109	$353,349,966	$353,349,966
ALDOT	172	SR-959 (Birmingham Northern Beltline) Construct a 4-Lane Expressway from I-65 to US-31	0	4	1.05	2028	Yes	2034	2	500000600	CN	New Road	GARVEE	$204,674,048	$204,674,048	$190,903,180	$190,903,180
ALDOT	183	SR-150 from West of CR-6 (Parkwood Rd) to West of Shades Creek (Phase 2)	2	4	2.35	2025	No	2034	7	100025540	CN	Add lanes	Local	$10,455,814	$0	$10,047,832	$0
ALDOT	271	I-59 From 18th/19th Street(Exit 112) to Allison-Bonnette Memorial Drive/Rutledge Drive(Exit 115)	4	6	4.20	2026	Yes	2034	3	100039736	RW	Additional Roadway Lanes	NHPP	$399,894	$319,915	$380,485	$304,388
ALDOT	271	I-59 From 18th/19th Street(Exit 112) to Allison-Bonnette Memorial Drive/Rutledge Drive(Exit 115)	4	6	4.20	2027	Yes	2034	3	100047791	UT	Utility Adjustment	NHPP	$76,716	$61,373	$72,270	$57,816
ALDOT	271	I-59 From 18th/19th Street(Exit 112) to Allison-Bonnette Memorial Drive/Rutledge Drive(Exit 115)	4	6	4.20	2028	Yes	2034	3	100033203	CN	Additional Roadway Lanes	NHPP	$33,472,791	$26,778,233	$31,220,677	$24,976,541
ALDOT	396	Widen I-20, 4 to 6 Lanes, From I-59 Interchange to Montevallo Road (Exit 132B) and Interchange Modifications At I-59	4	6	2.25	2030	Yes	2034	3	500000037	CN	Additional Roadway Lanes	NHPP	$71,106,160	$56,884,928	$65,015,194	$52,012,155
ALDOT	657	I-65 Auxiliary Lanes From US 31 to Alford Avenue	6	8	1.72	2029	Yes	2034	3	500000309	CN	Additional Roadway Lanes	NHPP	$24,080,000	$19,264,000	$22,237,476	$17,789,981
ALDOT	658	I-65 Auxiliary Lanes From Alford Avenue to Lakeshore Parkway	6	8	1.38	2029	Yes	2034	3	500000310	CN	Additional Roadway Lanes	NHPP	$19,320,000	$15,456,000	$17,841,696	$14,273,357
ALDOT	659	I-65 Auxiliary Lanes From Lakeshore Parkway to Oxmoor Road	6	8	1.04	2029	Yes	2034	3	500000312	CN	Additional Roadway Lanes	NHPP	$14,560,000	$11,648,000	$13,445,916	$10,756,733

TABLE 1. Non-Exempt Projects (Highway Capacity Projects) of 2050 Regional Transportation Plan

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														$2,548,547,478	**$2,017,789,069**	**$2,346,520,543**	**$1,856,679,578**
ALDOT	660	I-65 Auxiliary Lanes From Oxmoor Road to Greensprings Avenue	6	8	1.43	2029	Yes	2034	3	500000313	CN	Additional Roadway Lanes/Bridge	NHPP	$20,020,000	$16,016,000	$18,488,134	$14,790,507
ALDOT	661	I-65 Auxiliary Lanes From Greensprings Road to University Blvd	6	8	1.26	2029	Yes	2034	3	500000314	CN	Additional Roadway Lanes	NHPP	$17,640,000	$14,112,000	$16,290,244	$13,032,195
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	4	8	0.54	2023	Yes	2034	6	100055334	PE	Bridge Widening	BR	$1,441,660	$1,153,328	$1,413,254	$1,130,603
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	4	8	0.54	2025	Yes	2034	6	100055335	CN	Bridge Widening	BR	$13,568,571	$10,854,857	$13,039,130	$10,431,304
ALDOT	1191	SR-150 from Morgan Rd at Bessemer to MP 4.3 W of Parkwood Rd. Phase I	2	4	3.80	2025	no	2034	7	100025539	CN	Add lanes	State	$10,000,000	$0	$9,609,803	$0
ALDOT	1591	Additional Lanes on I-20/59 from MP116 to 118	4	6	2.30	2024	Yes	2034	3	100069261	CN	Widen	Rebuild Alabama	$78,871,326	$0	$76,551,732	$0
ALDOT	1591	Additional Lanes on I-20/59 from MP116 to 118	4	6	2.30	2025	Yes	2034	3	100073023	CN	Additional Roadway Lanes	Rebuild Alabama	$38,353,021	$0	$36,856,499	$0
ALDOT	1592	Additional Lanes on SR-79 from existing 4 lanes south of the Northern Beltline to	2	4	1.10	2024	Yes	2034	2	500000604	CN	Widen	STPAA	$10,000,000	$8,000,000	$9,705,901	$7,764,721
ALDOT	1594	I-65 Add Lanes From Chilton County Line to US-31 (Exit 231) in Calera	4	8	5.60	2032	Yes	2034	2	500000605	CN	Widen	Rebuild Alabama	$100,000,000	$0	$89,632,372	$0
ALDOT/Hoover	1595	Extend Ross Bridge Parkway to I-459; Add interchange (Exit 9) and extend new road to South Shades Crest Road	0	4	1.30	2027	Yes	2034	2	100056294	CN	Widen	STPAA	$120,000,000	$96,000,000	$113,045,428	$90,436,343
Homewood	223	Oxmoor Blvd-Green Springs to Barber Court. Intersection Improvements At Barber Ct. and Oxmoor Rd.	4	6	1.10	2024	No	2034	1	100029510	CN	Intersection Improvements	STPBH	$4,496,251	$3,597,001	$4,364,017	$3,491,214
Hoover/Shelby County	263	VALLEYDALE RD FROM CALDWELL MILL RD TO MEADOW DRIVE - PHASE 1	2	4	3.50	2024	No	2034	1	100033067	UT	Additional Roadway Lanes	STPBH	$8,000,000	$6,400,000	$7,764,721	$6,211,777
Hoover/Shelby County	263	VALLEYDALE RD FROM CALDWELL MILL RD TO MEADOW DRIVE - PHASE 1	2	4	3.50	2024	No	2034	1	100033064	CN	Additional Roadway Lanes	STPBH	$20,500,000	$16,400,000	$19,897,098	$15,917,678
Hoover/Shelby County	1588	Valleydale Rd(CR-17) (Medow Drive to Inverness Center) - Phase 2	2	4	3.50	2026	No	2034	1	500000603	CN	Additional Roadway Lanes	STPBH	$12,764,692	$10,211,753	$12,145,166	$9,716,133

TABLE 1. Non-Exempt Projects (Highway Capacity Projects) of 2050 Regional Transportation Plan

Sorted by Conformity Analysis Year, then by Sponsor, and 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 (2021 $)	Federal Cost (2021 $)
														$2,548,547,478	$2,017,789,069	$2,346,520,543	$1,856,679,578
Jefferson County	642	Galleria Blvd Extension from South Lorna Road to SR 150	0	2	0.44	2017	No	2034	1	100056487	RW	new Roadways	STPBH	$4,356,000	$3,484,800	$4,356,000	$3,484,800
Jefferson County	642	Galleria Blvd Extension from South Lorna Road to SR 150	0	2	0.44	2024	No	2034	1	100056488	UT	new Roadways	STPBH	$500,000	$400,000	$485,295	$388,236
Jefferson County	642	Galleria Blvd Extension from South Lorna Road to SR 150	0	2	0.44	2024	No	2034	1	100056489	CN	new Roadways	STPBH	$6,000,000	$3,200,000	$5,823,541	$3,105,888
Jefferson County	728	Hueytown Rd-Virginia Dr Intersection Improvements - Add Lanes and Sidewalk	2	4	0.70	2017	No	2034	1	100056288	RW	Aligning & Adding Lanes	STPBH	$400,000	$320,000	$400,000	$320,000
Jefferson County	728	Hueytown Rd-Virginia Dr Intersection Improvements - Add Lanes and Sidewalk	2	4	0.70	2023	No	2034	1	100056289	UT	Aligning & Adding Lanes	STPBH	$500,000	$400,000	$490,148	$392,118
Jefferson County	728	Hueytown Rd-Virginia Dr Intersection Improvements - Add Lanes and Sidewalk	2	4	0.70	2023	No	2034	1	100056290	CN	Aligning & Adding Lanes	STPBH	$1,500,000	$1,200,000	$1,470,444	$1,176,355
Jefferson County	1189	Eastern Valley Rd from McAshan Dr to Letson Farm Pkwy	2	2	2.10	2024	No	2034	16	500000609	CN	Add lanes from 2 to 3	Local	$6,306,060	$0	$6,120,600	$0
Jefferson County	1597	Lakeshore Parkway Extension from SR-150 to Morgan Road/Farr Rd	2	4	1.40	2025	Yes	2034	16	500000607	CN	Widening	Local	$15,000,000	$0	$14,414,705	$0
Jefferson County	1598	Old Tuscaloosa Hwy from Tanehill Parkway To McCashan Drive	2	4	4.20	2024	Yes	2034	16	500000608	CN	Widening	Local	$12,500,000	$0	$12,132,377	$0
Shelby County	120	Shelby CR-11 From US-31 to East Weatherly Entrance (Henderson Rd.). Widen 2 to 3 Lanes	2	2	3.20	2028	No	2034	1	100007575	PE	Widening and Resurfacing	STPBH	$237,952	$190,362	$221,942	$177,554
Shelby County	120	Shelby CR-11 From US-31 to East Weatherly Entrance (Henderson Rd.). Widen 2 to 3 Lanes	2	2	3.20	2029	No	2034	1	100007576	RW	Widening and Resurfacing	STPBH	$2,421,139	$1,936,911	$2,235,882	$1,788,705
Shelby County	120	Shelby CR-11 From US-31 to East Weatherly Entrance (Henderson Rd.). Widen 2 to 3 Lanes	2	2	3.20	2030	No	2034	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	2031	No	2034	1	100007572	CN	Widening and Resurfacing	STPBH	$3,847,719	$3,078,175	$3,483,290	$2,786,632
Shelby County	425	CR-26 (Kent Dairy Rd.), From CR-17 to Kentwood Dr., Widen 2 to 3 Lanes	2	2	1.20	2028	No	2034	1	500000075	CN	Additional Roadway Lanes	STPBH	$3,000,000	$2,400,000	$2,798,154	$2,238,523
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	$25,968,541	$20,774,833

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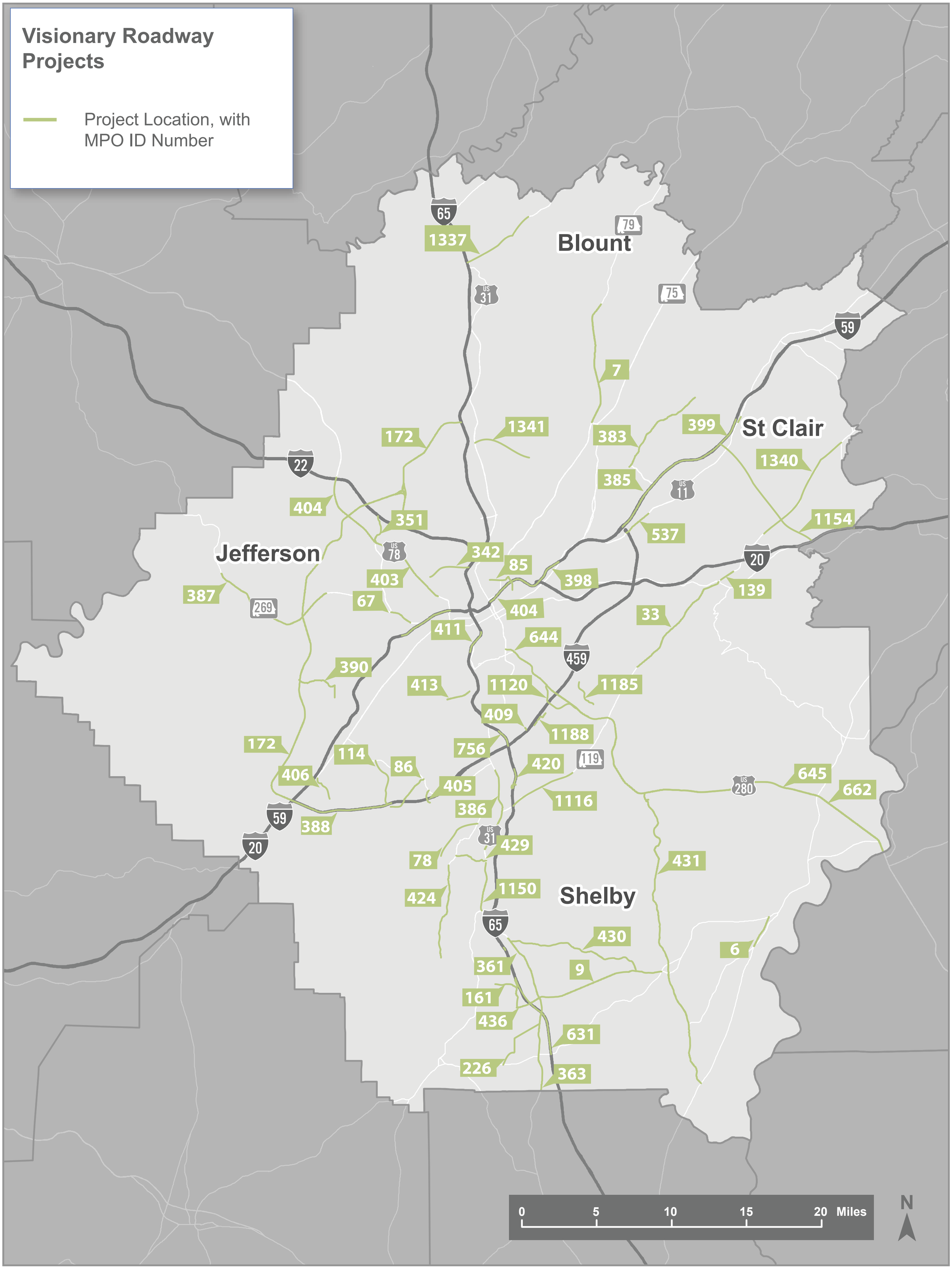
Sponsor	MAP (MPO) ID	Project Descriptions	Lane Before	Lane After	Length	Proposed Fiscal Year	Regional Significant	Conformity Analysis Years	TELUS Table #	ALDOT Project #	Scope	Type of Work	Funding Program	Total Cost (Year of Expenditure)	Federal Cost (Year of Expenditure)	Total Cost (2021 $)	Federal Cost (2021 $)
														$2,548,547,478	**$2,017,789,069**	**$2,346,520,543**	**$1,856,679,578**
Shelby County	427	CR-11 From CR-36 Intersection to US-280. Widen 2 to 5 Lanes	2	4	3.90	2033	No	2034	1	500000076	CN	Additional Roadway Lanes	STPBH	$54,600,000	$23,177,823	$48,454,728	$20,569,141
Shelby County/Helena	365	Helena Rd (CR-52), From CR-13 to SR-261. Widen 2 to 5 Lanes,	2	4	2.92	2028	No	2034	1	500000048	CN	Additional Roadway Lanes	STPBH	$18,539,871	$6,831,897	$17,292,472	$6,372,233
Shelby County/Helena	1192	Helena 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	$19,236,724	$7,389,379	$17,942,440	$6,892,208
ALDOT	172	SR-959 (Birmingham Northern Beltline) Construct a 4-Lane Expressway from SR-75 to I-59	0	4	7.74	2034	Yes	2044	2	500000599	CN	New Road	GARVEE	$548,208,578	$548,208,578	$481,690,374	$481,690,374
ALDOT	1190	SR-5 (US-78) Add Lanes From Finley Blvd to Pratt Hwy (2nd St) (Phase 2)	4	6	0.81	2038	Yes	2044	3	100044951	CN	Additional Roadway Lanes	NHPP	$8,804,051	$6,643,241	$7,433,943	$5,609,403
Clay	727	Old Springville Rd (CR-30) Intersection Improvements	2	2	0.98	2040	No	2044	1	100056276	CN	Adding Turn Lanes	STPBH	$5,850,000	$3,880,000	$4,842,279	$3,211,631
ALDOT	34	SR-119 From South of Oak Mountain Elementary to North of Greystone Way	2	4	5.10	2045	No	2050	2	100009238	CN	Grade, Drain, Base and Pave	STPAA	$53,904,455	$39,923,564	$42,453,323	$31,442,447
ALDOT	151	Corridor "X" From East of I-65 to US-31	0	6	0.40	2046	Yes	2050	3	100059531	CN	Grade, Drain, Base, Pave & Bridge	NHPP	$46,100,091	$19,704,040	$35,947,396	$15,364,588
ALDOT	168	US-31 From Riverchase Parkway to I-65	4	6	2.47	2045	Yes	2050	2	100009260	CN	Additional Roadway Lanes	STPAA	$25,377,000	$12,301,600	$19,986,066	$9,688,323



Visionary Roadway Projects
Project Location, with MPO ID Number
Blount
Jefferson
St Clair
Shelby
1337
7
1341
172
383
399
1340
385
404
351
1154
537
342
85
398
403
387
67
139
404
33
411
644
390
413
1120
1185
409
1188
172
114
756
86
420
406
405
1116
386
388
429
78
431
1150
424
430
361
9
6
161
436
631
226
363
645
662
0 5 10 15 20 Miles
N

TABLE 2. Visionary Roadway Projects of 2050 Regional Transportation Plan

Sorted by Sponsor and then by MAP ID

Sponsor	MAP (MPO) ID	Non-Exempt Project Descriptions	Lane Before	Lane After	Length	Total Cost
						$5,638,408,499
ALDOT	6	Extend SR-145 From CR-61 North to SR-25 In Wilsonville	0	2	2.36	$18,955,093
ALDOT	7	SR-79 From North End of 4-Lane to 1 Mile Inside Blount	2	4	6.67	$16,956,257
ALDOT	33	SR-119 From The Jefferson-Shelby County Line to Leeds	2	4	7.89	$8,951,748
ALDOT	67	I-59 From N of (CR-80)Av I to S of (SR-5)Arkadelphia Rd	8	10	2.70	$26,625,303
ALDOT	78	Helena Bypass From CR-52 West of Helena to SR-261 North of Helena	0	4	5.90	$27,385,982
ALDOT	139	US-411 From East of Dawson Street Connector to End of 4-	2	4	0.50	$1,497,397
ALDOT	162	Bridge Widening & Add Lanes on I-65 South (#I65-59-2.7 Dual Bridges). MP 236; RR Involvement	4	8	0.50	$11,926,087
ALDOT	172	SR-959 (Birmingham Northern Beltline) From SR-269 to US 78 W	0	6	7.80	$310,647,722
ALDOT	172	SR-959 (Birmingham Northern Beltline) From US 78 W to I-65	0	6	10.60	$1,057,006,535
ALDOT	172	SR-959 (Birmingham Northern Beltline) From I-459 to SR-269	0	6	13.40	$1,496,095,555
ALDOT	351	CR-65 (Hillcrest Rd) From SR-5 (US-78) to Corridor X	2	4	3.20	$21,793,354
ALDOT	361	US-31, Widen 2 to 4 Lanes, From I-65 (Exit 231) North to	2	4	2.20	$22,283,982
ALDOT	362	Widen US-31, 2 to 4 Lanes, From I-65(Exit 231) South to 6th	2	4	2.20	$19,810,379
ALDOT	363	Widen US-31, 2 to 4 Lanes, From 20Th St.(Calera) South to	2	4	2.10	$22,121,916
ALDOT	385	Widen I-59 North, From I-459 to Deerfoot Parkway (4 to 6 Lanes NBL)	4	6	5.10	$34,918,779
ALDOT	386	Widen US-31 From SR-119 to Cahaba River (Riverchase Parkway)	4	6	2.25	$18,732,077
ALDOT	387	Widen SR-269 From Maytown CL to Port Birmingham 2 to 4	2	4	9.25	$97,441,774
ALDOT	388	Widen I-459 From I-59 to (CR-52) Morgan Rd (4 to 6 Lanes)	4	6	6.50	$54,114,889
ALDOT	398	Widen I-59 North I-20 Interchange (Exit 130) to 1st Ave.	6	8	1.95	$20,541,779
ALDOT	399	Widen I-59 North, From Deerfoot Parkway to Jefferson/St.Clair County Line (4 to 6 Lanes NBL)	4	6	5.20	$43,291,911
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	$41,083,559
ALDOT	403	Widen US-78 From Cherry Ave(CR-105) to Hillcrest Rd(CR-65). 4 to 6 Lanes	4	6	5.20	$57,763,055
ALDOT	404	Widen US-78 From Hillcrest Rd(CR-65) to Corridor X	4	6	3.60	$42,400,721
ALDOT	410	SR-79 (Tallapoosa St.) From 400' South of I-59/I-20 to East	4	6	0.45	$5,554,140
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	$9,860,054
ALDOT	412	SR-269 From Ave. F to Minor Parkway. Widen 4 to 6 Lanes	4	6	9.25	$5,653,429
ALDOT	418	Widen US-78 From Pratt Hwy (2nd St.) to Cherry Ave(CR-105). 4 to 8 Lanes	4	6	0.70	$8,741,636
ALDOT	420	I-65 Additional Lanes From South End of Overpass At	6/8	8/10	1.18	$14,553,383
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	$9,542,874

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						$5,638,408,499
ALDOT	537	US-11 Additional Lanes From I-459 to Tutwiler Drive	4	6	1.25	$8,915,288
ALDOT	539	Replace Bridge, Bin 006360, SR-79 over Gurley Creek (Suff=59.0, Status=Fo) and Additional Bridge For 4 Lane	2	4	0.10	$2,081,342
ALDOT	631	Widen I-65, 4 to 8 Lanes, From SR-25 (Exit 228) to US-31, North of Calera	4	8	3.00	$32,363,546
ALDOT	644	US 280 Corridor Improvements (West Segment) from EB Expressway to Eagle Point Pkwy	6	8	16.10	$962,622,138
ALDOT	645	US 280 Limited Access Road (East Segment) from Eagle Point Pkwy to Shelby & Talladega County Line (Coosa River)	4	6	22.10	$45,053,372
ALDOT	662	US 280 Frontage Roads (Eastbound) from Eagle Point Pkwy to Shelby & Talladega County Line (Coosa River)	0	2	22.10	$45,053,372
ALDOT	756	I-65 Additional Lanes From South End of The Cahaba River Bridge to South End of CR-2310 (Wisteria Drive) Overpass.	6/8	8/1(	2.87	$18,315,809
ALDOT	766	Bridge Replacement and Approaches on US-78 (SR-5) over Dugan Avenue, Bin 1392	4	6	0.25	$1,727,436
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	$75,000,000
ALDOT	1152	Interchange Modification on I-65 @ CR-17 (Valleydale Road), (Flyover Ramps) Phase 2	6/8	8/1(	0.29	$57,172,570
ALDOT	1154	Route From I-59 @ Trussville - I-20 @ Leeds Extend Northern Beltline to East of Leeds	0	6	6.75	$146,110,200
ALDOT/ Calera	226	Calera Northern Bypass From SR-25 West of Calera to SR-3 (US-31) North of Calera	0	2	3.50	$18,167,797
ALDOT/ Shelby Co.	1116	SR-119 From I-65 to South of Oak Mountain Elementary	2	4	4.30	$62,076,306
ALDOT/Argo	1336	Widen US-11 from Argo Pkwy to Argo-Margaret Rd	2	4	0.50	$6,350,000
ALDOT/Blount County	1337	Widen SR-160 from I-65 to CR 7 in Hyden	2	4	5.30	$37,100,000
ALDOT/St. Clair	1340	Widen US-411 from Park Ave to SR-174	2	4	9.00	$63,000,000
Bessemer	132	Parkwood Road Improvements	2	2	3.20	$931,371
Birmingham	84	Finley Ave Extension From SR-3(US-31/26th Street) to SR-	0	4	1.30	$80,000,000
Birmingham	342	Daniel Payne Dr.(CR-94),From Cherry Ave (CR-105). to I-65, Add Left Turn Lanes.	4	4	2.50	$4,532,108
Birmingham	349	40Th St North,From I-59 to 400Ft. South of 10Th Ave. North, Add Left Turn Lane	2	2	0.50	$1,831,164
Chelsea	1338	CR 39 widen-including bridges over railroad & Yellow Cleaf	0/2	4	0.50	$20,610,000
Gardendale	1341	New Road from US 31 to New Castle Rd in Gardendale	0	2	3.90	$16,280,000
Hoover	405	Stadium Trace Parkway, From Current Terminus to CR-52. Extend Existing Roadway. 0 to 4 Lanes,	2	4	3.50	$31,103,184
Jefferson County	114	Lakeshore Parkway Extension from SR-150 to I-459	0	4	3.10	$32,840,910
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	$37,923,285
Jefferson County	390	Allison-Bonnet Memorial Drive(CR-56), From Hueytown Rd.(CR-46) to Brooklane Drive	2	4	2.10	$8,508,429

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Sponsor	MAP (MPO) ID	Non-Exempt Project Descriptions	Lane Before	Lane After	Length	Total Cost
						$5,638,408,499
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	$7,083,032
Jefferson County	409	Old Rocky Ridge Rd.. From Altadena Rd to Dolly Creek LN.. Widen 2 to 4 Lanes.	2	4	0.15	$1,298,757
Jefferson County	413	Lakeshore Parkway. From Wildwood North to Oxmoor Rd. Widen 4 to 6 Lanes	4	6	1.62	$6,481,663
Jefferson County	414	Lakeshore Parkway. From Oxmoor Rd. to Industrial Drive Widen 4 to 6 Lanes	4	6	0.55	$3,925,993
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	$1,940,451
Jefferson County	1188	Acton Rd from International Park Dr. to Camp Honner Rd	2	2	1.30	$6,700,000
Shelby County	9	SR-70 from US-31 to SR-25 in Columbiana	2	4	6.50	$6,523,122
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	$43,624,926
Shelby County	428	CR-12 (Smokey Rd.) From CR-107 East to CR-87.Widen 2	2	4	1.55	$9,670,438
Shelby County	429	CR-52 From SR-261 East To Johnson St. Widen 2 To 5 Lanes.	2	4	2.20	$15,546,931
Shelby County	430	CR-26, From US-31 East To SR-70. Widen 2 To 4 Lanes	2	4	9.00	$45,056,889
Shelby County	431	CR-47, From US-280 South to SR-145. Widen 2 to 4 Lanes	2	4	7.80	$97,404,106
Shelby County	434	CR-87 From CR-12 North .55 Miles. Widen 2 To 4 Lanes,	2	4	0.55	$2,591,155
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	$22,028,923
Shelby County	1153	CR-12 (Smokey Rd.) From CR-87 East to CR-22.Widen 2 to	2	4	1.30	$8,611,114
Shelby County	1185	Cahaba Beach Road from 0.2 mile w of Swan Dr. in Shelby County to Sicard Hollow Rd	0	2	2.03	$8,000,000
Vestavia Hills	1120	Cahaba River Road from Key Drive to US-280	2	4	4.02	$10,000,000
						$5,638,408,499

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 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.

IIJA – Infrastructure Investment and Jobs Act: Is the most recent transportation legislation, signed into law by President Biden on November 15, 2021.

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, then FAST, currently IIJA 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.