# CONFORMITY DETERMINATION REPORT

### ATLANTA NONATTAINMENT AND MAINTENANCE AREAS

IN SUPPORT OF:
The Atlanta Region's Plan (2020)
Gainesville-Hall Regional Transportation Plan (2020)
Bartow on the Move (2020)

Expected February 2020

# **DRAFT**





# RTP MODIFICATION HISTORY

Action

Adoption of TARP RTP (2020)

ARC Approval Date

Expected February 2020

## **GLOSSARY OF ACRONYMS**

ARC Atlanta Regional Commission

CBMPO Cartersville-Bartow County Metropolitan Planning Organization

CDR Conformity Determination Report
CFR Code of Federal Regulations

FAST Act Fixing America's Surface Transportation Act (federal transportation bill)

FHWA Federal Highway Administration

FTA Federal Transit Authority

GA EPD Georgia Environmental Protection Division
GDOT Georgia Department of Transportation

GHMPO Gainesville-Hall County Metropolitan Planning Organization

HOT High-Occupancy Toll
HOV High-Occupancy Vehicle

HPMS Highway Performance Monitoring System I/M Inspection and Maintenance Program

MAP-21 Moving Ahead for Progress in the 21st Century (federal transportation bill)

MARTA Metropolitan Atlanta Rapid Transit Authority

MOVES Motor Vehicle Emission Simulator
MPO Metropolitan Planning Organization
MVEB Motor Vehicle Emission Budget

NAAQS National Ambient Air Quality Standard

NO<sub>x</sub> Nitrogen Oxide

 $O_3$  Ozone

RTP Regional Transportation Plan
SIP State Implementation Plan
SOV Single-Occupancy Vehicle
TAC Technical Advisory Committee

TARP RTP (2016) The Atlanta Region's Plan RTP adopted in 2016 TARP RTP (2020) The Atlanta Region's Plan RTP adopted in 2020

TCM Transportation Control Measure

TIP Transportation Improvement Program
USDOT United States Department of Transportation
USEPA United States Environmental Protection Agency

VMT Vehicle Miles Traveled VOC Volatile Organic Compound

# FIGURES AND TABLES

FIGURES	1 1
Figure 1: Map of the current ARC air quality boundaries	
Figure 3: Results of the 15-County MVEB Test for the 8-hr. Ozone Standards	
TABLES	
Table 1: Recent Conformity Determinations	. 12
Table 2: Approved MVEBs	. 14
Table 3: FY 2020-2025 Yearly TIP Balances – Federal Highway Administration Funds (\$Y0E)	
Table 4: FY 2020-2025 Yearly TIP Balances - Federal Transit Administration Funds (\$YOE)	
Table 5: Results of the 15-County MVEB Test for the 8-hr. Ozone Standards	. 33

# TABLE OF CONTENTS

Introduction	
The Clean Air Act & Transportation Conformity	
Current Attainment Status.	
8-hr. Ozone Standard	
Recent Conformity Determinations	12
Statement of Conformity	
Statement of Conformity for the 8-hr. Ozone Standard	
Interagency Consultation	16
Introduction	
Transportation Conformity Rule Requirements	17
Public Involvement	
Fiscal Constraint	22
Latest Planning Assumptions	26
Overview	
Socioeconomic Forecasts	26
Tolls and Managed Lanes	27
Transit Operating Procedures	28
Quantitative Analysis	
8-hr. Ozone Standard	32
Exhibits to the CDR.	35
Exhibit 1: Planning Assumptions and Modeling Inputs	35
Exhibit 2: Status of TCMs	
Exhibit 3: Interagency Consultation Group Meeting Minutes	51

## INTRODUCTION

This report documents the transportation conformity requirements for the Atlanta air quality nonattainment and maintenance areas. This area is comprised of three Metropolitan Planning Organization (MPOs) with three distinct plans and policy committees. The three plans covered by this report area listed below and comprise the latest updates to the horizon year 2050 Regional Transportation Plans (RTPs) and Transportation Improvement Programs (TIPs) within the nonattainment and maintenance area:

- Atlanta Regional Commission (ARC): The Atlanta Region's Plan RTP and FY 2020-2025 TIP (TARP RTP (2020))
- Gainesville-Hall County MPO (GHMPO): 2050 RTP and FY 2020-2024 TIP (GHMPO RTP)
- Cartersville-Bartow County MPO (CBMPO): Bartow on the Move and FY 2020-2024 TIP (CBMPO RTP)

Together, these three plans demonstrate conformity to the 1997, 2008, and 2015 8-hr. ozone standards. The conformity analysis for the 8-hr. ozone standards is documented in full in this Conformity Determination Report (CDR).

### THE CLEAN AIR ACT & TRANSPORTATION CONFORMITY

The Clean Air Act requires the United States Environmental Protection Agency (USEPA) to set limits on how much of a particular pollutant can be in the air anywhere in the United States. National Ambient Air Quality Standards (NAAQS) are the pollutant limits set by the USEPA; they define the allowable concentration of six different pollutants: carbon monoxide, lead, nitrogen dioxide, fine and coarse particulate matter, ozone, and sulfur dioxide.

The Clean Air Act specifies how areas within the country are designated as either in attainment or nonattainment of an air quality standard and provides USEPA the authority to define the boundaries of nonattainment areas. For areas designated as nonattainment for one or more NAAQS, the Clean Air Act defines a specific timetable to attain the standard and requires that nonattainment areas demonstrate reasonable and steady progress in reducing air pollution emissions until such time that an area can demonstrate attainment. Each state must develop and submit a State Implementation Plan (SIP) that addresses each pollutant for which it fails to meet the NAAQS. Individual state air quality agencies are responsible for defining the overall regional plan to reduce air pollution emissions to levels that will enable attainment and maintenance of the NAAQS. This strategy is articulated through the SIP. In Georgia, the agency responsible for SIP development is the Georgia Environmental Protection Department (GA EPD).

The delineation and implementation of strategies to control emissions from on-road mobile sources is a significant element of the state plan to improve air quality, thereby creating a direct link between transportation and air quality planning activities within nonattainment

areas. The process of ensuring that a region's transportation planning activities contribute to attainment of the NAAQS, or conform to the purposes of the SIP, is referred to as transportation conformity. In order to receive federal transportation funds within a nonattainment area, the area must demonstrate through a federally mandated transportation conformity process that the transportation investments, strategies, and programs, taken as a whole, contribute to the air quality goals defined in all applicable SIPs.

To ensure that transportation conformity requirements are met, Section 176(c) of the Clean Air Act authorizes the USEPA Administrator to "promulgate criteria and procedures for demonstrating and assuring conformity in the case of transportation plans, programs, and projects." This is accomplished through the Transportation Conformity Rule<sup>1</sup>, developed by the USEPA to outline all federal requirements associated with transportation conformity. The Transportation Conformity Rule, in conjunction with the Metropolitan Planning Regulations<sup>2</sup>, direct transportation plan and program development as well as the transportation conformity process. The final Conformity Rule incorporates revisions resulting from the passage of the FAST Act, the current federal transportation funding legislation which specifies the process for the development of metropolitan transportation plans and programs for urbanized areas.

ARC is the federally designated MPO for all or portions of 20 counties in northern Georgia. ARC is directly responsible for developing a long-range RTP outlined in the Metropolitan Planning Regulations and Transportation Conformity Rule.

Portions of the Atlanta urbanized area extend into Bartow, Hall, and Jackson counties. Via interagency agreement, CBMPO and GHMPO plan for those portions of the Atlanta urbanized area within their boundary. ARC performs the planning and technical work required by the Transportation Conformity Rule, including, by agreement with CBMPO and GHMPO, the emissions modeling for Bartow and Hall counties. ARC documents the analysis in a combined CDR for all three MPOs. The USDOT approves or disapproves the conformity analysis in consultation with the USEPA. A positive conformity determination is required for the RTPs and TIPs to advance in all three MPOs.

If transportation plans and programs do not conform to the air quality goals established in the SIP, the transportation planning process will be delayed. Project implementation may be jeopardized through the imposition of transportation funding restrictions that direct how federal transportation funds can be applied. This situation is referred to as a conformity lapse, during which all federal transportation funds and approvals are restricted to projects that meet certain very specific criteria.

Conformity Determination Report | 8

<sup>40</sup> CFR 93: Determining Conformity of Federal Actions to State or Federal Implementation Plans (EPA)

<sup>&</sup>lt;sup>2</sup> 23 CFR 450: Planning Assistance and Standards (FHWA)

# **CURRENT ATTAINMENT STATUS**

### 8-HR. OZONE STANDARD

The Atlanta region is currently subject to three NAAQS for 8-hr. ozone pollution: (1) the 1997 standard of 0.08 ppm, (2) the 2008 standard of 0.075 ppm, and (3) the 2015 standard of 0.070 ppm.

#### 1997 STANDARD

In 2003, the 1997 standard was set to 0.08 ppm and a 20-county area in the Atlanta region was designated as marginal nonattainment. In 2008, Atlanta was redesignated as moderate nonattainment.

On December 2, 2013, EPA redesignated the Atlanta area as a maintenance area, effective January 2, 2014. When the 2008 8-hr. ozone standard was finalized and designations made, EPA then pursued the revocation of the 1997 8-hr. standard along with conformity requirements pertaining to this standard, through its "2008 Implementation of the 2008 National Ambient Air Quality Standards (NAAQS) for Ozone: State Implementation Plan (SIP) Requirements", which was finalized and effective April 6, 2015. Transportation conformity for the 1997 8-hr. ozone standard was no longer applied. A February 16, 2018 court ruling (South Coast Air Quality Management District v. EPA, No. 15-1115 (D.C. Cir. 2018)), vacated the 2008 Implementation Rule with regards to revoking conformity for areas like Atlanta, and required that conformity be conducted in those areas not covered by the 2008 and 2015 standards.

Pursuant to EPA Guidance released on November 29, 2018 (EPA-420-B-18-050) titled "Transportation Conformity Guidance for the South Coast II Court Decision" emissions modeling (i.e. regional emissions analysis) is not required to demonstrate conformity for the 1997 8-hr. ozone standard (see 40 CFR 93.109(c)). As such, no model planning assumptions are prepared to demonstrate conformity. Instead, this report states that requirements to meet the 1997 standard are in tandem with the 2008 and 2015 8-hr. ozone standards. This includes the fulfillment by all counties in the 1997 8-hr. ozone NAAQS 20-county maintenance area of conformity requirements through interagency consultation, assessing all projects as exempt or non-exempt, identifying the status of TCMs (also fulfilling planning assumptions), and asserting financial constraint.

#### 2008 STANDARD

Effective July 20, 2012, the 2008 8-hr. ozone standard was set at 0.075 ppm and 15 counties in the Atlanta region were classified as a marginal nonattainment area under the standard: Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, and Rockdale counties (see Figure 1). Initially, an attainment date of

December 31, 2015 was set. This date was later changed through litigation to July 20, 2015 for marginal nonattainment areas like Atlanta.

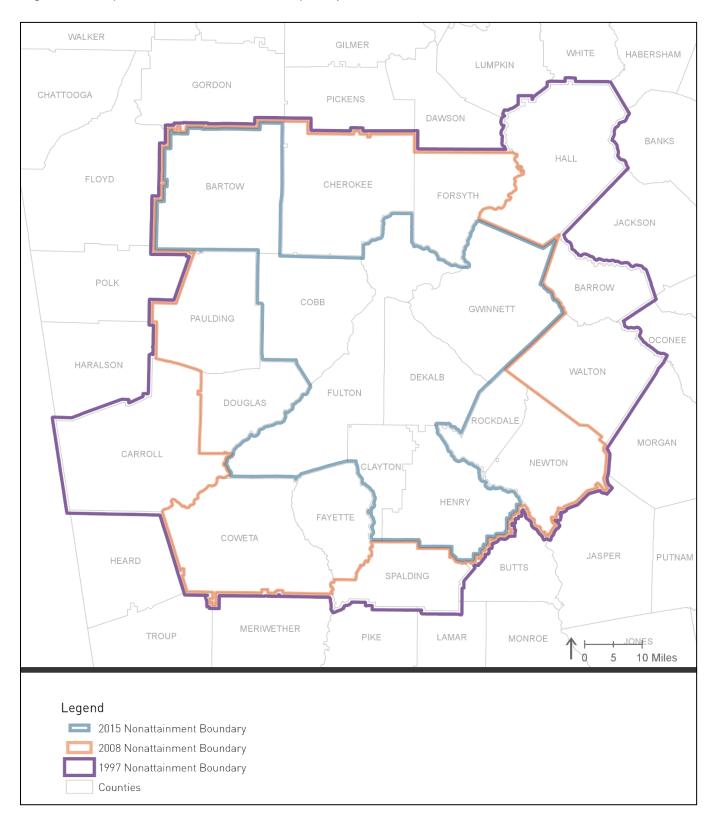
On May 3, 2016 EPA ruled on a clean data determination for the 2008 ozone standard effective August 15, 2016. This determination indicated that the Atlanta region met the 2008 ozone standard for the three summers from 2013-2015. One day later, on May 4, 2016 the region was reclassified from a marginal to a moderate nonattainment area for failure to meet the ozone standard before July 20, 2015.

On July 18, 2016, GA EPD submitted a Maintenance Plan to USEPA. This document shows the state's plan for continuing to attain the 2008 ozone standard into the future. Effective June 2, 2017, EPA approved the State's plan and the associated Motor Vehicle Emissions Budgets (MVEBs). This action redesignated the Atlanta region as a maintenance area.

#### 2015 STANDARD

Effective May 8, 2018, the 2015 8-hr. ozone standard was set at 0.070 ppm. Effective August 3, 2018, seven counties in the Atlanta region were classified as a marginal nonattainment area under the standard: Bartow, Clayton, Cobb, DeKalb, Fulton, Gwinnett, and Henry counties (see Figure 1). The goal attainment date is set for August 3, 2021. Amendment #6 to TARP RTP (2016) met the first requirement for the seven-county region to demonstrate conformity to the 2015 standard.

Figure 1: Map of the current ARC air quality boundaries



### RECENT CONFORMITY DETERMINATIONS

Since the adoption of the ARC's last RTP in 2016 there have been several positive conformity determinations by USDOT and USEPA. Amendments were the result of project funding changes, programming of new projects with air quality implications, and/or rebalancing of funds. A schedule of the conformity determinations associated with TARP RTP (2016) is provided in Table 1.

Table 1: Recent Conformity Determinations

Date	RTP/TIP	NAAQS
March 16, 2016	TARP RTP (2016) / FY 2016-2019	1. 2008 8-hr. Ozone
	TIP	2. 1997 Annual PM <sub>2.5</sub>
June 7, 2016	TARP RTP (2016) / FY 2016-2021	1. 2008 8-hr. Ozone
	TIP Amendment #1	2. 1997 Annual PM <sub>2.5</sub>
March 1, 2017	TARP RTP (2016) / FY 2016-2021	1. 2008 8-hr. Ozone
	TIP Amendment #2	2. 1997 Annual PM <sub>2.5</sub>
September 15, 2017	TARP RTP (2016) / FY 2018-2023	2008 8-hr. Ozone
	TIP Amendment #3	
March 21, 2018	TARP RTP (2016) / FY 2018-2023	2008 8-hr. Ozone
	TIP Amendment #4	
June 26, 2018	TARP RTP (2016) / FY 2018-2023	1. 2008 8-hr. Ozone
	TIP Amendment #5	2. 1997 8-hr. Ozone
November 19, 2018	TARP RTP (2016) / FY 2018-2023	2008 8-hr. Ozone
	TIP Amendment #6	
May 14, 2019	TARP RTP (2016) / FY 2018-2023	2008 8-hr. Ozone
	TIP Amendment #7	

## STATEMENT OF CONFORMITY

The purpose of this CDR, is to document compliance with the relevant elements of the Clean Air Act (Subsections 176(c) (1) (2) and (3)), the Transportation Conformity Rule (40 CFR Parts 51 and 93) and Metropolitan Planning Regulations (23 CFR Part 450) by demonstrating that TARP RTP (2020) (including the FY 2020-2025 TIP), Bartow on the Move, and the GHMPO RTP conform to the purpose of the SIP for the 8-hr. ozone standards. ARC has conducted the conformity determination for the ozone nonattainment areas, encompassing all three MPOs and parts of the state outside the boundary of the MPOs.

An updated transportation conformity analysis is required under the 8-hr. ozone standards for the three RTPs and TIPs as a result of numerous changes to regionally significant projects. ARC is updating its RTP/TIP as part of The Atlanta Region's Plan. There are numerous changes to non-exempt projects. CBMPO and GHMPO are also updating their long-range plans which contain numerous changes to non-exempt projects.

The conclusion of the conformity analyses, documented below, indicates that the ARC, CBMPO, and GHPMO RTPs and TIPs support the broad intentions of the Clean Air Act for achieving and maintaining the NAAQS for ozone as outlined in the Atlanta area SIPs.

### STATEMENT OF CONFORMITY FOR THE 8-HR. OZONE STANDARD

For the 8-hr. ozone conformity analysis the MVEB Test is required to demonstrate conformity. The latest approved MVEBs applicable to conformity under the 8-hr. ozone standard were established by GA EPD as part of Georgia's 2008 Ozone Maintenance SIP.

On January 23, 2018 the interagency consultation group determined that per §93.109(c)(2)(ii)(B) of the Transportation Conformity Rule it would be acceptable for the 2015 7-county 8-hr. ozone nonattainment area to demonstrate conformity through the 15-county modeling methodology developed for the 2008 standard. Any additional emission credits needed in the future to pass conformity tests, however, must come from the 7-county portion of the region. Therefore, all models and budgets established for the previous 15-county 8-hr. ozone nonattainment area were carried over for the analyses conducted in this CDR.

Ozone is not emitted directly by any source; it is formed when Oxides of Nitrogen (NOx) and Volatile Organic Compounds (VOCs) combine in the atmosphere in the presence of sunlight. Therefore, air pollution control strategies are aimed at controlling NOx and VOC. Budgets are established for these two pollutants instead of ozone directly. The transportation conformity analysis for the 15-county 8-hr. ozone nonattainment area was performed with the MVEB Test using the two sets of approved budgets outlined in Table 2.

Table 2: Approved MVEBs

Establishing SIP	Effective Date	Years Applied To	MVEBs
Georgia's 2008 Ozone	June 2, 2017	All conformity years	N0x: 170.15 tons/day
Maintenance SIP		prior to 2030	VOC: 81.76 tons/day
Georgia's 2008 Ozone	June 2, 2017	All conformity years	NOx: 58 tons/day
Maintenance SIP		2030 and later	VOC: 52 tons/day

The results of the emissions analysis for TARP RTP (2020), the CBMPO RTP, and the GHMPO RTP demonstrate adherence to the established MVEBs. The conformity analysis was performed for the years 2020, 2030, 2040, and 2050. The analysis years meet the requirements for specific horizon years that the transportation plan must reflect as specified in 93.106(a)(1) of the Transportation Conformity Rule and specific analysis years that the regional emissions analysis must reflect per Section 93.118(b) and 93.118(d)(2). The attainment deadline year for the 2015 8-hr. ozone standard is 2021, however attainment must be demonstrated using data from the previous ozone season ending in 2020. Therefore, only horizon year 2020 is modeled, and not the actual attainment deadline year of 2021.

The ARC's FY 2020-2025 TIP is a direct subset of TARP RTP (2020) (as are the TIPs associated with the CBMPO and GHMPO RTPs). The conformity determination for the FY 2020-2025 TIP includes the same set of projects; defined by their design concept, design scope and analysis years, as TARP RTP (2020). The RTP and TIP are financially constrained consistent per 23 CFR Part 450 Subpart C (i.e., cost feasible). The funding source for construction and operation, if applicable, of all projects is identified and presented in Appendix A to TARP RTP (2020), and in RTP documentation associated with the CBMPO RTP and the GHMPO RTP. The FY 2020-2025 TIP also meets all other planning requirements including:

- Each program year of the FY 2020-2025 TIP is consistent with the federal funding that is reasonably expected for that year.
- Required state and local matching funds, and funds for projects funded entirely by state and/or local money, are consistent with the revenue sources expected over the same period.
- The FY 2020-2025 TIP is consistent with the conforming long-range plan such that the regional emissions analysis performed for the long-range plan directly applies to the TIP.
- The FY 2020-2025 TIP contains all projects which must be started in the TIP time frame to implement the highway and transit system envisioned by the long-range plan in each of its horizon years.
- All FY 2020-2025 TIP projects that are regionally significant are part of the specific highway or transit system envisioned in the long-range plan's horizon years.
- The design concept and scope of each regionally significant project identified in the FY 2020-2025 TIP are consistent with TARP RTP (2020).

Upon completion of the technical conformity analysis, ARC staff have determined that TARP RTP (2020), CBMPO's RTP, and the GHMPO's RTP, along with associated TIPs, together demonstrate compliance with the Clean Air Act as amended in 1990 in accordance with all conformity requirements as detailed in 40 CFR Parts 51 and 93 (the Transportation Conformity Rule) and 23 CFR Part 450 (the Metropolitan Planning Regulations as established in the FAST Act).

# INTERAGENCY CONSULTATION

Section 93.105 of the Transportation Conformity Rule requires procedures be established for interagency consultation related to the development of the transportation plan and program and associated conformity determination. The interagency group meets on a routine basis to address transportation and air quality issues. See Exhibit 3 for the approved meeting minutes of the Interagency Consultation Group (IAC). The IAC is comprised of the following groups:

- The MPOs: ARC, CBMPO, and GHMPO
- Georgia Department of Transportation (GDOT)
- Metropolitan Atlanta Rapid Transit Authority (MARTA)
- GA EPD
- Federal Highway Administration (FHWA)
- Federal Transit Authority (FTA)
- USEPA
- Local transit providers: Cobb, Douglas and Gwinnett Counties
- Georgia Regional Transportation Agency (GRTA)

### INTRODUCTION

ARC, CBMPO, and GHMPO coordinated activities for this conformity analysis with the IAC, and provided regular briefings to ARC's, CBMPO's, and GHMPO's transportation technical and policy committees. CBMPO and GHMPO provided ARC staff with project details for travel demand model network coding in October 2019. Draft TARP RTP (2020) documents were provided to CBMPO and GHMPO planning partners through the IAC in November 2019 to allow for time to comment prior to the scheduled February 2020 final adoption of the plan.

It is anticipated that draft TARP RTP (2020) documents will be made available to ARC planning partners through the TCC and the Transportation and Air Quality Committee (TAQC) in January 2020, to allow for time to comment prior to formal adoption, in accordance with 93.105(b)(2)(iii) of the Transportation Conformity Rule. Final TARP RTP (2020) documents are anticipated to be provided after February 2020, upon approval of the update, fulfilling the requirement of 40 CFR 93.105(c)(7).

ARC, CBMPO, and GHMPO respond to any concern expressed by the state, local jurisdictions, or the general public during the development of the RTP and TIP. Such concerns and ARC's, CBMPO's, and GHMPO's responses are documented in the Public Comment Report included in the final TARP RTP (2020) document set.

### TRANSPORTATION CONFORMITY RULE REQUIREMENTS

The following sections summarize the applicable requirements of Section 93.105 of the Transportation Conformity Rule and how the requirements have been met.

### EMISSIONS ANALYSIS - MODEL AND ASSUMPTIONS

Section 93.105(c)(1)(i) of the Transportation Conformity Rule requires that the IAC be provided the opportunity for evaluating and choosing a model and associated methods and assumptions to be used in the regional emissions analysis needed to demonstrate conformity.

A detailed listing of the procedures and planning assumptions used for the conformity analysis is outlined in Exhibit 1. This document was submitted to the IAC in accordance with Section 93.105(c)(1)(i) of the Transportation Conformity Rule. The document includes assumptions for the 8-hr. ozone emissions analyses. The IAC's approval of these assumptions was granted on August 28, 2019.

ARC has consulted with the IAC as to the required version of USEPA's mobile source emission model for the conformity analysis, MOVES2014a<sup>3</sup>. ARC worked in consultation with the GA EPD to develop necessary MOVES2014a input files that specify all federally mandated and regional motor vehicle emission control programs.

### REGIONALLY SIGNIFICANT PROJECTS

A regionally significant project is a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs. Regionally significant projects include those that provide access to and from the area outside the region, provide connections to key places inside the region (such as major activity centers, major planned developments, sports complexes, etc.), and transportation terminals. Modifications to roadways or transit projects that would normally be included in the modeling of a metropolitan area's transportation network are also considered regionally significant, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel. Projects that are regionally significant, regardless of funding source, must be included in the regional emissions analysis in accordance with Section 93.122(a)(1) of the Transportation Conformity Rule.

Section 93.105(c)(1)(ii) of the Transportation Conformity Rule requires an interagency consultation process for determining which minor arterials and other transportation projects (i.e., those projects that are not classified as principal arterials or above) should be considered regionally significant for the purposes of regional emissions analysis. As agreed to by the IAC,

<sup>&</sup>lt;sup>3</sup> While MOVES2014b is the most up-to-date version of the MOVES model, the difference between version 2014a and 2014b only concerns updates to non-mobile sources. Therefore, the technical analysis for this conformity determination can be completed using the version 2014a.

ARC's policy is that all regional facilities that are functionally classified as minor arterial or above must be included in the travel demand model and regional emissions analysis. The project listing located in the appendix of the TARP RTP (2020) contains descriptions of any proposed regionally significant additions or modifications to the transportation system that are expected to be operational in each horizon year within the 8-hr. ozone nonattainment areas.

For those regionally significant additions or modifications that fall within ARC's 21-county travel modeling domain, projects are identified and described in the following level of detail:

- ARC's highway network identifies intersections with existing regionally significant facilities.
- The effect of such additions or modifications on route options between transportation analysis zones is defined.
- Highway segments identify the design concept and scope sufficiently to model travel time under various traffic volumes, consistent with ARC's modeling method.
- Transit facilities, equipment, and services proposed for the future are defined in terms of design concept, scope, and operating policies sufficient to model transit ridership.
- Sufficient description of the transportation network shows a reasonable relationship between forecasted land use and the future transportation system.

#### IDENTIFICATION OF EXEMPT PROJECTS

Section 93.105(c)(1)(iii) of the Transportation Conformity Rule provides for an evaluation of whether or not projects otherwise exempt per Sections 93.126 and 93.127, should be treated as non-exempt in cases where projects may have adverse impact on emissions. Exempt projects are those considered to be neutral with respect to their impact on air quality or are air-quality beneficial.

A draft listing of the proposed projects in the RTPs and TIPs, including their exempt status, was provided to interagency members on November 4, 2019, allowing time for the interagency consultation group to review and provide comment as needed prior to Board adoption and USDOT approval of the final RTPs and TIPs. All procedures used in the analysis and identification of these projects were done in accordance with Section 93.105 and provided for evaluation of any nonexempt project which may have been perceived to have an adverse impact on mobile source emissions.

### TRANSPORTATION CONTROL MEASURES

Transportation Control Measures (TCM) are physical improvements and travel demand management strategies that reduce vehicle-related emissions. A SIP TCM is any TCM that is specifically identified and committed to in an approved SIP for the purpose of reducing emissions of air pollutants from transportation sources by improving traffic flow, reducing congestion or reducing vehicle use. Section 93.105(c)(1)(iv) of the Transportation Conformity

Rule provides for interagency consultation regarding timely implementation of TCMs included in the SIP. The Transportation Conformity Rule specifically requires the following:

- Assurance that the transportation program does not contradict any TCM commitment in the SIP,
- Assurance that the transportation program provides for the expeditious implementation of TCMs, and
- Assurance that the status of each TCM is included with each TIP submission until TCMs are fully implemented.

TCM strategies reflected in any of the 8-hr. ozone SIPs fall in one of the five categories listed below. Refer to Exhibit 2 for a full listing of TCMs for the Atlanta region that are included in any of the ozone SIPs for Georgia. Currently, all TCMs have been implemented in the region:

<u>Transit</u> – This TCM is intended to promote alternatives to SOV travel by expanding public transit. Activities encompass expansion of transit service, operation improvements, express bus services, and signal preemption. There is also a program to convert existing diesel fuel buses to clean fuel.

<u>Traffic Flow Improvements</u> – This TCM comprises improved signalization, intersection improvements, incident management, HOV lanes and motorist information systems designed to improve traffic flow in the region.

<u>Shared Ride/Demand Management</u> – This TCM is intended to promote alternatives to SOV travel by encouraging carpooling/vanpooling, by providing commute options to employers, and by educating employers and commuters of the benefits of HOV travel. The TCM also includes a region-wide park-and-ride program designed to facilitate transfers to other modes as well as to serve bus or rail transit.

<u>Brownfield Redevelopment</u> – This SIP TCM strategy is comprised solely of the redevelopment of a 138 acre brownfield site previously owned by Atlantic Steel near Atlanta's central business district into a mixed-use residential and business activity center. The site supports 15 million square feet of retail, residential and office space, as well as 11 acres of public parks.

<u>Alternative Fuel and Other</u> – Clean fuel vehicles are included under this strategy.

### **EVALUATION OF CONFORMITY TRIGGERS**

Triggers for an RTP and TIP conformity determination are established in Section 93.104(e) of the Transportation Conformity Rule. Triggers can include actions that establish new MVEBs for conformity, or that add, delete, or change TCMs, leading to the development of a new transportation plan and TIP conformity determination. The IAC discuss conformity triggers on an as-needed basis. A conformity determination is required within two years of the effective date of the following triggers:

- USEPA's finding that the MVEBs in a submitted SIP are adequate,
- USEPA's approval of a SIP, if the budget(s) from that SIP have not yet been used in a CDR.
- USEPA's promulgation of an implementation plan which establishes or revises a budget, and/or
- USEPA's approval of a SIP, or promulgation of a Federal Implementation Plan, that adds, deletes, or changes a TCM.

### MPO NOTIFICATION OF NON-FEDERAL REGIONALLY SIGNIFICANT PROJECTS

Per Section 93.105(c)(4) of the Transportation Conformity Rule, the interagency consultation process must establish a mechanism to ensure that recipients of USDOT funds notify the MPO of any plans for construction of regionally significant non-federal projects. Regionally significant non-federal projects are those regionally significant projects that do not require federal funding or approval. In addition, the following requirements must be met:

- Notification of a planned project to the MPO is required even if the project sponsor has not made a final decision on project construction.
- Inclusion in the MPO transportation model and the regional emissions analysis is required of all known regionally significant non-federal projects.
- MPOs must respond in writing to any comments regarding regionally significant non-federal projects not adequately being accounted for in the regional emissions analysis.

All of the requirements for interagency consultation during the conformity process have been met.

# PUBLIC INVOLVEMENT

The official public comment period for TARP RTP (2020) and the associated FY 2020-2025 TIP is on-going from November 11, 2019 through December 13, 2019. This section will be updated after public comment closes.

## FISCAL CONSTRAINT

The RTP is required by law to be fiscally constrained, meaning that there will be enough revenue to cover the expected spending over the life of the plan. Revenue sources include federal funds from the US Department of Transportation, state funds collected from the motor fuel tax and other fees, local funds collected primarily from sales taxes, transit fares, private sector property tax assessments, and other sources.

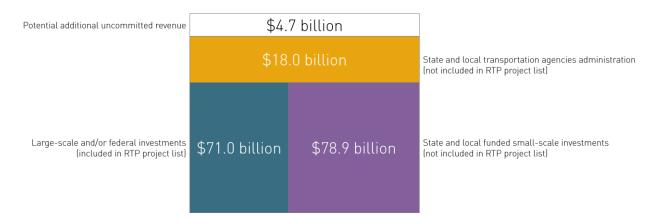
An RTP is considered financially constrained if projected project costs do not exceed projected revenues that are reasonably expected to be available during the time frame of the plan. Major transportation projects can move forward only if they are included in a plan which meets all federal planning process requirements, including a demonstration that fiscal constraint has been achieved.

The RTP's financial assumptions and forecasts are developed in consultation with ARC's Financial Planning Team. Composed of representatives of federal and state agencies, public transit operators, and other stakeholders, the Financial Planning Team reviews major assumptions regarding the levels of future revenues and cost estimation methodologies. The plan's financial forecasts reflect this partnership.

In order to compare the value of revenues and expenses over the 30-year horizon of the plan, the RTP uses a convention called "year of expenditure" (YOE) to express amounts. YOE means that the dollar value shown includes inflation between now and the year that the project is implemented. The average annual inflation rate assumed for this plan is 2.2%. Global economic trends over the past decade, as well as federal monetary policy, indicate a strong likelihood that inflationary pressure will remain weak, but stable. The relatively low, but stable inflation rate will increase the likelihood that project costs for projects planned in the outer years of the plan will remain within a reasonable range assumed for plan balancing purposes.

The maximum amount of revenue from all sources which will be available for transportation services, projects and programs through 2050 will be approximately \$172.6 billion. Specific investments totaling \$71.0 billion have been identified and reflected in the RTP project list (Appendix A, with YOE calculations presented in Appendix D), while another \$78.9 billion remains available for commitment to future projects yet to be identified. The overwhelming majority of these future investments are small scale maintenance and modernization projects being advanced by GDOT and local governments and do not have to be individually listed in the RTP. In addition to expenditures on projects, an additional \$18 billion of the revenue generated at the state and local levels will be required to staff and operate the various agencies and departments charged with implementing projects. About \$4.7 billion of available revenue remains uncommitted and could be dedicated to additional projects in future RTP updates.

Figure 2: Breakdown of TARP RTP (2020) investments through 2050



Because the upper estimate of \$172.6 billion of revenue exceeds the combined \$167.9 billion of expenditures for currently identified projects (\$71.0 billion), future small scale investments (\$78.9 billion) and agency administrative expenses (\$18 billion), the plan is fiscally constrained.

Fiscal constraint for regionally significant projects must be demonstrated for all levels of funding, including federal, state and local sources. But the analysis is most rigorous for federal sources. Tables 3 and 4 demonstrate that revenue projections exceed commitments to RTP projects for all FHWA and FTA programs.

Collectively, the plan commits \$40.7 billion of the \$45.2 billion forecasted revenue to regionally significant projects. This results in a funding contribution of \$30.3 billion being required from state and local sources to fully implement the \$71.0 billion of regionally significant projects identified in the TARP RTP (2020) Appendix A. Non-federal revenues available for transportation purposes will exceed \$125 billion through 2050, meaning state and local funding streams are adequate to deliver all projects identified in the plan.

A more detailed discussion of financial constraint for TARP RTP (2020), including revenue and cost assumptions, is available in the TARP RTP (2020) Finances chapter. Detailed tables demonstrating how federal, state and local revenue forecasts were derived are provided in TARP RTP (2020) Appendices E, F and G, respectively.

Table 3: FY 2020-2025 Yearly TIP Balances – Federal Highway Administration Funds (\$YOE)

					2024	2025 See				
FHWA Program (See Note 4)	2020	2021	2022	2023	See Note 2	Note 2	LR 2026-2030	LR 2031-2040	LR 2041-2050	Total
	\$33,026,792	\$29,000,000	\$29,000,000	\$29,000,000	\$28,400,000	\$28,400,000	0\$	0\$	\$0	\$176,826,792
'AP - Urban (>200K) (ARC)	\$12,904,254	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	0\$	0\$	\$0	\$47,904,254
AP - Statewide (Recreational Trails Program)	\$466,400	\$466,400	\$466,400	\$466,400	\$466,400	\$466,400	0\$	0\$	\$0	\$2,798,400
Highway Safety Improvement Program (HSIP)	\$37,288,000	\$37,288,000	\$37,288,000	\$37,288,000	\$37,288,000	\$37,288,000	0\$	0\$	\$0	\$223,728,000
Railway Highway Hazard Elimination Setaside	\$1,864,800	\$1,864,800	\$1,864,800	\$1,864,800	\$1,864,800	\$1,864,800	0\$	0\$	\$0	\$11,188,800
Railway Highway Protective Devices Setaside	\$1,491,200	\$1,491,200	\$1,491,200	\$1,491,200	\$1,491,200	\$1,491,200	0\$	0\$	\$0	\$8,947,200
National Highway Freight Program (NHFP)	\$40,323,538	\$40,726,733	\$18,359,670	\$	0\$	\$	0\$	0\$	\$0	\$99,409,941
National Highway Performance Program (NHPP)	\$232,171,032	\$224,643,574	\$329,162,193	\$396,774,155	\$419,672,702	\$342,544,800	0\$	0\$	\$0	\$1,944,968,456
STBG - Statewide Flexible (GDOT)	\$116,318,386	\$94,961,610	\$101,722,064	\$106,542,728	\$101,700,000	\$107,989,600	0\$	0\$	\$0	\$629,234,388
Off-System Bridge Setaside	\$10,711,229	\$13,188,000	\$9,695,200	\$17,863,200	\$16,800,000	\$22,640,000	0\$	0\$	0\$	\$90,897,629
Enhancements Setaside	\$7,084,800	\$8,154,800	\$7,084,800	\$7,084,800	\$2,880,000	\$2,880,000	0\$	0\$	\$0	\$35,169,200
STBG - Urban (>200K) (ARC)	\$92,967,972	\$82,252,523	\$83,075,049	\$75,625,357	\$90,000,000	\$90,000,000	0\$	0\$	\$0	\$513,920,901
Highway Infrastructure	\$2,400,000	\$4,320,000	0\$	\$	0\$	\$	0\$	0\$	\$0	\$6,720,000
General Federal Aid 2024-2040 (Non-MMIP Only)	\$0	\$0	\$0	0\$	\$0	\$0	\$4,862,596,218	\$11,082,618,221	\$12,567,377,594	\$28,512,592,033
	200 000	000		000 000		000 801	000 000 000	200 000 000	207	200 100 200 004
	\$589,018,403	\$545,357,640	\$626,209,376	\$681,000,640	\$707,563,102	\$642,564,800	\$4,862,596,218	\$11,082,618,221	\$12,567,377,594	\$32,304,305,994
	\$589,018,403	\$1,134,376,043	\$1,760,585,419	\$2,441,586,059	\$3,149,149,161	\$3,791,713,961	\$8,654,310,179	\$19,736,928,400	\$32,304,305,994	\$32,304,305,994
ESTIMATED AGGREGATE REVENIIF (FROM TARIF E4)										
Estimated FHW A Revenue See Note 1	\$777,549,022	\$823,158,448	\$866,639,244	\$881,376,201	\$903,718,832	\$926,580,042	\$4,882,702,950	\$11,393,060,560	\$13,487,192,695	\$34,941,977,994
Running Total Revenue	\$777.549.022	\$1,600,707,470	\$2,467,346,714	\$3,348,722,915	\$4,252,441,747	\$5,179,021,789	\$10,061,724,739	\$21,454,785,299	\$34,941,977,994	\$34,941,977,994

ESTIMATED AGGREGATE COST OF PROGRAMMED PROJECTS

(1) Note that all revenue estimates are based on assumptions about the average share of statewide revenues which will be directed to programs and projects in the Atlanta region. Actual amounts in any given year will fluctuate from these averages, as evidenced by the cost of projects programmed within the TIP period. GDOT has reviewed all TIP project commitments and confirms that financial resources are available to ensure no shortfall actually occurs within any individual fiscal year. Over the four year federally required TIP period (FY 2020-2023), the program is balanced and is less than revenue estimates. NET REVENUES MINUS COSTS Running Total Balance (YOE)

(2) Fiscal years 2024 and 2025 are not considered to be part of the federally required four year TIP. For financial constraint purposes, project costs and revenue estimates are presented for information purposes only.

(4) Italiaced programs denote those which are funded from setasides established by GDOT at the statewide level. The amounts shown are in addition to commitments made from the original source program as listed above the setaside line items.

Table 4: FY 2020-2025 Yearly TIP Balances - Federal Transit Administration (\$Y0E)

i					2024	2025				
FTA Program	2020	2021	2022	2023	See Note 2	See Note 2	LR 2026-2030	LR 2031-2040	LR 2041-2050	Total
Bus - New (80/20)	\$1,550,000	\$1,550,000	\$1,550,000	\$1,550,000	\$1,550,000	\$1,550,000	\$9,224,050	\$21,483,000	\$26,704,950	\$66,712,000
Bus and Bus Facilities Program	\$5,415,512	\$4,541,343	\$4,541,343	\$4,541,343	\$4,541,343	\$4,541,343	\$25,377,025	\$66, 719, 704	\$76,668,896	\$196,887,852
lean Fuels Formula Program	\$3,700,000	\$3,700,000	\$3,700,000	\$3,700,000	\$3,700,000	\$3,700,000	\$22,018,700	\$51,282,000	\$63,747,300	\$159,248,000
Enhanced Mobility of Seniors and Individuals with										
Disabilities	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$6,705,600	\$14, 782, 800	\$16,987,200	\$45,675,600
New Starts	0\$	0\$	0\$	0\$	0\$	0\$	\$406,155,750	\$1,329,659,100	\$1,835,481,178	\$3,571,296,028
State of Good Repair Grants	\$48,591,797	\$48,591,797	\$48,591,797	\$48,591,797	\$48,591,797	\$48,591,797	\$271,562,679	\$598,666,443	\$687,939,132	\$1,849,719,036
ransit Nonurbanized Area Formula	\$760,000	\$760,000	\$760,000	\$760,000	\$760,000	\$760,000	\$42,468,800	\$9,362,440	\$10,758,560	\$67,149,800
ransit Urbanized Area Formula Program	\$61,736,800	\$61,736,800	\$61,736,800	\$61,736,800	\$61,736,800	\$61,736,800	\$344,985,238	\$800,735,000	\$920,140,000	\$2,436,281,038
Fotal Project Costs	\$122,954,109	\$122,079,940	\$122,079,940	\$122,079,940	\$122,079,940	\$122,079,940	\$1,128,497,842	\$2,892,690,487	\$3,638,427,216	\$8,392,969,354
Running Total Cost	\$122,954,109	\$245,034,049	\$367,113,989	\$489,193,929	\$611,273,869	\$733,353,809	\$1,861,851,651	\$4,754,542,138	\$8,392,969,354	\$8,392,969,354
ESTIMATED AGGREGATE REVENUE (FROM TABLES E6 AND E7)	:S E6 AND E7)									
stimated FTA Formula Funds Revenue See Note 1	\$137,289,396	\$139,211,447	\$141,160,408	\$143,136,653	\$145,140,567	\$147,172,534	\$767,351,913	\$1,704,399,954	\$1,958,623,963	\$5,283,486,835
stimated FTA New Starts Revenue	0\$	0\$	0\$	\$0	0\$	0\$	\$653,478,260	\$2,178,260,870	\$2,178,260,870	\$5,010,000,000
Sunning Total Revenue	\$137,289,396	\$276,500,843	\$417,661,251	\$560,797,904	\$705,938,471	\$853,111,005	\$2,273,941,178	\$6,156,602,002	\$10,293,486,835	\$10,293,486,835

ESTIMATED FORMULA FUNDING ALLOCATIONS AND AGGREGATE COST OF PROGRAMMED PROJECTS

NET REVENUES MINUS COSTS Running Total Balance (YOE)

(1) Project and program expenditures by transit agency recipients are estimates based on historical spending levels and previously encumbered commitments. Line items will be adjusted periodically via future amendment processes to match

(2) Fiscal years 2024 and 2025 are not considered to be part of the federally required four year TIP. For financial constraint purposes, project costs and revenue estimates are presented for information purposes only. actual allocation amounts each year. Over the four year federally required TIP period (FY 2018-2021), the program is balanced.

(3) Initial years of the TIP period may reflect carryover balances from previous years which were not obligated in grants during the year of apportionment. Refer to Appendix C of the RTP documentation for more information on how carryover balances are managed.

# LATEST PLANNING ASSUMPTIONS

### **OVERVIEW**

Section 93.110 of the Transportation Conformity Rule (Criteria and Procedures: Latest Planning Assumptions), defines the requirements for the most recent planning assumptions that must be in place at the initiation of the conformity determination process. The planning assumptions relate to the socioeconomic forecasts, transit operating policies, and the transit and toll fare policies that impact the travel demand modeling process. A January 18, 2001 (revised in December 2008), memorandum from USEPA entitled "Use of Latest Planning Assumptions in Conformity Determinations," states that "areas are strongly encouraged to review and strive towards regular 5-year updates of planning assumptions, especially population, employment, and vehicle registration assumptions." ARC completes frequent, recurrent updates of planning assumptions used in the travel demand and emissions modeling process. ARC continuously reviews the travel demand model and regional emissions model as well as all assumptions and data used in model validation through the interagency consultation process. Newer assumptions and data are incorporated as appropriate.

ARC updates planning assumptions including (but not limited to) population, employment, socioeconomic variables, and vehicle miles traveled (VMT) on a recurring basis. A detailed listing of the planning assumptions for this conformity analysis is outlined in Exhibit 1 –of Planning Assumptions and Modeling Inputs. This document was submitted to the interagency consultation group in accordance with Section 93.105(c)(1)(i) of the Transportation Conformity Rule which requires interagency review of the model(s) and associated methods and assumptions used in the regional emissions analysis. Final interagency approval was granted on August 27, 2019.

Since the adoption of the last regional plan, TARP RTP (2016), ARC has updated its activity-based model. The model structure is significantly different and these changes impact the emissions calculated. Exhibit 1 includes updated data on model calibration and validation. The current activity-based model is calibrated to the year 2015 and is validated to current conditions and traffic volumes.

### SOCIOECONOMIC FORECASTS

Per Section 93.110(b) of the Transportation Conformity Rule, the RTP must quantify and document the demographic and employment factors which influence the expected travel demand, including land use forecasts.

In addition to the structural changes listed above, travel demand model enhancements include updated population and employment estimates. For TARP RTP (2020) and the FY 2020-2025 TIP, ARC produced forecasts of population, households by income, auto ownership and number of workers and employment by industry and land use type for the entire 21-county region (which

includes the nonattainment portions of GHMPO and CBMPO). ARC produces forecasts through a process briefly outlined below, and in more detail in Exhibit 1.

ARC staff was assisted in the development of these regional forecasts by a Technical Advisory Committee (TAC) of nationally known, local experts on the Atlanta regional economy. The committee met three times in the summer and fall of 2018. TAC members advised staff on land use model calibration, policy variable development, and related iterative revisions to model runs. The TAC then recommended the final regional control total forecasts for use in the ARC's plans, including Hall and Bartow counties. Interagency consultation partners agreed on these population forecasts on August 27, 2019.

The Traffic Analysis Zone Disaggregator model was used in modeling to disaggregate the regional controls to small areas. This model runs annually and iteratively. The process is integrated with the ARC travel demand model, as impedances (travel costs) from the travel demand model are a significant influence layer for spatial allocation of population and job growth. A more detailed explanation of the techniques used to draft population and employment estimates is outlined in Exhibit 1.

### TOLLS AND MANAGED LANES

The first optional toll facility in the region, the I-85 Express Lanes, opened in 2011. The I-75 South Metro Express Lanes, the Northwest Corridor Express Lanes, and the I-85 Express Lanes Extension opened throughout 2017 and 2018. Additional future managed lane facilities as part of GDOT's Major Mobility Investment Program (MMIP) include I-285 Eastside, I-285 Top End, I-285 Westside, SR 400 as well as the I-75 South Commercial Vehicle Lanes. Additional long-range managed lanes projects include I-20 East, I-20 West, and the I-75 Gap between the HOV system and the I-75 South Metro Express Lanes. These projects are all planned to be open by 2040.

One advantage of the activity-based model over the trip-based model is its significantly improved sensitivity to highway pricing. Joint travel was specifically introduced to enhance modeling of HOV/HOT facilities. There are 15 trip modes for assignment in the activity-based model, including auto by occupancy and toll/non-toll choice, walk and bike modes as well as walk and drive to transit modes. Assignments are multi-class and include the following classes:

- SOV (non-toll)
- HOV 2 (non-toll)
- HOV 3+ (non-toll)
- SOV (toll eligible)
- HOV 2 (toll eligible)
- HOV 3+ (toll eligible)
- Commercial vehicle
- Medium duty truck

Heavy duty truck: I-285 by-passHeavy duty truck: remaining

### TRANSIT OPERATING PROCEDURES

The conformity determination for each transportation plan and program must discuss how transit operating policies (including fares and service levels) and assumed transit ridership has changed since the previous conformity determination per Section 93.110(c). A detailed listing of the procedures and planning assumptions, including transit modeling assumptions, for the conformity analysis of TARP RTP (2020)/GHMPO RTP/CBMPO RTP is outlined in Exhibit 1.

For a more detailed listing of transit fares by transit provider, please see the Model Documentation of the TARP RTP (2020) documentation set. Provided below is a summary of the major transit modeling components.

#### ON-BOARD TRANSIT SURVEY EXPANSION

ARC is currently conducting a regional transit on-board survey to get a better understanding of transit rider travel behavior. The survey will be used to make important updates to the mode choice model that will be included in the modeling associated with the next RTP update.

### ZERO-CAR HOUSEHOLD DISTRIBUTION

Given that the 2009-2010 regional transit on-board survey indicated that approximately 40% of transit ridership in the Atlanta region originates in households with no automobiles, the location of those households is extremely important when estimating transit ridership. The ARC activity-based model auto ownership model is estimated with both the travel survey results and American Community Survey data. These data allow staff to develop distributions of households by number of workers and vehicles owned. The resulting output is calibrated in order to ensure that the right number of zero-car households by number of workers is generated and distributed correctly in the region. The generation and placement of zero-car households impacts the total transit tours being generated by the model.

### **FARE CHANGES**

Assumptions about transit fares for the existing and planned regional transit system were made and coded in the regional travel demand model. Transit fares are used as supplied by the regional transit operators and remain constant over time, throughout the life of the plan, across all network years. The fares reflect current operating plans, as provided to ARC by the various transit operators throughout the region. The transit fare structure involves different fares by transit systems coded as a distinct operators along with each mode. Transfer amounts are also factored in when transferring between operators. Fares are in 2010 dollars CPI adjusted from what they were in 2015, except for the Atlanta Streetcar which began charging a fare in 2016.

### SERVICE LEVEL CHANGES

At the time of the model development for the Atlanta Region's Plan (2020), eight transit agencies provided fixed route service in the Atlanta nonattainment and maintenance areas: Cherokee Area Transportation System (CATS), CobbLinc, Connect Douglas, Gwinnett County Transit (GCT), Hall County Transit (HAT), Henry County Transit (HCT), Metropolitan Atlanta Rapid Transit Authority (MARTA), and Xpress bus service through the State Road and Tollway Authority (SRTA). MARTA was the sole provider of heavy rail service as well as the ownership of the Atlanta Streetcar as of June 2018. Express bus service was provided by CobbLinc, GCT, MARTA, and SRTA. Local bus service was provided by all regional transit providers except SRTA.

Since the adoption of TARP RTP (2016), transit service in the region has seen major change. From 2016 through 2019, MARTA significantly updated their bus system after undergoing very few changes in the early part of the decade. As a result of Clayton County joining MARTA after voters approved a November 2014 referendum, MARTA added seven new routes and an extended two other routes into the county. As a result of More MARTA, which was passed by the city of Atlanta voters in November 2016, new routes and improved service were added in the City of Atlanta.

The other transit operators in the region also updated their operations as necessary over the past couple of years. In February 2016, Cobb rebranded their transit system as CobbLinc. The same year, CobbLinc added a local route connecting the Cumberland and Mableton areas. In 2017, CobbLinc began circulator service in the Cumberland area, which became free in 2018. In 2019, a limited stop route began connecting Kennesaw, Marietta, and Cumberland with Atlanta. Other express routes and local routes were also modified as recommended from the CobbLinc Forward study. In 2017, GCT added an express route from Gwinnett to Emory and began a new local route servicing Georgia Gwinnett College the next year. SRTA added new express routes from the Town Center and Sugarloaf areas to Perimeter Center in 2017. Since 2016, CATS has made minor modifications to their two local routes. In 2015, HAT rebranded their service Gainesville Express with six local routes which has seen a few minor route revisions since that time. Henry began local fixed bus service for the first time in 2018 that connected the Ellenwood and Stockbridge areas which was later expanded to the Stockbridge Park & Ride with longer service hours. Connect Douglas began local service as well for the first time in 2019 with four routes that connect Douglasville, Lithia Springs, and the southeastern sections of Douglas County.

The ARC travel demand model includes all Transportation Management Associations (TMA) and university shuttle operators in the Atlanta nonattainment and maintenance areas. Public shuttle services connecting specific major activity centers in the region include Atlantic Station provided through the Atlantic Station Access + mobility Program (ASAP+), the Buckhead Uptown Connection (BUC) provided through Livable Buckhead, and the Clifton Corridor provided through the Clifton Corridor TMA (CCTMA). Regional universities with shuttle service include: Atlanta University Center (AUC), Emory University, Georgia Institute of Technology,

Georgia State University (GSU), Kennesaw State University (KSU), Life University, Savannah College of Art & Design (SCAD) Atlanta, University of North Georgia (UNG) Gainesville, and the University of West Georgia (UWG).

### FUTURE REGIONAL TRANSIT SERVICE

The CDR must include reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time per Section 93.110(d). ARC has included several major expansions to the regional transit system over the life of this plan. Specific details about the expansions can be found in the TARP RTP (2020) Appendix A project listings. All projects meet the requirements of fiscal constraint and are appropriately accounted for in the federally required travel demand and mobile source emission modeling processes.

Major transit expansion projects from TARP RTP (2020) include:

- I-285 North Corridor Premium High Capacity Transit Service from West Paces Ferry Road to Northlake Mall Area (AR-409A)
- I-285 East Corridor High Capacity Premium Transit Service from Northlake Mall Area to Panthersville (AR-409B)
- Clifton Corridor Light Rail Transit Phase 1 from Lindbergh MARTA Station to Emory University (AR-411)
- Clifton Corridor Light Rail Transit Phase 2 from Emory University to North Decatur Road (AR-412)
- I-20 East High Capacity Premium Transit Service from Downtown Atlanta to Stonecrest Mall Area (AR-420)
- Summerhill BRT Corridor from North Avenue MARTA Station to Southeast Beltline (AR-454)
- Clayton County Bus Rapid Transit Service Replacing MARTA Bus Routes 191 and 196 (AR-455)
- North Avenue Corridor High Capacity Premium Transit Service Phase 1 from MARTA North Avenue Rail Station to Atlanta Beltline East / Ponce City Market (AR-457)
- Campbellton Road Corridor High Capacity Premium Transit Service from MARTA Oakland City Station to Greenbriar Mall Area (AR-459)
- GA 400 High Capacity Premium Transit Service Phase 1 from North Springs MARTA Station to Windward Parkway (AR-470)
- Connect Cobb / Northwest Atlanta High Capacity Premium Transit Service from Kennesaw State University to Midtown Atlanta (AR-475)
- Clayton County High Capacity Transit Initiative Phase 1 from East Point MARTA Rail Station to Jonesboro (AR-485A)
- Clayton County High Capacity Transit Initiative Phase 2 from Jonesboro to Lovejoy (AR-485B)
- Atlanta Streetcar East Extension from Jackson Street to Ponce City Market (AR-490A1)

- Atlanta Streetcar Atlanta Beltline East Corridor from Ponce City Market to Lindbergh/Armour Area (AR-490B)
- Atlanta Streetcar West Extension from Centennial Olympic Park to near Intersection of Westview Drive at Langhorn Street (AR-490C)
- Atlanta Streetcar Atlanta Beltline Southwest Corridor from near Intersection of Westview Drive at Langhorn Street to MARTA South Rail Line between West End and Oakland City Rail Stations (AR-490D)
- Atlanta Streetcar Northwest Beltline Corridor from near Intersection of Westview Drive at Langhorn Street to Marta Bankhead Rail Station (AR-490F)
- Atlanta Streetcar Southeast Beltline Corridor from Irwin Street to University Avenue (AR-490G)
- South Fulton Parkway Corridor High Capacity Premium Transit Service from MARTA College Park Rail Station to SR 92 (AR-491A)
- North Avenue Corridor High Capacity Premium Transit Service from MARTA North Avenue Rail Station to Marta Bankhead Rail Station (AR-491B)
- Northside Drive Corridor High Capacity Premium Transit Service from Atlanta Metropolitan State College to I-75 North (AR-491C)
- I-85 North / Satellite Boulevard Corridor High Capacity Premium Transit Service from MARTA Doraville Rail Station to Sugarloaf Mills (AR-491D)
- Buford Highway High Capacity Premium Transit Service from MARTA Lindbergh Rail Station to MARTA Doraville Rail Station (AR-491E)

# QUANTITATIVE ANALYSIS

The regional emissions analysis used to demonstrate conformity to the 8-hr. ozone standard relies on ARC's 21-county regional activity-based travel demand model. Updated travel model networks were created for each analysis year (2015, 2020, 2030, 2040, and 2050) to reflect projects as listed in the TARP RTP (2020), and in collaboration with changes to both the GHMPO and CBMPO RTPs/TIPs.

Analysis was performed using USEPA's MOVES emissions model, version MOVES2014a. This is the second RTP update that has used both ARC's activity-based model and USEPA's MOVES model. Direct comparisons between these results and results documented in previous CDRs (relying on either ARC's trip-based model or older versions of USEPA's emissions model) are inadvisable.

## 8-HR. OZONE STANDARD

To prepare for modeling emissions under the 2015 standard, IAC reviewed the methodologies prescribed in the conformity guidance for a shrinking nonattainment area. According to § 93.109(c)(2)(ii)(B) of the "July 2012 Guidance for Transportation Conformity Implementation in Multi-Jurisdictional Nonattainment and Maintenance Areas," the MVEB Test using existing budgets for a reduced area is still considered a valid test, provided that any additional emissions reductions needed to pass the MVEB Test come from within the new nonattainment area boundary. Since the 2015 standard's nonattainment area only covers 7 counties and all of those counties are within the 2008 standard's maintenance area (which covers 15 counties total), the analysis for the 7-county nonattainment area was carried out using the 21-county travel demand model and the existing 15-county budgets, per interagency agreement.

The nonattainment and maintenance area is broken into a 13-county and 2-county geography and the MOVES model is run separately for each area. For a full explanation of how MOVES is run and how inputs are developed reference the MOVES2014a User Guide. In addition, MOVES2014a county data manager input files used for this conformity analysis are available upon request.

Highway Performance Monitoring System (HPMS) adjustment factors were calculated in accordance with § 93.122(b)(3) of the Transportation Conformity Rule. These factors reconcile travel model estimates of VMT in the base year of validation to HPMS estimates for the same period. These factors include summer (seasonal) adjustments to convert from average annual VMT to summer-season VMT. Factors are calculated separately for the 13-county and 2-county geographies of the nonattainment area. See Exhibit 1 for more details on planning assumptions used in this CDR.

### RESULTS OF ANALYSIS - 8-HR. OZONE STANDARD

The results of the emissions analysis for TARP RTP (2020), CBMPO RTP, and GHMPO RTP for all analysis years for the 8-hr. ozone nonattainment area demonstrate adherence to conformity requirements with levels of emissions below the MVEBs contained in the Ozone Maintenance Plan SIP. Table 5 and Figure 4 document the VOC and NOx emissions for each analysis year, as compared to the applicable MVEBs.

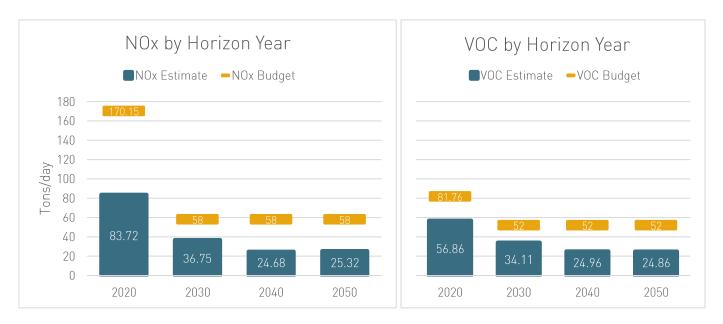
To maintain consistency between procedures used to estimate the MVEBs included in the ozone SIPs and the conformity analysis, ARC in consultation with GA EPD applies an off-model adjustment to emission results for the 13-county area to reflect an emissions debit resulting from a program to exempt senior citizens from the Inspection and Maintenance (I/M) program. This program was initiated by the Georgia General Assembly in 1996 (O.C.G.A § 12-9). It exempts from emission testing vehicles ten years old or older that are driven fewer than 5,000 miles per year and are owned by persons 65 years of age or older.

It was estimated that this senior I/M exemption increased VOC and NOx emissions by 0.05 and 0.03 tons per day respectively. These amounts are reflected in Table 5. This off-model adjustment is conservatively high and was applied to the emission results for VOC and NOx to produce final emission results for each analysis year in the 13-county area where the I/M program is in place. The same credit loss is assumed for each analysis year.

Table 5: Results of the 15-County MVEB Test for the 8-hr. Ozone Standards

MVEB Plan	Conformity	N0xin tons/day	VOC in tons/day
	Year		
Georgia's 2008 Ozone Maintenance	2020	83.72	56.86
SIP for years before 2030		(170.15 budgeted)	(81.76 budgeted)
Georgia's 2008 Ozone Maintenance	2030	36.75	34.11
SIP for years 2030 and after		(58 budgeted)	(52 budgeted)
	2040	24.68	24.96
		(58 budgeted)	(52 budgeted)
	2050	25.32	24.86
		(58 budgeted)	(52 budgeted)

Figure 3: Results of the 15-County MVEB Test for the 8-hr. Ozone Standards



# **EXHIBITS TO THE CDR**

### **EXHIBIT 1: PLANNING ASSUMPTIONS AND MODELING INPUTS**

### 2015 EIGHT-HOUR OZONE STANDARD PLANNING ASSUMPTIONS & MODELING INPUTS

The requirement to demonstrate conformity for the 2015 eight-hour ozone (National Ambient Air Quality Standards) NAAQS is satisfied through the demonstration of conformity with the 2008 eight-hour ozone NAAQS maintenance plan motor vehicle emissions budgets (MVEBs). Since the nonattainment area shrank in size, pursuant to §93.109(c)(2)(ii)(B) a demonstration of conformity to the older standard with a larger geography meets the requirement for the smaller nonattainment area until such a time that new budgets are established.

# 2008 EIGHT-HOUR OZONE STANDARD PLANNING ASSUMPTIONS & MODELING INPUTS General Methods and Assumptions

- 1) Modeling Methodology: Use the MOVES model in inventory mode to determine the total NO, and VOC emissions in the 15-county maintenance area.
- 2) Analysis Years: 2020, 2030, 2040, 2050
- 3) Conformity Test
  - a. Motor Vehicle Emission Budget (MVEB) Test<sup>4</sup>
    - i. For years prior to 2030, 2014 MVEBs are used:
      - 1. NOx: 170.15 tpd
      - 2. VOC: 81.76 tpd
    - ii. For years 2030 and later, 2030 MVEBs are used:
      - 1. NOx: 58 tpd
      - 2. VOC: 52 tpd
- 4) Modeling Start Date: August 2019. This start date is defined by the ARC as the initiation of the first model run for plan amendment/update.

## Travel Demand Modeling Assumptions

- 1) Calibration Year: 2015
  - a. Model calibrated/validated to the year 2015 using updated data and a comparison between estimated volumes and observed counts. See Appendix A for validation/calibration information.
- 2) Social/Economic Data: See Appendix B.
- 3) ARC's Activity-Based Travel Demand Model (ABM) is the basis for these runs. See Appendix C for an overview of ABM specifications.

## **Emissions Modeling Assumptions**

- 1) Emissions Model: MOVES2014a Database: movesdb20151028
  - a. Emissions Process use MOVES in inventory mode for a July weekday

<sup>&</sup>lt;sup>4</sup> Procedures for Emission Inventory Preparation, Volume IV: Mobile Sources, Section 3.4.2.6, EPA420-R-92-009, USEPA Office of Air and Radiation, Office of Mobile Sources, 1992.

- i. For the years 2020, 2030, 2040 and 2050 modeled travel data is used to calculate emissions
- b. Run separately for the 13-county and 2-county portions of the nonattainment area<sup>5</sup>
  - i. 13-county area activity, vehicle population and other inputs are assigned to Fulton County while running MOVES
  - ii. 2-county area activity, vehicle population and other inputs are assigned to Bartow County while running MOVES

### 2) MOVES Inputs

- a. Road Type Distribution Processed from the travel demand model, GDOT HPMS counts and MOVES defaults. Summarizes VMT fraction by road type and source type for the 13 and 2 counties separately.
- b. Source Type Population
  - i. Started with 2017 R.L. Polk & Co. registration data for the Atlanta nonattainment counties
  - ii. Future analysis year data is grown from 2017 based on the ratio of MPO population estimates
  - iii. Since the population of vehicle type 62 (combination long-haul trucks) can easily be underrepresented in areas with lots of through traffic, the vehicle population for MOVES source type 62 was revised using MOVES default VMT/VPOP ratios and VMT for HPMS type 60 data
- c. Vehicle Type VMT
  - i. HPMS VTypeYear Processed from the travel demand model, GDOT HPMS Counts, and an EPA daily to annual VMT converter. Assigns total annual VMT by HPMS vehicle type.
  - ii. Month VMT Fraction: MOVES defaults
  - iii. Day VMT Fraction: MOVES defaults
  - iv. Hour VMT Fraction: Derived from the travel demand model by source and road type. The fractions are determined separately for the 13 and 2 county areas.
- d. I/M Programs Applied to the 13-county area only (See Appendix D)
- e. Age Distribution Age data was derived from 2017 R.L. Polk & Co. registration data for the 13 and 2 counties separately for all vehicle types, except HDV8b (Source type 62) where MOVES defaults were used
- f. Average Speed Distribution Processed from the travel demand model with HPMS VMT adjustment factors applied. Calculates VHT by hour by speed bin by source. The distribution is determined separately for the 13 and 2 county areas.
- g. Ramp Fraction Processed from the travel demand model. Calculates VHT by freeway and ramps by area type. The fraction is determined separately for the 13 and 2 county areas.

<sup>&</sup>lt;sup>5</sup> For the 2008 eight-hour ozone NAAQS there are two sets of MOVES input files, one for the 13 counties that make up the former one-hour ozone nonattainment area in which a specific set of emission control measures is in place, and one for the 2 remaining ring counties in the 2008 8-hour ozone maintenance area.

- h. Fuel MOVES2014 defaults after 2015 do not match local fuel due to the removal/modification of Georgia summer fuel in the 45 county Atlanta region effective Oct 1, 2015
  - i. Tier 3 Low Sulfur fuel (10ppm, 80ppm refinery gate and 95ppm downstream cap) for all counties
  - ii. Summer Fuel reclassification
    - 1. 13 counties
      - a. Low Federal RVP summer requirements (June 1-Sept 15) for "designated volatility nonattainment areas" (40 CFR 80.27(a)(2)(ii))
      - b. Fuel region ID 170000000 kept but fuel formulations reflect region 178000000 for any model years after 2015
    - 2. 2 counties
      - a. Standard Federal RVP summer requirements (June 1-Sept 15) for "designated volatility attainment areas" (40 CFR 80.27(a)(2)(i))
      - b. Fuel region ID 170000000 kept but fuel formulations reflect region 100000000 for any model years after 2015
  - iii. Ethanol The current assumption is an increasing percentage of ethanol fuel
    - 1. 2% in 2014, 28% in 2030 and 21% in 2040
    - 2. The rest of the gasoline blends with a larger percent of E15 with time:
      - a. 0.8% in 2014, 19% in 2030 and 23% in 2050
    - 3. Remainder is E10
  - iv. Volatility waiver for E10 allows 1.0 psi RVP increase, but not in E15
- i. Meteorology July 2014 weather for Hartsfield-Jackson Atlanta International Airport was used for this analysis consistent with the 2008 Eight Hour Ozone Maintenance SIP
- j. Starts The regional travel demand model determines the number of trip starts in each of the 13 and 2 county areas. Applies only to the trips per day input. Defaults used for the rest of the start inputs.
- k. Hotelling MOVES defaults
- 3) VMT HPMS Adjustment Factors

a. Calculated for the year 2015 (See Appendix E)

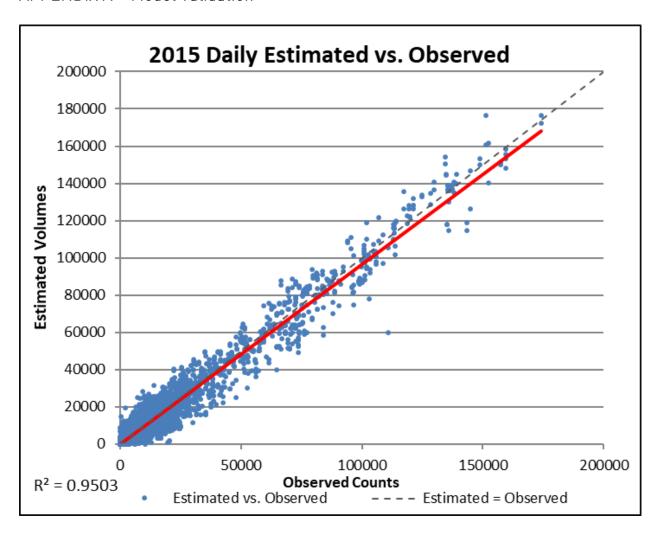
- b. HPMS adjustment in base year of calibration in accordance with Section 93.122(b)(3) of the Transportation Conformity Rule which recommends that HPMS adjustment factors be developed to reconcile travel model estimates of VMT in base year of validation to HPMS estimates for the same period
- c. Summer (seasonal) adjustment to convert from average annual VMT to summerseason VMT<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Procedures for Emission Inventory Preparation, Volume IV: Mobile Sources, Section 3.4.2.6, EPA420-R-92-009, USEPA Office of Air and Radiation, Office of Mobile Sources, 1992.

- d. Factors applied to VMT estimates generated by ARC travel demand model for 13-county portion and 2-county portion of 20-county modeling domain, separately
- e. Factors aggregated up to MOVES road types from base HPMS functional classifications
- 4) Off-Model Calculations
  - a. Senior I/M Exemption (emissions debit)
    - i. The Senior I/M Exemption calculated for year 2002 is conservatively high and will be added to the regional emission inventories for each analysis year
- 5) TCMs
  - a. No additional credit is taken in the emissions modeling process for SIP TCMs
  - b. A full list of implemented TCMs is attached as Exhibit 2 to the CDR.

#### 1997 EIGHT-HOUR OZONE STANDARD PLANNING ASSUMPTIONS & MODELING INPUTS

Pursuant to EPA Guidance released on November 29, 2018 (EPA-420-B-18-050) titled "Transportation Conformity Guidance for the *South Coast II* Court Decision" emissions modeling (i.e. regional emissions analysis) is not required to demonstrate conformity for the 1997 eighthour ozone standard (see 40 CFR 93.109(c). As such, no planning assumptions are prepared to demonstrate conformity. Instead, the Conformity Determination Report will document the requirements to meet the 1997 standard for the orphan maintenance area in tandem with the 2008 and 2015 eight-hour ozone standards.



#### APPENDIX B - Socioeconomic Data for the Travel Model

## Forecasting and Land Use Allocation Modeling

ARC uses a two-step modeling process to develop regional control totals and small area forecasts used as inputs into our Activity Based Travel Demand Model. These models include an econometric model (REMI) that uses a national forecast that is shared out to each county in the nation. We then use an "agent" model (PECAS) that simulates future location of activities and the development of space by developers. More information about these two models are below.

Prior to beginning the technical, modeling work, however, ARC starts with a Technical Advisory Committee (TAC) that reviews the assumptions and calibrations that are inherent in our econometric model. The TAC consisted of leading local economists who advised us on different scenarios we could test through the REMI model that offered more realistic assumptions and reasonable outcomes of the local economy. Based on this feedback, we modified the standard REMI model output to include different projections of labor force participation rates, and we also adjusted the early years of the model to reflect ARC's population estimates rather than REMI-generated estimates based on forecasts. This resulted in several different scenarios that created a lower bound forecast range, and mid-range and, finally an upper bound forecast range. After four meetings and several runs of the model, the TAC chose the mid-range scenario as the region's control total, which is a population of 8.6 million in the 21-county area by the year 2050.

Here are other initial findings from our <u>DRAFT</u> Series 16 forecasts:

We are forecasting the region to add approximately 2.9 million new residents and close to 1.2 million more jobs between 2015 and 2050. See Figure 1 below.



Figure 1. Forecast Population and Employment Change, 2015-2050

7,000,000

6,000,000 5.000.000 4.000.000

3,000,000

2,000,000 1,000,000 5,721,011

3,562,350

4,740,468

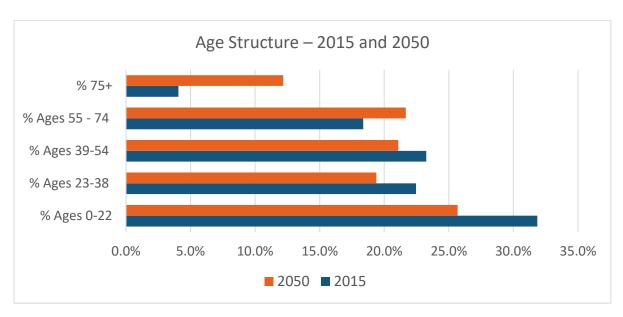
As with previous forecast series, our current Series 16 draft is forecasting a significant reduction in the overall share of White population between 2015 and 2050. See figure 2 below.

Shares of Population by Race/Ethnicity 35.0% 0.0% 5.0% 10.0% 15.0% 20.0% 25.0% 30.0% 40.0% 45.0% 50.0% % Black % Hispanic % Other % White ■ 2015 ■ 2050

Figure 2. Share of Population by Race/Ethnicity

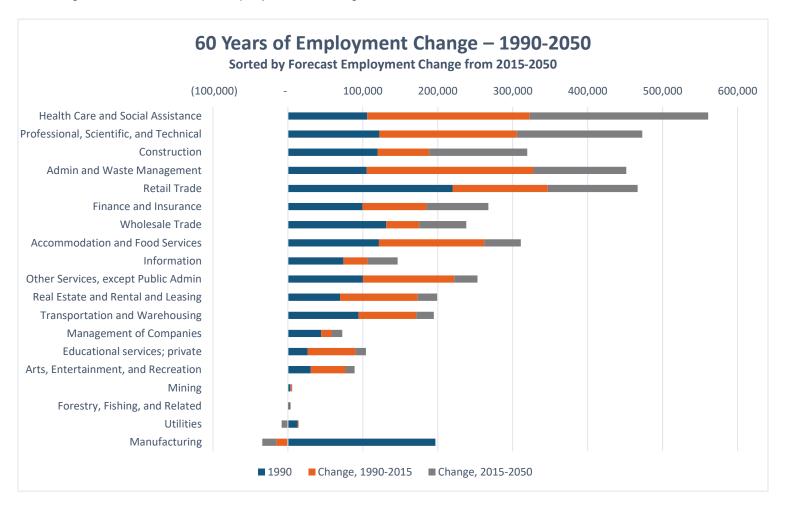
Again, in line with previous forecasts, our current Series 16 draft is also forecasting a tremendous increase in the share of 75+ population between 2015-2015. But please note – these are SHARE changes, not total population changes. So even though we are showing a reduction in the SHARE of those age 0-22, the actual population of that age cohort increases. See figure 3 below.





Finally, and again consistent with previous forecasting series, our current Series 16 draft is forecasting that the "Health Care and Social Assistance" sector will the most jobs between 2015 and 2050. See Figure 4 below.

Figure 4. 60 Years of Employment Change: 1990-2050



#### **REMI**

The REMI model (Regional Economic Models, Inc.) is a very widely used regional economic policy analysis model. The model is used by government agencies on the national, state, and local level, as well as by private consulting firms, utilities, and universities. REMI is a structural economic forecasting and policy analysis model. It integrates input output, computable general equilibrium, econometric, and economic geography methodologies. The model is dynamic, with forecasts and simulations generated on an annual basis and behavioral responses to wage, price, and other economic factors.

# PECAS for Small Area Forecasting (Land Use Allocation)

ARC reviewed state-of-the art land use models, to allocate the forecast population and employment totals to small areas, between 2007 and 2008 and selected PECAS (Production Exchange Consumption Allocation System). PECAS' main purpose is to simulate the future

location of activities (industries, households and government), and the development of space by developers, for both forecasting and policy analysis. It has been used in the conformity process for the first time in 2015.

The ARC PECAS model includes the two standard PECAS modules: The Activity Allocation module (AA) and the Space Development module (SD). AA follows an aggregate approach and represents how and why industries, government and households choose to locate in different zones or locations in the region. SD follows a microsimulation approach and simulates development at the parcel level, considering developers' profit-motivated behavior as well as land and market characteristics. These two modules interact with each other, and both also interact with the Atlanta transport model by providing it with land use data. The travel demand model, in turn, provides an indication of travel conditions for use in AA.

## APPENDIX C - Model Inputs

In 2016, ARC switched from its 4-step trip-based aggregate regional travel demand model to its newly developed, and recently calibrated disaggregate activity-based model (ABM). The ABM now serves as the major travel forecasting tool in the ARC region. This model has been developed to ensure that the regional transportation planning process can rely on forecasting tools that will be adequate for new socioeconomic environments and emerging planning challenges. It is equally suitable for conventional highway projects, transit projects, and various policy studies such as highway pricing and HOV / HOT analysis. The ARC ABM is based on the CT-RAMP (Coordinated Travel Regional Activity-Based Modeling Platform) family of Activity-Based Models. This model system is an advanced, but operational, AB model that fits the needs and planning processes of ARC.

The ABM has been tailored specifically to meet ARC planning needs, considering current and future projects and policies and considering the special market segments that exist in the Atlanta region. The model system addresses requirements of the metropolitan planning process, relevant federal requirements, and provides support to ARC member agencies and other stakeholders.

- 1) Calibration Year: 2015
- 2) Project Listing: Project listings will be provided in electronic format to Interagency Consultation Group for review and include:
  - a. Regionally Significant and Federally Funded
  - b. Regionally Significant and Non-Federally Funded
- 3) Demographic Data: To be provided as separate attachment
- 4) Speed Data: Free-flow Speed by Area Type and Facility Type<sup>7</sup>

FACTYP	ABM Area Type							
E	CB D	Urban Commercia l	Urban Residentia l	Suburban Commercia l	Suburban Residentia l	Exurba n	Rura l	Facility Type
1	62	63	63	63	64	65	66	interstate/freeway
2	43	46	49	52	55	58	61	Expressway
3	43	46	49	52	55	58	61	Parkway
4	64	65	65	65	66	67	68	freeway HOV (concurrent)
5	64	65	65	65	66	67	68	freeway HOV (barrier)
6	62	63	63	63	64	65	66	freeway truck only
7	50	50	50	55	55	55	55	system to system ramp
8	35	35	35	35	35	35	35	exit ramp
9	35	35	35	35	35	35	35	entrance ramp

-

Within the ARC travel demand and emission modeling process, free flow speeds are adjusted to reflect the increase in delay and travel time on a roadway segment as traffic volumes build and congestion levels increase. Link-level congested flow speeds are used to estimate NOx and VOC emissions as required by Sections 93.122(b)(i)-(iv) and 93.122(b)(2) of the Transportation Conformity Rule.

FACTYP E	ABM Area Type							
	CB D	Urban Commercia l	Urban Residentia l	Suburban Commercia l	Suburban Residentia l	Exurba n	Rura l	Facility Type
10	23	26	31	35	41	48	53	principal arterial
11	21	26	29	33	38	43	48	minor arterial
12	21	26	29	33	38	43	48	arterial HOV
13	21	26	29	33	38	43	48	arterial truck only
14	17	23	24	26	30	35	45	collector

# 5) Transit Modeling

- a. Model calibrated/validated to 2015 transit ridership empirical observations provided by transit operators
- b. Reflects results from the 2009-2010 Transit On-Board Survey, re-expanded to 2015
- c. Routes updated to reflect current operating plans
- d. Transit mode split is estimated using the mode choice model
  - i. Estimates individual modal trips from the person trip movements
  - ii. Composed of 15 modes, including auto by occupancy and toll/non-toll choice, walk and bike non-motorized modes, and walk and drive access to different transit line-haul modes:
    - 1. Auto SOV Drive Alone (Free)
    - 2. Auto SOV Drive Alone (Pay)
    - 3. Auto 2-Person Carpool (Free)
    - 4. Auto 2-Person Carpool (Pay)
    - 5. Auto 3+ Person Carpool (Free)
    - 6. Auto 3+ Person Carpool (Pay)
    - 7. Walk
    - 8. Bike
    - 9. Walk-All-Transit
    - 10. Walk-Premium Transit-Only
    - 11. PNR-All-Transit (PNR = Park and Ride)
    - 12. PNR-Premium Transit-Only
    - 13. KNR-All-Transit (KNR = Kiss and Ride)
    - 14. KNR-Premium Transit-Only
    - 15. School Bus
  - iii. The mode choice model is organized in terms of seven characteristics:
    - 1. Mathematical structure;
    - 2. Trip purposes and choice sets;
    - 3. Limitations on choice sets:
    - 4. Analysis of transit access;
    - 5. Treatment of HOV lanes;
    - 6. Stratification by income groups; and
    - 7. Analysis of alternative transit paths.

## e. Transit Fare Modeling

- i. Transit fares are based on information provided by the local transit operators throughout the Atlanta region
- ii. The base year for the travel demand model is year 2015; therefore, any costs of traveling incurred within the model are representative of year 2015 dollars
- iii. A CPI adjustment was applied to all the operator fares and is carried forward for all model years from 2015 and beyond
- iv. The current ARC transit coding approach enables fares to be coded by mode and operator (cases where an operator has a different fare for different modes).
- v. The transit fare structure includes additional fares incurred from transferring from one operator to another
- vi. The fare structure results in a fare matrix which includes the total fare of the trip on a zone-to-zone level

## f. 2009-2010 Transit On-Board Survey Data

- i. Update of regional transit travel targets based on the re-expansion of the on-board survey data to 2015
  - 1. Modifications to express bus and BRT transfer constants
  - 2. Modifications to travel demand model estimates of zero-car transit work trips
  - 3. Modifications to travel demand model estimates of kiss-and-ride passenger access and use of transit system
  - 4. Overall evaluation of all modal constants
  - 5. Refinement to park-and-ride lot assumptions
  - 6. Updated walk connector and percent walk procedures
- ii. Modified transit skimming procedures
- iii. Re-calibrated air passenger model
- iv. Assessment of travel demand model understanding of market segments and travel patterns relative to the on-board survey records

## Appendix D – I/M Program

- Exhaust and Evaporative (OBD and gas cap pressure test) for 1996 and newer vehicles
  - o Annual inspection required
  - o Computerized test and repair OBD Exhaust
  - o Computerized test and repair OBD & GC Evaporative
  - o Applies to all LDG vehicle types
  - o Three-year grace period
  - o 3% waiver rate for all vehicles Exhaust test
  - o 0% waiver rate for all vehicles Evaporative test
  - o 97% compliance rate
- Exhaust and Evaporative test for 1975 1995 vehicles
  - o Annual inspection required
  - o Computerized test and repair ASM 2525/5015 Phase-in Exhaust
  - o Computerized test and repair GC Evaporative
  - o Applies to all LDG vehicle types
  - o 3% waiver rate for all vehicles Exhaust
  - o 0% waiver rate for all vehicles Evaporative
  - o 97% compliance rate
  - o 25 year and older model years are exempt

# Appendix E – VMT Adjustment Factors

# Ozone VMT Adjustment Factors

Functional Class Name	Functional Classificatio	Factor for 13 County	Factor for 7 County
	n	Area	Area
Rural Interstate	1	0.93	0.83
Rural Principal Arterial	2	0.95	0.91
Rural Minor Arterial	6	0.95	0.91
Rural Major Collector	7	1.14	0.78
Rural Minor Collector	8	1.14	0.75
Rural Local Collector	9	2.24	2.34
Urban Interstate	11	0.93	0.83
Urban Principal Arterial	12	0.95	0.83
Urban Minor Arterial	14	0.95	0.91
Urban Major Collector	16	0.95	0.91
Urban Minor Collector	17	1.14	0.78
Urban Local Collector	19	2.24	2.34

# **EXHIBIT 2: STATUS OF TCMS**

Description	ARC Project	GDOT PI#	TIP	Status
HOV LANES Sponsor – GDOT	AR 073B	713760	98-00, 99-01	Implemented
I-85N from Chamblee-Tucker Rd to SR 316 (HOT Lanes), I-85 @ SR 316, Interchange Reconstruction	GW-AR 053A GW-AR 053B	110530	01-03 02-04 03-05 05-10	Implemented Implemented
ALTERNATIVE FUEL STATION Sponsor – Douglas County	DO-AR 211	771035	98-00 99-01 00-02 01-03 02-04	TCM removed from SIP on 11/28/2006 (71 FR 68740, November 28, 2006)
ATLANTIC STATION, 17th STREET BRIDGE Sponsor – City of Atlanta A – Bridge and Southbound off ramps C – Northside Dr over Norfolk Southern Railroad to Atlantic Station D – Northbound off ramp to 17th Street Bridge, Williams St Relocation	AT-AR 224A AT-AR 224C AT-AR 224D	714190 0001297 0001298	00-02 01-03 02-04 03-05 05-10	A – Implemented C – Implemented D – Implemented
CLEAN FUEL BUSES Sponsors – MARTA and CCT	M-AR 232	N/A	94-95	Implemented
EXPRESS BUS ROUTES Sponsor – MARTA	M-R 160 M-R 162	770632 770632	94-96	Implemented
IMPROVE / EXPAND BUS SERVICE Sponsor – MARTA	M-R 161	770633	96-98	Implemented
INTERSECTION UPGRADE,	AT 089	04Y108	93-95	Implemented
COORDINATION & COMPUTERIZATION	CL 094	770600	94-96	Implemented
Sponsor(s) – GDOT in partnership with	CO 249	770601	94-96	Implemented
local Jurisdictions	DK 118	770603	94-96	Implemented
	FN 086	770605	94-96	Implemented
	FS 068	770605	94-96	Implemented
	GW 135	170950	94-96	Implemented
	R 098	04418	93-95	Implemented
	R 098	770391	94-96	Implemented
ITS – ADVANCED TRAFFIC MANAGEMENT SYSTEM / INCIDENT MANAGEMENT PROGRAM Sponsor – GDOT I-75/I-85 within I-285, Northern portion of I-285 between I-75 and I-85	R 098	770391	94-96	Implemented
CLEAN FUELS REVOLVING LOAN PROGRAM Sponsor – GEFA	R 195	770790, 770795	96-98	Implemented
HOV LANES Sponsor – GDOT	R 174	320H94	94-96	Implemented
I-75 and I-85 within I-285				

Description	ARC Project	GDOT PI#	TIP	Status
PARK & RIDE LOTS	DO 211C		94-96	Implemented
Sponsor(s) – Douglas & Rockdale				
Counties				
Douglas County – Chapel Hill @ I-20,				
Rockdale County – Sigman @ I-20				
REGIONAL COMMUTE OPTIONS & HOV	R 159	770631	94-96	Implemented
MARKETING PROGRAMS				
Sponsor(s) - GDOT				
SIGNAL PREEMPTION	M-R 164	770636	94-96	Implemented
Sponsor – MARTA				
TRANSIT INCENTIVES PROGRAM	M-AR 231A	771031	98-00	Implemented
Sponsor - MARTA	M-AR 231B	771119	99-01	
			00-02	
TRANSPORTATION MANAGEMENT	AR 221A	771033	98-00	Implemented
ASSOCIATIONS	AR 221B	771140	99-01	
Sponsor – ARC	AR 221C	771141	00-02	
	AR 221E	0000570	01-03	
	AR 221F	0000571		
UNIVERSITY RIDESHARE PROGRAM	AR 220A	771032	98-00	Implemented
Sponsor - ARC	AR 220B	771113	99-01	
	AR 220C	0000351	00-02	
	AR 220D	0000567	01-03	
	AR 200E	0000568	02-04	

# **EXHIBIT 3: INTERAGENCY CONSULTATION GROUP MEETING MINUTES**

The following pages contain the approved minutes from the Interagency Consultation Group meetings beginning in January 2018. Some of these minutes are also attached to previous CDRs, and are additionally attached here to present a complete record of discussions regarding this CDR.

# Interagency Consultation Group January 23, 2018

#### MEETING SUMMARY

Attendees	
ARC	David D'Onofrio, Jean Hee Barrett, Kyung-Hwa Kim, Kofi Wakhisi, John Orr, Guy Rosseau
CBMP0	
Cobb	
Douglas	
EPA	Dianna Myers, Richard Wong
EPD	Gil Grodzinsky, Deb Basnight
FHWA	Tamara Christion
FTA	
GDOT	Megan Weiss, Daniel Dolder, Habte Kassa
GHMP0	Sam Baker
GRTA/SRT A	Rob Goodwin
Gwinnett	
MARTA	
Other	

## 1. Welcome & Review of 10/24/17 Meeting Summary

David D'Onofrio, ARC, called the meeting to order. He noted that the draft October 24th meeting summary was distributed for review. There were no modifications and the summary was accepted.

# 2. Transportation Planning Updates

#### a. ARC

#### i. Amendment #4 Update

Jean Hee Barrett, ARC, updated the committee on ARC's schedule to wrap up Amendment #4. Public comment closed on January 16. ARC received 29 comments via email. ARC staff is reviewing and preparing responses to those comments to release by January 26. Comments were varied, with some reflecting the new project evaluation procedures, some related to transit expansion and some more general.

Amendment #4 will begin moving through ARC committees in February. It's scheduled to be in front of TCC on February 9 and TAQC on February 15. GRTA is scheduled to act on the amendment on March 14.

## ii. Amendment #5 Update

Barrett continued the conversation into Amendment #5. ARC provided planning assumptions and a modeling list to Interagency last week and hope to receive comments by February 1. ARC staff hopes to complete the runs by early March with a goal of the amendment going out to a 30-day public comment period on March 21. ARC committees are scheduled to act in May with GRTA providing a conditional approval in May as well. Amendment #5 includes some FY'18 funds so ARC staff is eager to get that allocated ASAP. Amendment #5 includes a mix of solicitation projects, project scope and costs changes, and TSPLOST locally funded projects.

#### b. CBMPO

No Update.

#### c. GHMP0

Sam Baker, GHMPO, updated the committee on planning activities in Hall County. GHMPO has recently completed two planning studies: a regional freight study and a Green Street traffic improvement study. This year, GHMPO is starting several new studies: two trail routing studies to connect existing segments and a traffic improvement study on Dawsonville Hwy. GHMPO staff is also actively working on an update to their UPWP for FY'19. GHMPO staff is gearing up to start their next RTP update, which is due by mid-2020. Staff is planning to kick-off work for that product later this year.

Baker noted that GHMPO is preparing an application for additional PL funding from GDOT to prepare an update to the Jackson County CTP. If granted they hope the project will begin in July and finish by the end of 2019.

Finally, GHMPO staff are working on a resolution and agreement with GDOT to incorporate statewide safety performance measures and targets into their planning process.

## 3. Air Quality Updates

Richard Wong, EPA, updated the committee on the status of the 2015 ozone standard designations. On December 22, EPA sent out 120-day letters to all the states. In the letter, EPA agreed with Georgia's recommendation to designate an 8-county portion of the Atlanta area as nonattainment for the 2015 standard. The eight counties include: Bartow, Clayton, Cobb, DeKalb, Fulton, Gwinnett, Henry and Rockdale. The state has an opportunity to reply by February 8 with the most recent data ahead of final designations set for April 30. Preliminary monitor data suggests that Rockdale County may be meeting the standard. The state is determining how to progress from here with that information.

D'Onofrio asked several questions related to the new standard and transportation conformity requirements. First, the group discussed the conformity requirements for the 2015 standard. In the past, when the nonattainment area shrank it was acceptable to use the larger pre-existing nonattainment area for conformity until new budgets were eventually established. Interagency agreed that this method would still be viable for this new standard.

Second, the group discussed whether Amendment #5 would meet the requirement to demonstrate conformity to the new standard within one year of designations. Ultimately it was decided that without implementation guidance it would be difficult to have Amendment #5 meet this requirement. Therefore, ARC would not aim to demonstrate conformity to the 2015 standard with Amendment #5. Implementation guidance will be an important part in knowing the future attainment date and procedures for carrying out conformity with the new standard.

### 4. New Business/Announcements

#### a. RVP Requirements

Gil Grodzinsky, GA EPD, explained that the state was interested in removing the Reid Vapor Pressure (RVP) requirements in place since the early 1990s on gasoline sold in the 13-county area. This effort would require a demonstration and likely offsets. These requirements were put in place when the region was a serious violator of the one-hour ozone standard. The requirements reduce the amount of VOCs released from fuel by requiring fuel sold in the area be refined to reduce volatility. In 2015, the state removed certain requirements on Georgia gasoline for a 45-county area and they consider removing RVP requirements to be the next natural step.

## b. Conformity Training

D'Onofrio announced that ARC would be hosting an NTI-sponsored conformity class at the end of February. The training is 2.5 days long and free to government and non-profit employees.

# c. EPA-Georgia Annual Visit

Wong announced that EPA would be meeting with GA EPD next Thursday for their annual state visit.

# Interagency Consultation Group February 27, 2018

#### MEETING SUMMARY

Attendees	
ARC	David D'Onofrio, Jean Hee Barrett, John Orr, Guy Rosseau, David Haynes
CBMP0	
Cobb	
Douglas	
EPA	Dianna Myers, Richard Wong
EPD	Gil Grodzinsky
FHWA	
FTA	
GDOT	Habte Kassa
GHMP0	Sam Baker
GRTA/SRT	Rob Goodwin
Α	NOD GOOGWIII
Gwinnett	
MARTA	
Other	

# 1. Welcome & Review of 1/23/18 Meeting Summary

David D'Onofrio, ARC, called the meeting to order. He noted that the draft January 23<sup>rd</sup> meeting summary was distributed for review. There were no modifications and the summary was accepted.

# 2. Transportation Planning Updates

#### a. ARC

#### i. Amendment #4 Update

Jean Hee Barrett, ARC, updated the committee on ARC's schedule to wrap up Amendment #4. Public comment closed on January 16, and ARC's TCC and TAQC have taken action to approve the amendment. ARC's Board is scheduled to take action on February 28. GRTA's board is scheduled to take it up on March 14 before USEPA/USDOT can take action. This amendment allocates FY'18 funds for projects associated with ARC's 2017 project solicitation, among other changes.

## ii. Amendment #5 Update

Barrett continued the conversation into Amendment #5. ARC is still coordinating with GRTA and GDOT on the amendment, which is scheduled to go to public comment on March 21 for 30 days. ARC staff are finishing up model coding and emission modeling on

the project list. After the close of public comment, ARC committees will take action in May followed by GRTA action in June, before the close of FY'18.

#### b. CBMP0

No Update.

#### c. GHMP0

Sam Baker, GHMPO, updated the committee on planning activities in Hall County. GHMPO recently passed a resolution to support the state's safety targets. Otherwise, all planning activities they discussed in January's meeting are still ongoing.

# 3. Air Quality Updates

## a. Ozone Designation Update

Gil Grodzinsky, GA EPD, explained that the state recently submitted new data to EPA for their nonattainment area determination for the 2015 8-hr. ozone standard. Updated monitor data suggests that the proposed nonattainment area should be revised from eight to seven counties (Clayton, Cobb, DeKalb, Fulton, Gwinnett, Henry and Bartow). EPA is reviewing this data ahead of their final nonattainment area determination later this spring.

## b. 2008 Ozone Implementation Plan Ruling

D'Onofrio explained that on February 16, the DC Circuit Court of Appeals vacated portions of the EPA's 2008 Ozone Implementation Rule. Among those components vacated are the revocation of transportation conformity requirements for the 1997 ozone standard.

Interagency had a roundtable discussion on this topic and its potential implications. EPA staff were only able to offer that they would provide more information to the group as soon as they received it from headquarters. As of now, the exact impact of this ruling on the region's transportation planning process remains unknown.

#### 4. New Business/Announcements

No Announcements

# Interagency Consultation Group May 22, 2018

#### **MEETING SUMMARY**

Attendees	
ARC	David D'Onofrio, David Haynes, Kyung-Hwa Kim, Patrick Bradshaw, Kofi Wakhisi
CBMP0	
Cobb	
Douglas	
EPA	
EPD	Gil Grodzinsky, Deb Basnight
FHWA	Andy Edwards
FTA	
GDOT	Phil Peevy, Henry Green
GHMP0	Sam Baker
GRTA/SRT A	Jamie Fischer
Gwinnett	
MARTA	
Other	

# 1. Welcome & Review of 2/27/18 Meeting Summary

David D'Onofrio, ARC, called the meeting to order. He noted that the draft February 27<sup>th</sup> meeting summary was distributed for review. There were no modifications and the summary was accepted.

# 2. Transportation Planning Updates

#### a. ARC

#### i. Amendment #5 Update

Patrick Bradshaw, ARC, updated the committee on the status of ARC's TIP Amendment #5. TIP Amendment #5 programs 2017 solicitation projects that required an emissions analysis and weren't included in Amendment #4, which was only for exempt projects. The GRTA Board took conditional action on the amendment on May 9th. ARC's TCC will take it up on June 8th followed by TAQC on June 14th. ARC will transmit the approval, along with sign-offs for TIPs from GHMPO and CBMPO after TAQC acts.

D'Onofrio reminded the committee that Amendment #4 was approved a couple of months ago by FHWA. It didn't require a new emissions analysis. There was uncertainty in conformity for these two amendments due to a court ruling in February, but ARC staff

is happy Amendment #4 was approved on time. ARC staff similarly anticipate approval for Amendment #5.

#### ii. Resilience Grant

D'Onofrio explained that ARC won a grant from FHWA to expand how the MPO addresses resilience as part of the planning process. The grant has two major focus areas: 1) to incorporate resilience into the planning process and 2) develop a hydrological and heat analysis to inform the criticality and vulnerability of resources in the Atlanta region considering existing problem areas and climate projections of future problems. Work on the grant will last until April 2020.

#### b. CBMP0

No Update.

#### c. GHMP0

Sam Baker, GHMPO, updated the committee on planning activities in Hall County. Several studies are ongoing in Hall County that are slated to be finished later this summer. Currently, GHMPO staff is working with Jackson County to develop a new CTP. They hope to start by July this year with a goal to wrap up by June 2019. Jackson County is hoping this process will help inform how they invest money in an upcoming TSPLOST referendum.

GHMPO just received federal approvals for their 2019 UPWP and an amended plan and TIP adding I-85 widening and I-985 widenings. GHMPO TIP approvals were in May and they will transmit that information for ARC to include with its approvals in June.

# 3. Air Quality Updates

#### a. 2015 Ozone Standard Designations

Gil Grodzinsky, GA EPD, provided the group with information on the recent EPA action to designate for the 2015 ozone standard. On April 30th the state received a letter stating that 7 counties (Bartow, Cobb, Clayton, DeKalb, Fulton, Gwinnett and Henry) were being designated for the 2015 Ozone standard. This action will be official 60 days after it's published in the Federal Register (which is still forthcoming).

D'Onofrio noted that the seven counties in metro Atlanta are the only nonattainment area for the 2015 standard in EPA Region IV. There's no word yet on when an implementation rule will follow. The attainment date will likely be in 2021, which will require ARC to update its modeling years. Grodzinsky noted that the region would need to attain by the end of summer 2020, or a new attainment SIP will need to be prepared and the region could be bumped up to moderate status. If we attain by that date, the State will need to prepare a Clean Data Determination and a Maintenance SIP instead.

# b. 2008 Ozone Implementation Plan Court Ruling

Andy Edwards, FHWA, described the status of the South Coast court ruling from a conformity standpoint. FHWA has issued preliminary guidance explaining how to continue

with conformity while EPA seeks a rehearing of the ruling. The Atlanta, Cartersville and Gainesville areas will need to demonstrate conformity to the 1997 standard to receive a positive conformity determination. GHMPO's plan will be left on a five-year timer, and will not be shortened to the four years required for nonattainment and maintenance areas.

D'Onofrio noted to the committee that the FHWA guidance matched ARC's expectation and Amendment #5, along with the amendments for GHMPO and CBMPO, is fully compliant with this preliminary guidance.

#### 4. New Business/Announcements

Baker started a brief conversation on the federal performance measures. Some of these measures include CMAQ emissions results and ARC committed to coordinating with GHMPO and CBMPO on those measures.

# Interagency Consultation Group August 28, 2018

#### **MEETING SUMMARY**

Attendees	
ARC	David D'Onofrio, David Haynes, Kyung-Hwa Kim, Patrick Bradshaw, Kofi Wakhisi, Jean Hee Barrett, John Orr, Guy Rousseau, Michael Sherman, Steve Lewandowski
СВМРО	Tom Sills
Cobb	
Douglas	
EPA	Dianna Myers, Richard Wong
EPD	Gil Grodzinsky, Deb Basnight
FHWA	Tamara Christion
FTA	
GDOT	Daniel Dolder, Johnathan McLoyd
GHMPO	Sam Baker, Joseph Boyd
GRTA/SRT	Jamie Fischer
А	Jaillie Fischer
Gwinnett	
MARTA	
Other	

# 1. Welcome & Review of 5/22/18 Meeting Summary

David D'Onofrio, ARC, called the meeting to order. He noted that the draft May 22<sup>nd</sup> meeting summary was distributed for review. There were no modifications and the summary was accepted.

# 2. Transportation Planning Updates

#### a. ARC

#### i. Amendments #6 and 7

Patrick Bradshaw, ARC, updated the committee on ARC's upcoming schedule of amendments. Currently, ARC staff are planning on a 6th and 7th amendment to the Atlanta Region's Plan. Amendment #6 will not require a new emissions analysis and will rely on a conformity short form. Staff will be updating financial and exempt projects only. Public comment will begin at the beginning of October, and ARC will provide Interagency with an update via email in the middle of September. D'Onofrio noted that during this amendment staff would meet the requirements to reconfirm conformity for the new 2015 ozone standard nonattainment area.

ARC staff also anticipate a 7<sup>th</sup> amendment early in 2019. This amendment will require a new emissions analysis and will likely be the last amendment ARC completes before the new RTP update scheduled for adoption in early 2020.

### ii. 2020 RTP Update and MPO Schedule Coordination

David Haynes, ARC, provided an update on ARC's development of the next RTP, due in early 2020. Staff have been working on the update requirements continuously since the adoption of the last RTP, the Atlanta Region's Plan, in 2016. There are several key tasks left, including reconfirming the plan's policy framework, updating socio-economic data (including extending the plan horizon to 2050), and travel demand modeling. Staff anticipates going to public comment with the plan towards the end of 2019 and receiving Board approvals in January or February of 2020.

D'Onofrio then led a conversation about synching work across all three MPOs. Since GHMPO is now required to participate in conformity again due to the South Coast 2 court ruling, their participation and timing is important for the schedules of ARC and CBMPO. The conversation left to two main issues to be resolved: the plan horizon year and timing for public comment for all three MPOs plans. Currently, GHMPO and CBMPO are planning on using a 2045 horizon year for their RTP updates, while ARC is planning on using 2050. After deliberation, Tamara Christion, FHWA, committed to looking to see if it would be acceptable for ARC to interpolate 2045 for the other two MPOs' requirements, thereby not forcing ARC to build an extra model year.

All three MPOs will need to include the finalized CDR as part of their public involvement process. Through the conversation, ARC and CBMPO seem to be on synch with public comment late in 2019 and adoption in early 2020. GHMPO, however, is set to adopt their new RTP later, in summer 2020. Interagency followed with a brief conversation about options, since GHMPO will have to go through public involvement with the CDR well ahead of final public comment for their plan. In the end, it was decided that GHMPO could likely go through two public comment periods and have their board approve the CDR ahead of final adoption of their plan later in the summer.

#### b. CBMP0

Tom Sills, CBMPO, explained that CBMPO is well underway in getting the socio-economic data that GDOT will need to build a model for their MPO for project evaluation for the 2020 plan. CBMPO is planning on hiring a consultant in January for work related to the RTP. CBMPO has no planned amendments between now and the adoption of their plan update.

#### c. GHMP0

Sam Baker, GHMPO, updated the committee on happenings in Hall County. GHMPO is proceeding with a TIP amendment, which involves some changes to the breaking points of a project on I-85. Since the changes don't require rerunning emissions, GHMPO has prepared a short form that their board will approve with the amendment in November. At that time, ARC and CBMPO will also need to act to concur.

Related to their RTP development, GHMPO is meeting with GDOT in September to talk about their modeling schedule. Currently a consultant is working on a CTP for Jackson County and that work will be incorporated into upcoming work for Hall County as well.

# 3. Air Quality Updates

# a. 2015 Ozone Standard Designations & Requirements

Richard Wong, EPA, kicked off the discussion about air quality items. On June 4, EPA finalized designations for the 2015 8-hr. ozone standard. These designations were effective on August 3. Currently there is a one-year grace period for conformity requirements. The Implementation Rule for the new standard has not been finalized. For Atlanta, a sevencounty portion of the region was designated as a marginal nonattainment area with an attainment year of 2021. Since the attainment date is in the summer of 2021, the region is required to meet the standard using validated data up to summer of 2020. As part of the development of the Implementation Rule, EPA took comments on how to handle 2008 ozone areas, but the final rule will likely not speak to that due to the ongoing South Coast 2 court case.

## b. 2008 Ozone Implementation Plan Court Ruling (South Coast 2)

Dianna Myers, EPA, updated the committee on the South Coast 2 ruling. On April 23, 2018, EPA filed a petition with the Court for a rehearing on the following: 1) direct application of Clean Air Act § 172(e) when EPA replaces an existing ozone NAAQS with a more stringent standard and (2) determination that Clean Air Act § 176(c)(5) "unambiguously" requires application of transportation conformity requirements after a NAAQS has been revoked in areas that were redesignated as attainment areas. EPA also asked that if a rehearing is not granted that the court would remand the decision without vacatur to allow EPA the opportunity to implement the court's decision.

The court requested a response from the environmental petitioners to EPA's request for a remand without vacatur. The court also wanted to know the petitioner's and EPA's thoughts on to a potential stay of the vacatur. The Enviros responded to the rehearing request by the deadline of August 1, 2018, and EPA responded to the court by the deadline of August 15, 2018. We are still waiting for the court's ruling on the rehearing petition and a possible stay.

EPA is moving forward in implementing the court's ruling that second 10-yr maintenance plans are due for the 1997 8-hour ozone standard. Atlanta's second 10-yr plan will be due in 2022.

## 4. New Business/Announcements

- a. Myers noted that soon EPA will release an updated version of MOVES2014b. This update only addresses non-road components and won't be required for conformity.
- b. Wong noted that EPA received Georgia's fuel RVP plan update.
- c. Gil Grodzinsky, GA EPD, announced that GA EPD is continuing forward with TCM removal. They're working on finding the offsets and will provide more information soon.

d.	Guy Rousseau, ARC, noted that ARC is preparing to perform an update to our on-board survey. The last update was in 2009. This iteration will include Title VI information and all fixed routes in the ARC model domain.

# Interagency Consultation Group October 23, 2018

#### MEETING SUMMARY

Attendees	
ARC	David D'Onofrio, David Haynes, Kyung-Hwa Kim, Patrick Bradshaw, Kofi Wakhisi, Jean Hee Barrett, John Orr
СВМРО	
Cobb	
Douglas	
EPA	
EPD	Gil Grodzinsky
FHWA	Tamara Christion
FTA	
GDOT	Daniel Dolder, Johnathan McLoyd, Habte Kassa
GHMPO	Sam Baker
GRTA/SRT A	Jamie Fischer
Gwinnett	
MARTA	
Other	

# 1. Welcome & Review of 8/28/18 Meeting Summary

David D'Onofrio, ARC, called the meeting to order. He noted that the draft August 28th meeting summary was distributed for review. There were no modifications and the summary was accepted.

# 2. Transportation Planning Updates

#### a. ARC

#### i. Amendment #6

Patrick Bradshaw, ARC, updated the committee on the status of TIP Amendment #6. Public comment for the amendment closes on October 24th. ARC's committees are scheduled to act in November. A public hearing was held as part of October's TAQC meeting. No comment was provided at that time.

#### ii. Amendment #7

Next Bradshaw outlined ARC's plan for TIP Amendment #7. This amendment will include a new emissions analysis as part of the conformity determination. ARC expects there to be some changes to the state's MMIP program, possibly some SPLOST project changes and the addition of MARTA's BRT TIGER grant. In addition, there will be some financial changes for projects in 2019 and 2020. ARC staff expect this amendment to be

the last before the major RTP/TIP update in 2020, which will extend the horizon year of the RTP to 2050.

ARC staff are finalizing the schedule for Amendment #7. Over the next month staff will finalize a coding list for the modelers. Travel model coding is expected to occur in the first quarter of 2019. IAC should expect planning assumptions for review ahead of the initialization of modeling. A 15-day public comment period is planned for some time in April with approvals likely in May, 2019. ARC staff requested that any changes to projects in CBMPO or GHMPO be provided to ARC shortly to incorporate into the model coding.

# iii. 2020 RTP Update

David Haynes, ARC, provided a brief overview of ongoing work to develop ARC's next full RTP update in early 2020. ARC staff is polishing up schedules for the work and have had a lot of activities going on in the background. This plan will not require a wholesale change due to the extensive work ARC has undertaken over the past few years in updating content along with major amendments to the RTP/TIP. Ongoing work this year includes updating land use forecasts, revisiting the policy framework and updating financial forecasts. ARC staff are still working with stakeholders to ensure that projects will be coded correctly, and everything will be accounted for in the updated assumptions for the plan.

#### b. CBMPO

No update.

#### c. GHMP0

Sam Baker, GHMPO, updated the committee on happenings in Hall County. GHMPO is taking its TIP Amendment #2 through approvals in November and are requesting concurrence from CBMPO and ARC. This amendment required a conformity short form that they provided to Interagency. Baker noted that GHMPO staff is still aware of the need to provide ARC with projects for their 2020 RTP update by September 30, 2019.

# 3. Air Quality Updates

# a. FHWA Interim Conformity Guidance

Tamara Christion, FHWA, gave an overview of a memo provided to division offices on how to deal with conformity post-South Coast II court ruling. Areas have until February 16, 2019 to begin accounting for conformity, if necessary, under the 1997 ozone standard. The way ARC integrated the 1997 standard back into the process meets the requirements. More guidance from EPA is expected soon.

The committee also briefly discussed other ramifications of the court ruling, including implications for Macon and Murray County as well as SIP requirements. In the Atlanta region, no new SIPs are required until 2022 (the 2nd maintenance plan for 1997 ozone standard).

#### b. Other Air Quality Updates

Gil Grodzinsky, EPD, updated the group on work at the state. A SIP revision to adjust the required Reid Vapor pressure is currently moving through the chain at EPA. Grodzinsky also explained that the TCM removal work is moving through an in-house review. He expects to share more information about that early in 2019. Finally, Grodzinsky noted that EPA will be starting their ozone standard review shortly, as part of the five-year review requirement outlined in the Clean Air Act.

#### 4. New Business/Announcements

- a. D'Onofrio noted that ARC will be releasing an RFP later in the year to update the CMAQ calculator
- **b**. John Orr, ARC, announced that ARC staff is working on recalibrating and updating the regional travel model to push out to the year 2050, the horizon year of the upcoming RTP update
- c. Orr also announced that ARC is entering procurement for the transit on-board travel survey, which will occur in 2019. Some people on IAC may be asked to participate on the RFP review committee. The \$1.7M survey will update travel modeling assumptions with characteristics of transit users. ARC is targeting 40,000 surveys across all routes in the Atlanta region. Following this survey, in 2020 or 2021, ARC will also bid out a full regional travel survey.
- **d**. Jamie Fischer, SRTA/GRTA, informed the group that she would be preparing the annual air quality update for her organization. She may reach out to ARC and GA EPD for information.

# Interagency Consultation Group January 22, 2019

#### **MEETING SUMMARY**

Attendees	
ARC	David D'Onofrio, David Haynes, Kyung-Hwa Kim, Patrick Bradshaw, Kofi Wakhisi, John Orr
CBMP0	Tom Sills
Cobb	
Douglas	
EPA	
EPD	Gil Grodzinsky
FHWA	Tamara Christion
FTA	
GDOT	Daniel Dolder, Habte Kassa, Spencer Pucci, Megan Weiss
GHMPO	Sam Baker
GRTA/SRT A	Parker Martin
Gwinnett	
MARTA	
Other	

# 1. Welcome & Review of 10/23/18 Meeting Summary

David D'Onofrio, ARC, called the meeting to order. He noted that the draft October 23<sup>rd</sup> meeting summary was distributed for review. There were no modifications and the summary was accepted.

# 2. Transportation Planning Updates

#### a. ARC

#### i. Amendment #7

Patrick Bradshaw, ARC, reminded the group that the main reason for amendment #7 is to make changes to regionally significant projects. Many managed lanes projects are being modified, and a new BRT route in Atlanta is being incorporated into the TIP.

Interagency concurred with planning assumptions on January 4th. Staff have started modeling, which will be completed by March. Staff will distribute a draft CDR to Interagency by the end of March with emission analysis results. The final CDR and amendment documentation will go to a 15-day public comment period on April 4th. Approvals for the plan are scheduled for May before an expected conformity determination in June.

# ii. 2020 RTP Update

David Haynes, ARC, provided a brief overview of ongoing work to develop ARC's next full RTP update in early 2020. During the last regularly scheduled ARC committee day, staff held a kick-off meeting with policy makers from both the transportation and land use committees. ARC staff are now working on finalizing any changes to the plan's policy framework while concurrently developing land use and transportation model estimates and assumptions. The plan horizon year is being pushed out to 2050.

Over the next few months ARC staff will be meeting with local governments to prioritize transportation needs and receive feedback to help develop the 2020 RTP update. ARC staff will bring more information about this work to Interagency throughout 2019.

#### b. CBMP0

Tom Sills, CBMPO, updated the committee on planning work in Bartow County. Staff have been working on developing land use data to provide to GDOT for travel modeling for their 2020 RTP update. Currently, there is an RFQ out to select a consultant to develop a project list. Apart from 2020 RTP development, staff are working on a railroad bridge feasibility study and several studies or projects on Cass-White Road and SR 411.

#### c. GHMP0

Sam Baker, GHMPO, updated the committee on happenings in Hall County. GHMPO kicked-off plan development for their next RTP. They selected a consultant and will provide a project list to ARC by September 30. GHMPO is also working on a micro-transit study to look at the feasibility of services like Uber supplementing public transit. Finally, Baker informed the group that Hall County was selected as a location for an inland port, GHMPO staff is looking for money to study the impacts that will have on their transportation system.

# 3. Air Quality Updates

#### a. EPA's South Coast II Guidance

D'Onofrio provided a brief update on guidance EPA released last November to address conformity after the South Coast II court ruling in February 2018. The guidance indicates that regional emissions analyses are not required in orphan counties for the 1997 ozone standard. Conformity can be met in these areas through tracking new projects as exempt and non-exempt, interagency consultation, and documenting the TCMs if there are any in the region. This guidance adjusts the way ARC will perform conformity determinations, removing a model network year and streamlining the process.

## b. Other Air Quality Updates

Grodzinsky updated the group on work at the state. EPD is looking for strategies to reduce ozone below the 2015 standard's 70 ppb. Staff have been more involved with stakeholders and have participated in conversations with regional organizations and groups on how to continue to improve air quality.

The state is preparing to release information to Interagency on the removal of TCMs in the SIP and the adjustment of summer fuel in the 13-county area to match the rest of the state.

With EPA staff on furlough due to the shutdown, the timeline for some of this work has been adjusted; but in short, the state is planning on removing all but one TCM from the SIP and hopes to have that task completed, along with the fuel requirement changes, this year.

# 4. New Business/Announcements

a. John Orr, ARC, announced that this would be D'Onofrio's last meeting at ARC. D'Onofrio has accepted a job with FHWA's Resource Center. David Haynes will chair the committee in the interim until a permanent replacement is identified.

# Interagency Consultation Group February 26, 2019

#### MEETING SUMMARY

Attendees	
ARC	David Haynes, Jean Hee Barrett, Guy Rousseau, Abby Marinelli, Aileen Daney, John Orr
CBMP0	Tom Sills (by phone)
Cobb	
Douglas	
EPA	Dianna Myers (by phone)
EPD	Gil Grodzinsky, Deb Basnight
FHWA	Tamara Christion (by phone)
FTA	
GDOT	Daniel Dolder, Habte Kassa, Charles Robinson, Megan Weiss
GHMPO	Sam Baker
GRTA/SRT A	George McDonald
Gwinnett	
MARTA	
Other	

# 1. Welcome & Review of 01/22/19 Meeting Summary

David Haynes, ARC, called the meeting to order. He noted that the draft January 22<sup>nd</sup> meeting summary was distributed for review. Two modifications were suggested by EPD, one of which was a typo. The other change regarded how "orphan" and "non-orphan" counties need to be addressed in the regional emissions analysis related to the 1997 ozone standard. The modifications were accepted and the meeting notes were subsequently approved.

#### 2. TCM Removal SIP

Gil Grodzinsky, EPD, discussed proposed changes to MOVES emissions modeling inputs related to the 2008 8-hr. ozone standards. The changes are highlighted under Emissions Modeling Assumptions > MOVES Inputs > Fuel > Summer Fuel Reclassification on the attached document at the end of this summary. EPD is proposing that fuel input values be revised to reflect the phase out of summer fuel requirements in the 45 county Atlanta region. The recommendations are to maintain inputs reflecting fuels with a stricter volatility level for all model runs before 2020, but switch to a different formulation input value for 2020 and later.

EPD intends to show the calculations related to these changes at the Interagency meeting in either March or April. Following presentations to TCC and TAQC at dates to be determined, and a public comment period, a final draft of the TCM Removal SIP will be submitted to EPA with

eventual publication of the new rule and effective date to be determined. The changes will then be made in CDR documentation and planning assumptions at the next available opportunity.

# 3. Special Studies Updates

## a. FHWA Resiliency Study

Aileen Daney, ARC, provided a status update on a new initiative involving the development of multiple deliverables to be used in informing a regional transportation system vulnerability and high-level risk assessment. These include the deployment of a tool to assess hydrological and thermal vulnerabilities, as well as information necessary to assess asset criticality and system vulnerability and risk. This work is funded through a \$175,000 FHWA grant and ARC recently contracted with Atkins, Inc. to provide consultant services. Work will continue throughout 2019 and ARC will provide periodic updates to Interagency at key milestones, as warranted.

#### b. On-Board Transit Survey

Guy Rousseau, ARC, updated the group on a major transit usage survey necessary to calibrate the regional travel demand model. The last similar study was conducted approximately a decade ago. The goal is to capture 10% of the total transit ridership, with most data collection to occur in and around October 2019. ARC anticipates a completion by spring 2020. Total funding for the survey is \$1.75 million, with MARTA being a local funding partner for the required match. ETC Institute is the consultant for the work.

# 4. Transportation Planning Updates

#### a. ARC

#### i. Amendment #7

Jean Hee Barrett, ARC, provided an update about ongoing work activities related to an amendment to the FY 2018-2023 TIP and the 2040 RTP. Staff are continuing with modeling work, which will be completed by March. A modified list of changes, reflecting edits to GDOT's Major Mobility Investment Program, will be provided to Interagency within the next several days. A draft CDR will be distributed to Interagency by the end of March with emission analysis results and financial constraint details. The final CDR and amendment documentation will go to a 15-day public comment period on April 4th. Approvals for the plan are scheduled for May before an expected conformity determination in June. GHMPO and CBMPO were reminded that concurrence resolutions were required from them since this amendment involves conducting a new emissions analysis.

## ii. 2020 RTP Update

David Haynes, ARC, provided an update on ongoing work to develop ARC's next full RTP update in early 2020. Over the past month, ARC staff have been meeting with local governments to prioritize transportation needs and receive feedback to help develop a revised project list. The plan horizon will be extended to 2050 as part of the update. ARC conducted a test for that year using new forecasts to ensure meeting air quality

conformity requirements would not be a problem. ARC staff will bring more information about this work to Interagency throughout 2019.

#### b. CBMP0

Tom Sills, CBMPO, updated the committee on planning work in Bartow County. Staff have been working on developing land use data to provide to GDOT for travel modeling for their RTP update. A consultant should be selected by mid-March to assist with the update. Apart from 2020 RTP development, staff conducted a public information open house this month for a project on Cass-White Road.

#### c. GHMP0

Sam Baker, GHMPO, updated the committee on planning work in Hall County and the portion of Jackson County within their MPO area. GHMPO has selected a consultant and will provide a project list to ARC by September 30, with all work on the RTP update complete by June 2020. Forecasts for 2050 for Jackson County have been prepared and GDOT will provided base year data for Hall County this spring.

As reported in January, Hall County was selected as a location for an inland port and GHMPO is study the impacts that will have on their transportation system, most notably the need for a new interchange at I-985 and SR 365. A micro-transit study has been completed, which included recommendations to eliminate three of six fixed routes and dial-a-ride services with new on-demand micro-transit services. GHMPO is now seeking bids to provide the recommended services.

#### 5. Air Quality Updates

There was no new information to report.

#### 6. New Business/Announcements

None. The meeting was subsequently adjourned. The next scheduled meeting is March 26.

# Interagency Consultation Group June 25, 2019

#### MEETING SUMMARY

Attendees	
ARC	David Haynes, Jean Hee Barrett, Guy Rousseau, Abby Marinelli, Aileen Daney, John Orr, Patrick Bradshaw
CBMP0	Tom Sills
Cobb	
Douglas	
EPA	Kelly Sheckler (by phone)
EPD	Gil Grodzinsky
FHWA	
FTA	John Crocker
GDOT	Daniel Dolder, Habte Kassa, Megan Weiss, Paul Tanner, Ryan Walker
GHMPO	Joseph Boyd
GRTA/SRT A	Jamie Fischer
Gwinnett	
MARTA	
Other	

# 1. Welcome & Review of 03/26/19 Meeting Summary

David Haynes, ARC, called the meeting to order. He noted that the March 26 meeting summary was distributed for review by email and no modifications had been received. The meeting notes were therefore approved by consensus.

#### 2. STAQS 2019 Conference

Kelly Scheckler, EPA, invited attendees to attends the Southern Transportation and Air Quality Summit. It will be held August 20-21 in Louisville, KY and is being sponsored by the Kentuckiana Regional Planning and Development Agency. A flyer with more information was provided.

#### 3. TCM Removal SIP

Gil Grodzinsky, EPD, gave a presentation on a proposed action by Georgia EPD which is currently open for public comment through August 5. A public hearing on the proposed action will be held on July 29.

Transportation Control Measures (TCMs) are transportation projects or programs codified into the U.S. Code of Federal Regulations (CFR) through inclusion in Georgia's EPA approved, regulatory complying State Implementation Plan (SIP). ARC tracks the implementation of these projects through the Conformity Determination Report associated with regional transportation

plan updates. TCMs in the Atlanta SIP cover the gamut of transportation improvements from transit enhancements and commuter incentives to the HOV system and bridges associated with the Atlantic Station redevelopment.

Many TCMs were included in the SIP during the period of the middle 1990s to help advance attainment of the 1-hour ozone nonattainment area. In these cases, the State took off-travel model credit for their implementation in the SIP directly. Later in the 1990s and early 2000s, during the conformity lapse, several TCMs were added to allow for the continued advancement of certain key infrastructure project in a period when all non-exempt projects were frozen. Outside of these periods, no TCMs have been added to the Atlanta nonattainment area's transportation program.

TCMs inserted in the State's SIP do not have a sunset, unless specifically mentioned. Many are outdated, with new technologies or programs being implemented. In some cases, TCMs have affected land use decisions and can prevent the implementation of newer best practices in travel demand management or transit operations. Many TCMs have outlived their useful life and are due to be retired. Therefore, GA EPD has requested that all TCMs, except one, be removed from the SIP. As demonstrated in information provided in the presentation this action will have no negative impact on air quality in the Atlanta region. It will require no action by ARC (other than notification of the process through standing committees), and will not impact any projects in the TIP/RTP.

A technical memorandum was subsequently developed by EPD, with additional information on the background rationale of the proposal, a list of the TCMs being removed, and the results of an impacts analysis of their removal. ARC will use this memo as the basis for informing its committees of the proposed action during the month of July.

# 4. On-Board Transit Survey

Guy Rousseau, ARC, gave a presentation on a major transit usage survey currently underway to calibrate the regional travel demand model. The last similar study was conducted approximately a decade ago. The purpose is to collect rider demographic and origin/destination data in order to help calibrate the regional travel demand model and support transit planning functions of ARC and partner agencies. This will improve the region's competitiveness for FTA New Starts funding. The survey will also collect information on new transit access options, such as TNCs and e-scooters.

The goal is to capture 10% of the total transit ridership, with most data collection to occur in and around October 2019. ARC anticipates a completion by spring 2020. Total funding for the survey is \$1.75 million, with MARTA being a local funding partner for the required match. ETC Institute is the consultant for the work.

# 5. Five Party Memorandum of Agreement

David Haynes, ARC, advised the group that ARC is currently revising the federally required MOA which defines roles and responsibilities between the MPO, the state Department of

Transportation and transit operators. This agreement has not been updated since 2009 and is being revisited as a result of the creation of the ATL Authority. Signatory agencies to the MOA will be ARC, ATL, GDOT, GRTA and MARTA. Approvals are expected by the five agencies in August and September.

## 6. Transportation Planning Updates

#### a. ARC

David Haynes, ARC, provided an update on ongoing work to develop ARC's next full RTP update in early 2020. Draft fiscally constrained project lists have been developed and modeling activities are scheduled to begin in late summer. Documentation is underway and materials are being prepared for engagement efforts which will occur throughout the remainder of 2019. Adoption of the plan update is scheduled for February 2020. ARC staff will provide a fuller briefing on modeling assumptions for IAC concurrence at the next meeting.

#### b. CBMPO

Tom Sills, CBMPO, updated the committee on planning work in Bartow County. Staff have been working with VHB to develop potential projects for inclusion in the RTP update. Completion is anticipated in early 2020 in conjunction with the ARC plan update. As information becomes available, it will be provided to ARC for travel demand and air quality modeling either in the current major update or via an amendment in 2020.

#### c. GHMP0

Sam Baker, GHMPO, updated the committee on planning work in Hall County and the portion of Jackson County within their MPO area. GHMPO is working with RS&H to provide a project list to ARC by September 30, with all work on the RTP update complete by June 2020. As information becomes available, it will be provided to ARC for travel demand and air quality modeling either in the current major update or via an amendment in 2020.

#### 7. Air Quality Updates

There was no new information to report.

#### 8. New Business/Announcements

None. The meeting was subsequently adjourned. The next scheduled meeting is August 8.

#### **MEETING SUMMARY**

Attendees	
ARC	David Haynes, Jean Hee Barrett, Guy Rousseau, Abby Marinelli, Aileen Daney, John Orr, Patrick Bradshaw, Mike Carnathan, Kyung-Hwa Kim
CBMP0	Tom Sills
Cobb	
Douglas	
EPA	Kelly Sheckler, Dianna Myers, Richard Wong (all by phone)
EPD	Elisabeth Munsey
FHWA	
FTA	John Crocker
GDOT	Daniel Dolder, Habte Kassa, Megan Weiss, Ted Hicks, Sarah Lamothe
GHMPO	Joseph Boyd
GRTA/SRT A	Jamie Fischer
Gwinnett	
MARTA	
Other	

# 1. Welcome & Review of 06/25/19 Meeting Summary

David Haynes, ARC, called the meeting to order. He noted that the June 25 meeting summary was distributed for review by email and no modifications had been received. The meeting notes were therefore approved by consensus.

# 2. Update on TCM Removal SIP Update

Elisabeth Munsey, EPD, gave an updated on a proposed action by Georgia EPD to remove all Transportation Control Measures, except one, from the SIP. Technical background information on this proposal has been reviewed with IAC at previous meetings. Elisabeth reported that a public hearing was held on July 29 and there were no attendees. The comment period closed on August 5 and no comments were received other than a request for clarification on one item from EPA. EPD was scheduled to discuss the issue with EPA on August 9 and then submit the TCM removal request. EPA then has 18 months to review the request and take action.

# 3. Update on Approval Status of Five Party Memorandum of Agreement

David Haynes, ARC, provided an update on the approval process of a federally required MOA which defines roles and responsibilities between the MPO, the state Department of Transportation and transit operators. Background information on this process has been

discussed with IAC at previous meetings. Signatory agencies to the MOA will be ARC, ATL, GDOT, GRTA and MARTA. Approvals will occur by the five agencies during August and September.

# 4. MPO Planning Updates

#### a. CBMPO

Megan Weiss, GDOT, stated that CBMPO approved a draft list of capacity projects to provide to ARC within the next couple of weeks. Tom Sills, CBMPO, joined the meeting later and confirmed this information.

#### b. GHMPO

Joseph Boyd, GHMPO, stated that staff presented a first draft of capacity projects to their committees on July 30 and anticipates being able to have a final list by mid September.

## 5. Atlanta RTP Planning Assumptions

David Haynes, ARC, prefaced three presentations by indicating that a model assumptions document circulated prior to the meeting was not completely updated to reflect ABM/PECAS information. That item will be updated and provided next week and will be included on the agenda at the next meeting for discussion.

#### a. Forecasts

Mike Carnathan, ARC, provided an overview of the process used to establish population and employment forecasts used in modeling activities for conformity determinations. A narrative file was provided to the group in advance of the meeting and Mike summarized a few key milestones and outcomes. Key data points include the fact that ARC is projecting a population of 8.6 million by 2050. The methodology for assigning growth to various portions of the region using the PECAS model was also described.

# b. Modeling Calibration/Validation

Guy Rousseau, ARC, gave an overview of the process used to calibrate the regional travel demand model to ensure that it accurately represents existing travel conditions. These efforts have involved a peer review, updating base year 2015 socioeconomic data, updating the external model, adding a work from home model and undertaking extensive sensitivity testing. Results of 2015 actual data compared to 2015 model results showed levels of accuracy for both highway and transit trips which exceed national best practice "rules of thumb".

# c. Exempt and Non-Exempt Projects

Patrick Bradshaw, ARC, reviewed various lists of projects proposed for inclusion in the RTP. The purpose is to ensure that those projects which need to be included in the regional travel demand model and the conformity determination process are identified. Five lists were reviewed: 1) Draft Non-Exempt Project List (Atlanta MPO); 2) Draft Exempt Project List (Atlanta MPO); 3) List of Known Capacity Projects Outside of Atlanta MPO (excluding CBMPO& GHMPO); 4) Draft CBMPO Project List; and 5) Draft GHMPO Project List. Since the

CBMPO and GHMPO project lists are still draft, the timing and process of how the final lists will be reflected in the model needs additional discussion. ARC has suggested including the best possible information available now and then revising the lists as necessary via an amendment in early 2020. The group agreed to continue coordinating closely on this issue over the next few months to determine the best approach.

The discussion closed with an agreement that IAC members would review all of the information provided and provide any feedback by Friday, August 23. This will include a revised modeling assumptions document which will be forwarded on Friday, August 16.

## 6. Air Quality Updates

Elisabeth Muncey, EPD, reported that a monitor hit a critical value which will prevent the region from achieving the ozone standard this year. This has no direct impact on the process at this time.

## 7. New Business/Announcements

None. The meeting was subsequently adjourned. The next scheduled meeting is August 27.

#### MEETING SUMMARY

Attendees	
ARC	David Haynes, Guy Rousseau, Kyung-Hwa Kim, Abby Marinelli, Steve Lewandowski
CBMP0	Tom Sills (via phone)
Cobb	
Douglas	
EPA	Dianna Myers (via phone), Richard Wong (via phone)
EPD	Gil Grodzinsky
FHWA	David D'Onofrio
FTA	
GDOT	Phil Peevy, Megan Weiss, Matthew Fowler, Sarah Lamothe, Johnathan McLoyd, Habte Kassa
GHMPO	Sam Baker
GRTA/SRT A	Jamie Fischer
Gwinnett	
MARTA	
Other	Jing Xu (HNTB)

# 1. Welcome & Review of 08/08/19 Meeting Summary

David Haynes, ARC, called the meeting to order. He noted that the August 8 meeting summary was distributed for review by email and no modifications had been received. The meeting notes were therefore approved by consensus.

# 2. Old Business / Tracking

## a. TCM Removal SIP Status

Gil Grodzinsky clarified that a new SIP revision has been sent to USEPA for approval. USEPA now has up to 18 months to approve the new SIP revision.

# b. Approval Status of Five Party Memorandum of Agreement

David Haynes updated the status of the Five Party MOA. The document is being reviewed by the approving committees of the five agencies. It has been approved by the ATL Authority's Board. Other agencies are reviewing and expect final approval in September.

# 3. Atlanta RTP Planning Assumptions

## a. Recap of Previously Provided Materials

The forecasts, model calibrations and validations, and lists of exempt and non-exempt projects were presented at the previous meeting. David noted that there were very small tweaks to the presented modeling assumptions and project lists that do not affect the overall outcome of the model or potential conformity. There were no additional comments on those changes. A new draft of assumptions was sent out the day before this meeting that included updates from Gil (regarding updates to the MOVES model) and some additional edits from ARC modeling staff. Jamie also provided additional comments regarding presentation and formatting that have not yet been incorporated into the draft.

## b. Modeling Assumptions (Guy Rousseau, ARC)

Guy provided an update to the modeling assumptions. He noted that EPA provided notes on the nomenclature included in the document and those changes have been included. Some other minor edits were made to the text. The appendices to this document will be updated to reflect some additional information (like the Traffic Forecasting Resource) noted by Jamie Fischer to clarify model calibration and validation terms. Guy noted that the model is officially calibrated and validated. He reviewed the remainder of the document and noted that it remains largely unchanged from previous drafts. Sam Baker asked to clarify that the travel demand modeling domain included Hall county, but that the air quality model did not include Hall county. Abby Marinelli answered that Sam was correct, that Hall was included in the travel demand model but is not directly modeled in the MOVES air quality model. Gil asked to clarify what the official model start date is. Guy answered that the modeling is currently underway and that the model start date is actually considered the model calibration/validation date.

## c. Feedback on All Materials Prepared to Date

David noted that there were no additional comments on the assumptions. Therefore, the necessary documents (forecasts, modeling assumptions, and exempt and non-exempt projects lists) are approved by IAC to be used in the CDR.

# 4. MPO Long Range Plan Process Updates

#### a. ARC

David noted that the modeling for the updated RTP was expected to be completed by mid-October. Open Houses are scheduled for September and October. The official public comment period is scheduled for November. Official adoption is scheduled for February 2020. ARC anticipates having to prepare an Amendment 1 to the RTP as quickly as possible to include projects from Hall and Bartow counties, due to those project lists being in flux. Dianna clarified that Hall county is only part of the 1997 orphan maintenance area and therefore does not have to be included in a regional emissions analysis, but they do have to

be part of the Interagency process and coordinate the planning process. Guy clarified that project lists from CBMPO and GHMPO are still needed by September 30th.

### b. CBMPO

CBMPO is working through their project list development and open house phase in order to meet the September 30<sup>th</sup> deadline.

#### c. GHMP0

Sam Baker provided an update to the GHMPO RTP update. The existing project list is not acceptable to the local policymakers, so they are working with GDOT Planning to alter the list and get it approved by the September 30<sup>th</sup> deadline.

# 5. South Coast II Ruling - Implications on Regional Coordination

David D'Onofrio discussed the implications of the South Coast II ruling on the region's planning processes. South Coast II found that EPA revoked the 1997 standard improperly. To be conservative, ARC used an overly inclusive modeling area to develop its RTP Amendment and demonstrated conformity to the revoked standards. EPA then provided guidance on the ruling, which said that the 1997 area that was not part of the 2008 or 2015 standards is considered "partial orphan areas." These areas no longer have to demonstrate conformity through an emissions analysis, but they do have to participate in the interagency process and the other requirements for conformity. Hall county still needs to participate in the Interagency process due to South Coast II, and they still need to provide project lists because they are part of the ARC 21-county travel demand model.

Dianna stated that Hall county needs to be on a 4-year planning cycle because they still need to demonstrate conformity, just without the emissions analysis component. It was agreed in the end that a 4-year planning cycle will be followed based on synching Hall county's planning cycle with the Atlanta area to keep the process simple.

# 6. Air Quality Updates

No new updates.

#### 7. New Business/Announcements

Jamie Fischer noted that the pre-read for the RTP update is scheduled for November and the GRTA/SRTA board approval meeting is scheduled for January 2020. The November meeting will also include a 2019 ozone season update.

The next scheduled meeting is September 24.