1997 Ozone NAAQS Second Maintenance Plan for the Atlanta Maintenance Area

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Air Protection Branch

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Executive Summary

This document fulfills Georgia's requirement under the Federal Clean Air Act Amendments of 1990 (CAA Section 175A(b)) to submit a second maintenance plan showing that the Atlanta area will continue to maintain the 1997 ozone National Ambient Air Quality Standard (NAAQS) over the remainder of the 20-year maintenance period[1].

The Atlanta maintenance area for the 1997 8-hour ozone NAAQS includes the counties of Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton.

The Atlanta area qualifies for its second 10-year maintenance plan to be submitted as a limited maintenance plan. In order to qualify, the 2018-2020 ozone design values at the Atlanta area monitors must have been less than 85% of the 1997 ozone NAAQS (0.08 parts per million (ppm)) with design value trends from 2009 to 2020 showing stable or decreasing ozone levels, and the area must have had no violations of the 8-hour ozone standard since being redesignated. This document is being submitted as a limited maintenance plan.

There has been and will continue to be the implementation of permanent and enforceable reductions in ozone precursor emissions along with continued compliance with all applicable requirements through the end of the maintenance period which is in 2034. Georgia EPD will continue to operate its air quality monitors in the Atlanta area, and contingency measures cited in the first 10-year maintenance plan will continue to apply for the remaining 10 years of the maintenance period. The transportation conformity process, assuring no interference in maintenance of the standard by onroad mobile transportation projects, will continue through the end of the second 10-year period; with the exception that the motor vehicle budgets will be uncapped. Ozone levels are far enough below the air quality standard that transportation planning should not cause an exceedance of the 1997 ozone NAAQS; especially with continued oversight through the transportation conformity process.

[1]This affirmation of attainment addresses the 1997 8-hour ozone NAAQS for the second 10-year maintenance plan period.

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1.0 Introduction and Background

1.1 Purpose

This document contains the technical support and documentation necessary for the Georgia Environmental Protection Divisions (EPD) to fulfill the requirements of The Clean Air Act (CAA) Section 175A(b), and to demonstrate that the Atlanta maintenance area will continue to maintain ozone levels below the 1997 8-hour ozone NAAQS of 0.08 parts per million (ppm) (84 parts per billion (ppb)) for the remainder of the 20-year maintenance period ending in 2034. This demonstration is comprised of a second 10-year limited maintenance plan (LMP). The Atlanta area qualifies for this less burdensome, limited option because the ozone design value (annual 4th high daily maximum 8-hour concentration averaged across 3-years) for the years 2018-2020 was below 85% of the standard (≤71 ppb), and ozone design values from 2009 to 2020 generally show decreasing ozone levels.

This LMP was prepared in accordance with the United States Environmental Protection Agency (EPA) guidance on LMPs in the form of a memorandum, issued on November 16, 1994, and the EPA resource document issued on November 20, 2018, on "orphan maintenance areas" for the 1997 8-hour ozone NAAQS.

1.2 Historical Background

On July 18, 1997, EPA promulgated a revised ozone standard of 0.08 ppm, measured over an 8-hour period. The 1997 8-hour ozone standard is more protective of public health and more stringent than the previous 1979 1-hour ozone standard.

In accordance with Section 107(d)(1) of the CAAA, the Atlanta area was designated as a nonattainment area for the 1997 8-hour ozone NAAQS in a Federal Register notice on April 30, 2004[2], to be effective June 15, 2004. The CAA requires nonattainment areas that are meeting the NAAQS to develop maintenance plans to show continued maintenance of the NAAQS, and to document a plan to address future violations of the NAAQS. These maintenance plans are divided into two ten-year periods with a new plan developed for each period.

The Atlanta area was redesignated to attainment/maintenance for the 1997 8-hour ozone NAAQS with the approval of the first maintenance plan demonstrating attainment through the initial 10-year period. This redesignation was effective on January 2, 2014[3]. Effective June 2, 2017, the Atlanta area was designated as attainment for the 2008 8-hour ozone standard[4]. Effective August 3, 2018, the Atlanta area was designated marginal nonattainment for the 2015 8-hour ozone NAAQS[5]. On April 6, 2015, EPA revoked the 1997 8-hour ozone NAAQS as part of the final implementation rule for the 2008 ozone NAAQS[6]. This implementation

[2] 69 FR 23858, April 30, 2004
[3] 78 FR 72040, December 2, 2013
[4] 82 FR 25523, June 2, 2017
[5] 83 FR 25776, June, 4, 2018
[6] 80 FR 12264, March 6, 2015

rule also indicated that maintenance areas that had attained the 2008 ozone standard were no longer required to develop and submit a second 10-year maintenance plan for the 1997 ozone NAAQS which would have been due to EPA by December 2, 2021.

However, certain aspects of EPA's Implementation Plan rule were challenged in court[7]. One of the items challenged was EPA's rule that excused "orphan maintenance areas," areas that had been redesignated to attainment for the 1997 ozone NAAQS and were designated attainment for the 2008 ozone NAAQS, from submitting a second maintenance plan for the 1997 ozone NAAQS. On February 16, 2018, the D.C. Circuit Court issued a decision in South Coast Air Quality Management District v. EPA (South Coast II) that, among other things, granted the petitioners argument on this point. The Court held that "orphan maintenance areas" are required to submit the "second 10-year" maintenance plans under CAA section 175A(b). Therefore, these "orphan maintenance areas" must submit a second maintenance plan to ensure maintenance through the full 20-year period following the effective date of redesignation.

To assist areas that were nonattainment or maintenance for the 1997 8-hour ozone NAAQS in development of their second 10-year maintenance plans, EPA provided a resource document that outlines LMPs as an option that areas may choose to meet CAA section 175A requirements[8]. Conditions to qualify for an LMP and its requirements are described in the next section. This second 10-year maintenance plan, in this case an LMP, builds upon the foundation established by the first maintenance plan which was previously approved by EPA.

A map showing the Atlanta 1997 ozone NAAQS maintenance area is provided below in Figure 1-1.

[7] United States Court of Appeals for the District of Columbia Circuit. *South Coast Air Quality Management District v. EPA*.
[8] USEPA. *Resource Document for 1997 Ozone NAAQS Areas: Supporting Information for States Developing Maintenance Plans*. November 20, 2018.

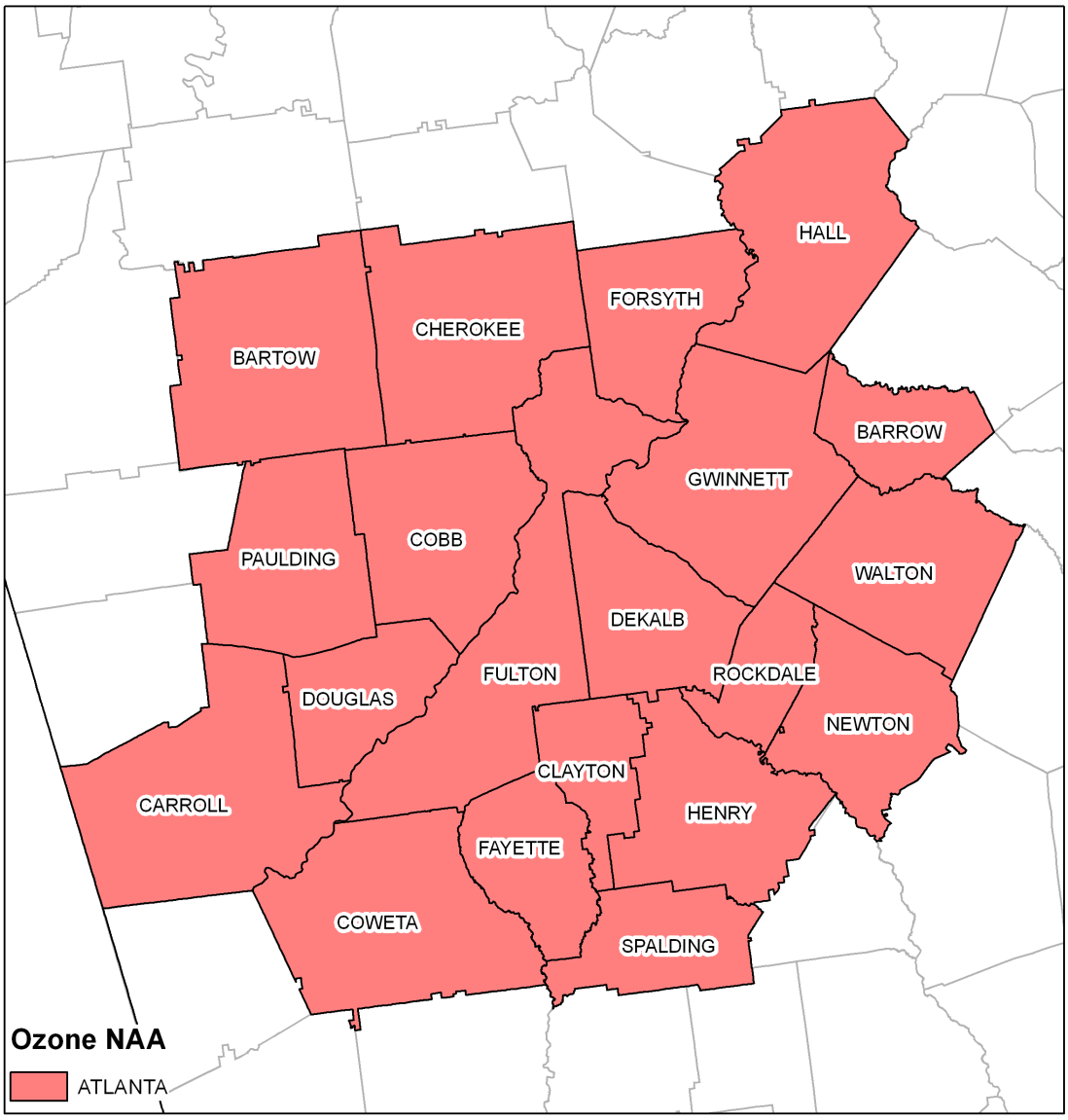

Figure 1-1. Atlanta 1997 Ozone NAAQS Maintenance Area.

1.3 Criteria for Limited Maintenance Plan Eligibility

According to the "Resource Document for 1997 Ozone NAAQS Areas: Supporting Information for States Developing Maintenance Plans" (the EPA Resource Document), provided by EPA on November 20, 2018, an area qualifies for the option to submit an LMP if:

1. Based on certified ambient monitoring data, the 2018-2020 design values are "significantly below the level of the standard" which has been defined in previous LMP guidance as not more than 85% of the level of the standard; which in this case is 71 ppb for the 1997 8-hour ozone standard (85% of 84 ppb).
2. Based on certified ambient monitoring, the design values have demonstrated a "stable or improving air quality trend".

Both of these requirements have been satisfied for the Atlanta maintenance area with supporting data and tables provided in Section 2 of this document.

1.4 Requirements of a Limited Maintenance Plan

This document has been prepared with all of the required elements of an LMP according to the EPA Resource Document. These elements include:

1. Ambient monitoring data that demonstrates continued attainment of the 1997 8-hour ozone NAAQS since attaining the standard with 2018-2020 design values below 85% of the level of the standard. In addition, it includes assurances of continued monitoring of air quality at the same level as for the first maintenance plan and reporting annually of the design value.
2. Emissions inventory. An LMP is not required to project emissions until the end of the maintenance period, which for the Atlanta 1997 8-hour ozone maintenance area is January 2, 2034.
3. Proof of stable or improving air quality trend. This is demonstrated by showing a downward trend of design values over the previous years.
4. Continued application of control measures as listed in the previous 10-year maintenance plan.
5. List of contingency plans that would be triggered in the unlikely event the design value, over the final 10 years of the maintenance period, approaches or exceeds the 1997 8-hour ozone NAAQS.
6. Continued application of transportation conformity.

2.0 Ambient Monitoring Data

2.1 Review and Assessment of Monitored Ozone Concentrations

2.1.1 Overview

The 1997 NAAQS for ground-level ozone is 0.08 ppm based on an 8-hour average concentration. With the EPA-established rounding convention, an 8-hour monitor reading of 0.085 ppm or greater is considered an exceedance of the 8-hour ozone standard, whereas a reading of 0.084 ppm or less is not. For the purpose of this demonstration, the units of ppb are used so 84 ppb is considered the limit for the standard. Compliance with the 1997 8-hour ozone NAAQS is based on an average of the annual 4th highest 8-hour daily maximum concentrations from each of the last three years of ambient air monitoring data. A violation of the ozone NAAQS occurs when the three-year average of the annual 4th highest 8-hour daily maximum concentrations exceeds 84 ppb. Therefore, the LMP requires a current design value equal to or below 85% of the standard or 71 ppb.

The 2018-2020 ozone design values for the Atlanta maintenance area ozone monitors demonstrate compliance with the 8-hour ozone NAAQS with a value of 70 ppb, which is below the 85% level (71 ppb). The 2008-2010 ozone design value was 80 ppb, which brought the area into attainment. Since then, the ozone design values in the Atlanta area have generally decreased, and the most recent design value (2018-2020) is 70 ppb.

2.1.2 Ozone Monitoring Network

There are currently nine ambient ozone monitoring stations in and around the Atlanta ozone maintenance area for 1997 ozone NAAQS. EPD operates seven of the nine ozone monitors located in the Atlanta area from March 1st through October 31st. The eight monitor is a National Core Monitoring Network (NCore) ozone monitor (South DeKalb, 13-089-0002) that operates year-round. The ninth monitor is part of the Clean Air Status and Trends Network (CASTNET, 13-231-9991) that operates year-round. All of the ozone monitors in the Atlanta area are operated according to the requirements of 40 CFR Part 58. These monitoring stations have been installed and operated in accordance with 40 CFR 58. Together they provide adequate coverage of the maintenance area and have been representative of the areas of highest concentration. Figure 2-1 shows the locations of all nine monitors and Table 2-1 lists the start date of each monitor. Georgia will continue to operate the monitoring network in accordance with 40 CFR 58 for the duration of the second ten years of the maintenance period, unless a change is approved by EPA. Table 2-2 contains a summary of the 8-hour ozone design values for each year at all the Atlanta maintenance area monitors starting from 2007-2009 and continuing all the way to the most recent three-year period (2018-2020).

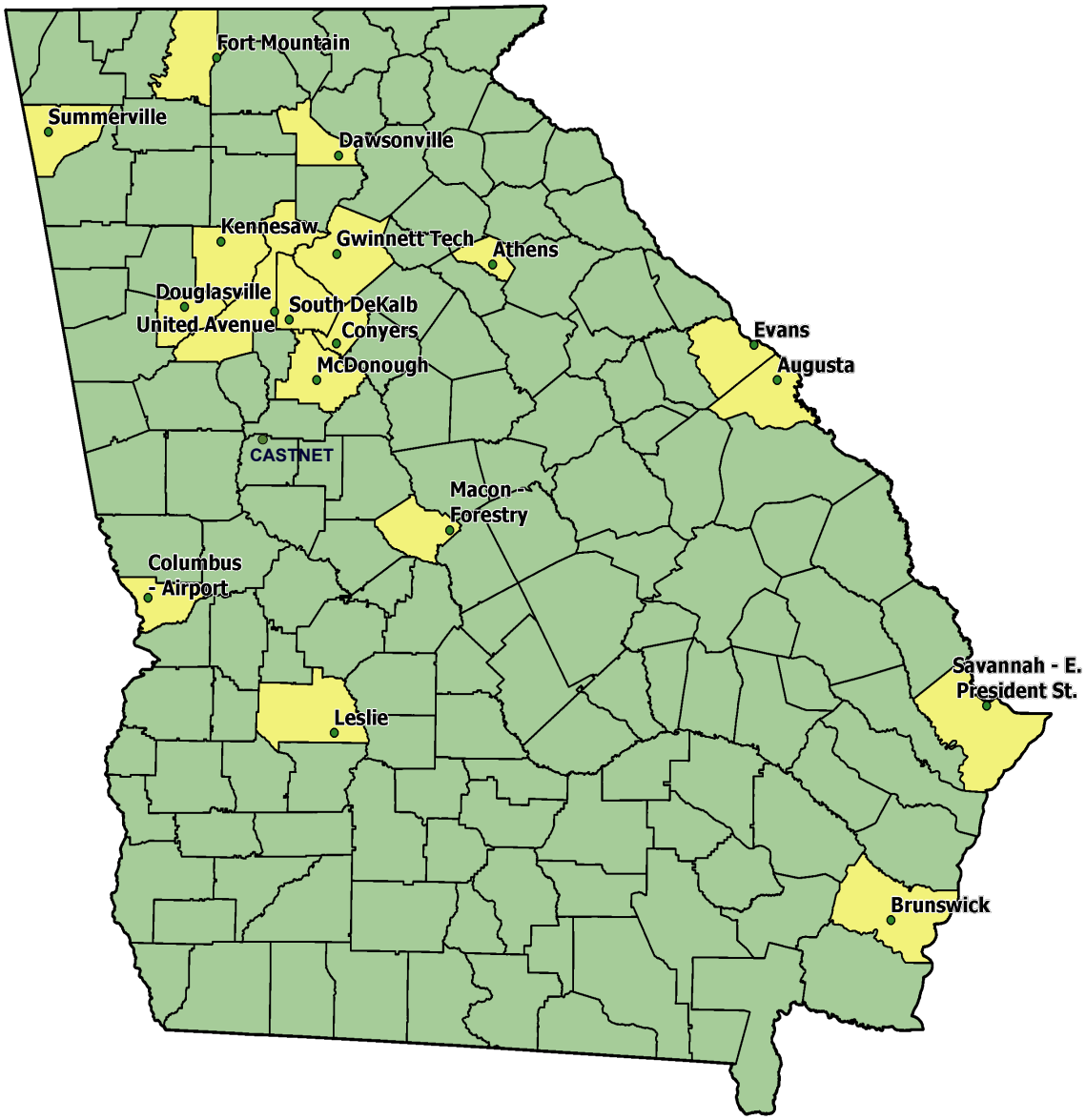

Figure 2-1. Georgia Ozone Monitor Locations as of 2021.

Table 2-1. Metro Atlanta Ozone Data Collection Sites

Site Name	AQS Site ID	Start Date
Kennesaw – Georgia National Guard, 1901 McCollum Parkway	13-067-0003	Sept. 1, 1999
South DeKalb – 2390-B Wildcat Road	13-089-0002	Jan. 1, 1974
Douglasville – Douglas County Water Authority, 7725 W. Strickland St.	13-097-0004	Aug. 15, 1997
Gwinnett Tech – 5150 Sugarloaf Pkwy, Lawrenceville	13-135-0002	March 17, 1995
McDonough – Blessings Thrift Store, 86 Work Camp Road	13-151-0002	June 7, 1999
Conyers – Monastery, 2625 GA Highway 212	13-247-0001	July 26, 1978
United Ave. – 945 East United Ave.	13-121-0055	Oct. 1, 1991
Dawsonville – Georgia Forestry Commission, 4500 Georgia Highway 53 East	13-085-0001	January 1, 1985
CASTNET – GA Agricultural Experiment Station, Pike County	13-231-9991	Jan. 1, 2011[+]

[+]As of 2011, the CASTNET ozone monitor met the Code of Federal Regulations (40 CFR) and met quality assurance and completeness criteria. Therefore, as of 2011, data collected by this monitor can be used for comparison to the NAAQS.

2.1.3 Ambient Ozone Monitoring Data

All of the ozone ambient monitoring data was collected in accordance with 40 CFR 58 and has been submitted to EPA's Air Quality System (AQS). This process continues through the collection of the data for calculating the 2018-2020 design value. The actual method for determining attainment of the 8-hour ozone standard is contained in 40 CFR 50.10. The standard is attained when the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.08 ppm (which is equivalent to 84 ppb), as determined by Appendix I, 40 CFR 50. The number of significant figures in the level of the standard dictates the rounding convention for comparing the computed 3-year average annual fourth-highest daily maximum 8-hour average ozone concentration with the level of the standard. The third decimal place of the computed value is rounded, with values equal to or greater than 5 rounding up. Thus, a computed 3-year average ozone concentration of 0.085 ppm or 85 ppb is the smallest value that is greater than 0.08 ppm.

The listing of the design values showing the three-year average of the fourth highest ozone concentrations at Atlanta area monitors is included in Table 2-2 below. Design values for the last several years have been stable and below 85% of the 1997 8-hour ozone NAAQS (≤71 ppb).

As Table 2-2 and Figure 2-2 indicate, ozone design values in the Atlanta area generally show a downward trend. The largest increase in recent history occurred between the 2013-2015 and 2014-2016 design values (2 ppb increase), following which the design values continued to decrease.

Table 2-2. Ozone Design Values (ppb) at the Atlanta Maintenance Area Monitors. The highest value for each year is shown in red bold.

Ozone Monitor Name (AIRS ID)	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019	2018-2020
Kennesaw (13-067-0003)	80	76	78	77	73	68	65	66	67	66	65	62
Dawsonville (13-085-0001)	73	71	68	67	64	64	64	65	65	65	64	61
South DeKalb (13-089-0002)	86	79	77	80	75	72	67	71	71	69	69	67
Douglasville (13-097-0004)	79	75	74	75	71	67	66	68	69	67	67	64
United Avenue (13-121-0055)	86	**80**	**80**	**83**	**80**	76	**73**	**75**	**75**	**73**	**73**	**70**
Gwinnett (13-135-0002)	81	74	75	78	77	72	69	72	71	69	66	66
McDonough (13-151-0002)	**87**	79	78	82	**80**	**77**	71	74	71	71	70	67
CASTNET (13-231-9991)					72	69	66	68	67	66	65	62
Conyers (13-247-0001)	85	78	75	79	77	**77**	72	74	69	70	68	67
AVERAGE	**82**	**77**	**76**	**78**	**74**	**71**	**68**	**70**	**69**	**68**	**67**	**65**

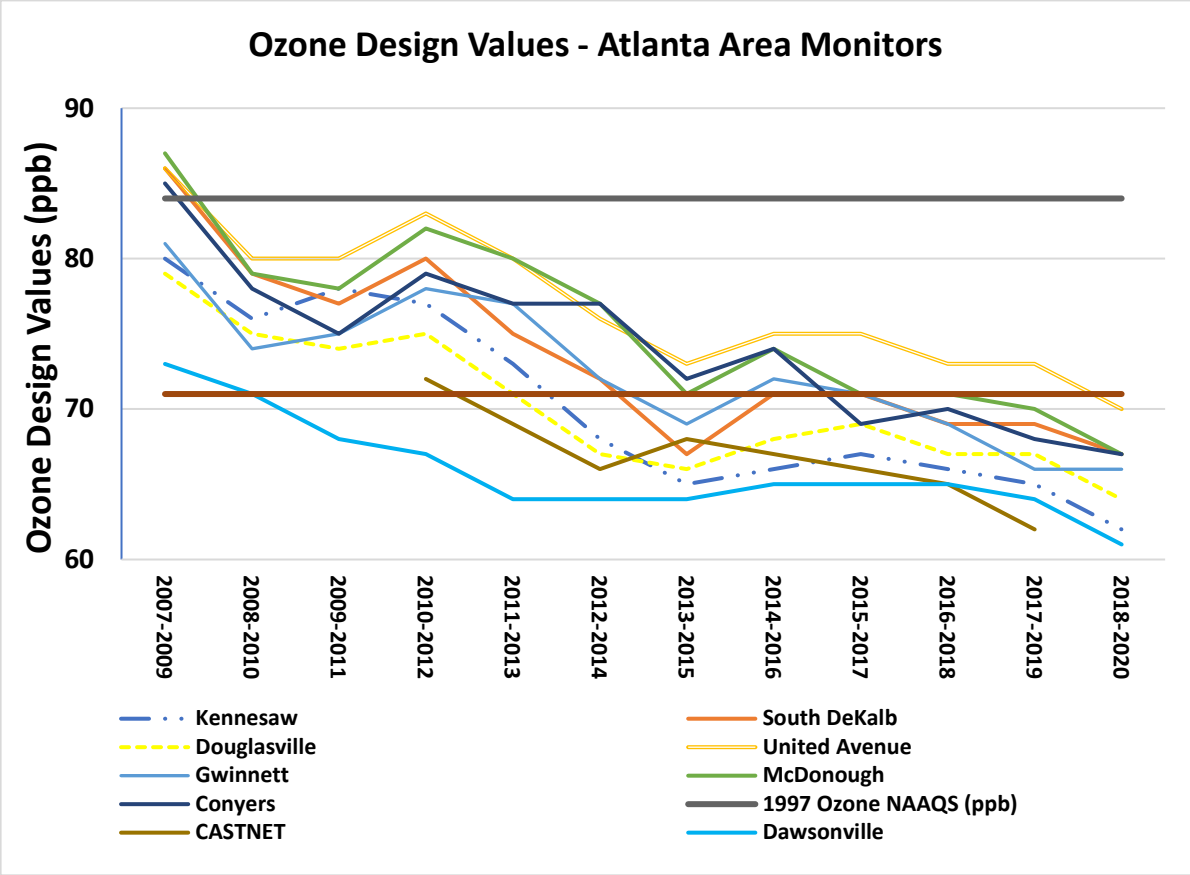

Figure 2-2. Atlanta Maintenance Area 3-Year Ozone Design Value History.

Table 2-3 is a summary of the fourth-highest daily maximum 8-hour average ozone concentration for the Atlanta area monitors for each year from 2009 to 2020. This table further demonstrates how ozone values have been generally decreasing in the Atlanta area. The trend is more variable since these are annual values, but a clear downward trend is evident.

Table 2-3. Ozone 4th Highest Annual Values at Atlanta Area Monitors (2009-2020) (ppb)

Ozone Monitor Name (AIRS ID)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Kennesaw (13-067-0003)	76	79	79	75	67	63	66	70	65	65	67	56
Dawsonville (13-085-0001)	67	73	66	63	63	66	63	67	65	65	62	57
South DeKalb (13-089-0002)	77	75	80	85	62	70	71	74	68	67	73	61
Douglasville (13-097-0004)	72	74	78	73	63	65	70	71	66	64	72	56
United Avenue (13-121-0055)	77	80	84	87	69	73	77	75	74	72	75	63
Gwinnett (13-135-0002)	73	72	82	80	69	68	71	78	65	65	68	66
McDonough (13-151-0002)	74	78	82	88	70	75	70	78	67	69	75	58
CASTNET (13-231-9991)			75	77	64	66	68	71	62	65	68	54
Conyers (13-247-0001)	70	76	81	81	71	79	68	76	65	69	72	60
AVERAGE	**73**	**76**	**79**	**79**	**66**	**69**	**69**	**73**	**66**	**67**	**70**	**59**

3.0 Emissions Inventory

In an LMP, the maintenance demonstration requirement is considered satisfied if the monitoring data shows the area is meeting the air quality criteria for submission of an LMP (i.e., 85% or lower of the 1997 8-hour ozone NAAQS). Because the ozone design values are meeting the 85% threshold, LMPs are not required to project emissions over the maintenance period. Since the ozone redesignation for the Atlanta area for 1997 8-hour ozone was effective on January 2, 2014, the 20-year maintenance period ends January 2, 2034. This document assures maintenance of the 1997 8-hour ozone NAAQS throughout that period.

As stated earlier, a projected emissions inventory is not required, but EPA's Resource Document provides links to already prepared emissions inventories to illustrate emissions trends in support of LMPs[9]. Included below are two summary tables generated from the data EPA has made available from the 2014 National Emissions Inventory (NEI) with projections out to 2028. The 2014 emissions inventory information is from the EPA 2014 version 7.0 modeling platform. The EPA developed an air quality modeling platform for air toxics and criteria air pollutants that represents the year 2014 based on the 2014 National Emissions Inventory (NEI), version 2 (2014NEIv2). This 2014 modeling platform includes all criteria air pollutants and precursors. The air quality modeling platform consists of all the emissions inventories and ancillary data files used for emissions modeling, as well as the meteorological, initial condition, and boundary condition files needed to run the air quality model. For information on how EPA developed this inventory, visit EPA's Air Emissions Modeling Website[10]. The 2028 emissions inventory is projected from EPA's 2011 version 6.3 modeling platform. The inventory documentation for this platform can be found on EPA's Air Emissions Modeling Website[11]. Table 3-1 and Table 3-2 illustrate the projected changes in NO_x and VOC emissions by sector (Fire, Nonpoint, Nonroad, Onroad and Point) in the Atlanta area between 2014 and 2028. Note, these emissions are the total cumulative emissions for the summer months (May through September) for the entire Atlanta area (Appendix A). Based on data contained in Table 3-1, total summer-time NO_x emissions are expected to decline approximately 58% between 2014 and 2028. Similarly, Table 3-2 indicates that total summer-time VOC emissions will decline approximately 27% over the same time. These projected decreases in emissions will ensure that the Atlanta area will continue to maintain the 1997 8-hour ozone NAAQS.

[9] https://www.epa.gov/ground-level-ozone-pollution/1997-ozone-national-ambient-air-quality-standards-naaqs-nonattainment

[10] https://www.epa.gov/air-emissions-modeling/2014-2016-version-7-air-emissions-modeling-platforms

[11] https://www.epa.gov/air-emissions-modeling/2011-version-63-platform

Table 3-1. Atlanta Area NO_x Emissions in 2014 and 2028 (Summer tons[12])

NO_x	Fire		Nonpoint		Nonroad		Onroad		Point		Total	
County	**2014**	**2028**	**2014**	**2028**	**2014**	**2028**	**2014**	**2028**	**2014**	**2028**	**2014**	**2028**
Barrow	0	0	55	44	62	43	610	123	29	12	756	222
Bartow	0	1	165	166	148	104	1,630	469	2,604	110	4,547	850
Carroll	0	0	75	69	137	86	1,343	373	16	14	1,571	542
Cherokee	0	0	80	50	303	194	922	278	43	4	1,348	526
Clayton	0	0	103	84	266	156	1,131	374	2,229	2,556	3,729	3,170
Cobb	0	0	479	397	815	535	3,053	788	552	263	4,899	1,983
Coweta	0	3	117	97	148	89	859	269	405	14	1,529	472
DeKalb	0	0	304	264	709	347	2,973	883	88	91	4,074	1,585
Douglas	0	0	78	51	103	67	701	200	0	0	882	318
Fayette	0	0	60	54	140	92	370	117	6	5	576	268
Forsyth	0	0	65	31	275	232	852	239	22	17	1,214	519
Fulton	0	0	626	545	1,169	712	4,765	1,632	355	440	6,915	3,329
Gwinnett	0	0	364	267	1,176	803	3,223	973	2	2	4,765	2,045
Hall	0	0	157	93	276	205	1,410	280	73	48	1,916	626
Henry	0	1	186	120	257	147	1,034	331	682	440	2,159	1,039
Newton	0	0	49	40	130	77	781	165	14	17	974	299
Paulding	0	0	149	89	119	73	491	159	1	0	760	321
Rockdale	0	0	46	31	97	62	440	124	23	26	606	243
Spalding	1	1	33	31	56	33	482	90	0	0	572	155
Walton	0	0	37	31	116	74	614	128	45	162	812	395
Total	**1**	**6**	**3,228**	**2,554**	**6,502**	**4,131**	**27,684**	**7,995**	**7,189**	**4,221**	**44,604**	**18,907**

[12] Summer tons is defined as the total cumulative emissions for May through September.

Table 3-2. Atlanta Area VOC Emissions in 2014 and 2028 (Summer tons)

VOC	Fire		Nonpoint		Nonroad		Onroad		Point		Total	
County	**2014**	**2028**	**2014**	**2028**	**2014**	**2028**	**2014**	**2028**	**2014**	**2028**	**2014**	**2028**
Barrow	0	0	336	277	46	64	302	89	31	33	715	463
Bartow	0	2	618	509	222	218	561	172	164	59	1,565	960
Carroll	0	0	667	560	172	125	537	158	115	84	1,491	927
Cherokee	0	1	830	715	444	304	463	205	17	6	1,754	1,231
Clayton	0	0	1,048	989	182	210	535	205	398	517	2,163	1,921
Cobb	0	0	2,842	2,646	1,339	1,134	1,806	606	317	178	6,304	4,564
Coweta	1	6	559	519	153	128	317	132	40	26	1,070	811
DeKalb	0	0	2,884	2,648	1,163	421	1,399	536	545	476	5,991	4,081
Douglas	0	0	675	592	78	86	304	122	0	0	1,057	800
Fayette	0	0	430	400	120	175	228	98	33	14	811	687
Forsyth	0	0	722	611	376	485	432	168	86	40	1,616	1,304
Fulton	0	0	4,096	3,647	1,360	1,034	2,592	865	122	127	8,170	5,673
Gwinnett	0	0	3,458	3,030	1,504	1,590	1,670	726	36	28	6,668	5,374
Hall	0	0	1,009	924	618	454	765	207	182	134	2,574	1,719
Henry	0	1	738	652	221	191	465	208	185	152	1,609	1,204
Newton	0	1	444	408	84	117	407	120	169	167	1,104	813
Paulding	0	0	495	438	89	105	267	119	1	0	852	662
Rockdale	0	0	341	320	88	97	188	76	73	55	690	548
Spalding	3	3	364	308	124	43	259	68	25	19	775	441
Walton	0	1	435	359	95	117	371	102	43	41	944	620
Total	**4**	**15**	**22,991**	**20,552**	**8,478**	**7,098**	**13,868**	**4,982**	**2,582**	**2,156**	**47,923**	**34,803**

4.0 Maintenance Demonstration

4.1 State and Federal Measures

As stated in the Sally L. Shaver memo[13] titled "Limited Maintenance Plan Option for Non-classifiable Ozone Nonattainment Areas":

> *The EPA believes if the area begins the maintenance period at or below 85% of exceedance levels, the air quality along with the continued applicability of PSD requirements, and control measures already in the SIP, and Federal measures, should provide adequate assurance of maintenance over the initial 10-year maintenance period*

PSD requirements are under Georgia Rules for Air Quality Control 391-3-1-.02(7):

- All new major sources and major modifications in Georgia, are currently subject to Prevention of Significant Deterioration (PSD) under Georgia Rules for Air Quality Control 391-3-1-.02(7).

In addition to the above-mentioned PSD requirements, Georgia has in place the following SIP approved rules that will help with maintenance of the 1997 ozone standard.

SIP Approved Rules:

- Georgia Rules for Air Quality Control 391-3-1-.02(2)(yy) - Emissions of Nitrogen Oxides from Major sources.
- Georgia Rules for Air Quality Control 391-3-1-.02(2)(jjj) - NO_x Emissions from Electric Utility Steam Generating Units.
- Georgia Rules for Air Quality Control 391-3-1-.02(2)(lll) - NO_x from Fuel Burning Equipment.
- Georgia Rules for Air Quality Control 391-3-1-.02(2)(rrr) - NO_x from Small Fuel Burning Equipment.
- Georgia's Rules for Enhanced Inspection and Maintenance 391-3-20 - Vehicle Emissions Inspection and Maintenance (I/M) Program.
- Georgia Rules for Air Quality Control 391-3-1-.02(13) - Cross State Air Pollution Rule NO_x Annual Trading Program.

Additionally, the following national standards are now being implemented in various phases:

- Onboard Refueling Vapor Recovery for Light Duty Vehicles.
- Architectural and Industrial Maintenance Coatings.

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[13]https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/19941116_shaver_limited_maintenance_nonclassifiable.pdf

- Automobile Refinishing.
- The National Emission Standards for Hazardous Air Pollutants (NESHAP); the majority of which are for VOC.
- Phase II Acid Rain Program for NO_x.
- Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements (65 FR 6697).
- Tier 3 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements (79 FR 23414)
- Cross State Air Pollution Rule

5.0 Mobile Source Emissions Budget

5.1 Mobile Source Maintenance Budgets Under a Limited Maintenance Plan

As stated in the Sally L. Shaver memo titled "Limited Maintenance Plan Option for Nonclassifiable Ozone Nonattainment Areas":

> *The transportation conformity rule (58 FR 62188; November 24, 1993) and the general conformity rule (58 FR 63214; November 30, 1993) apply to nonattainment areas and maintenance areas operating under maintenance plans. Under either rule, one means of demonstrating conformity of Federal actions is to indicate that expected emissions from planned actions are consistent with the emissions budget for the area. Emissions budgets in limited maintenance plan areas may be treated as essentially not constraining for the length of the initial maintenance period because it is unreasonable to expect that such an area will experience so much growth in that period that a violation of the ozone NAAQS would result. In other words, EPA would be concluding that emissions need not be capped for the maintenance period. Therefore, in areas with approved limited maintenance plans, Federal actions requiring conformity determinations under the transportation conformity rule could be considered to satisfy the "budget test" required in sections 93.118, 93.119, and 93.120 of the rule. Similarly, in these areas, Federal actions subject to the general conformity rule could be considered to satisfy the "budget test specified in section 93.158 (a) (5) (i) (A) of the rule.*

Therefore, the second 1997 8-hour ozone LMP for the Atlanta area does not need to provide a mobile source emissions budget.

6.0 Ozone Monitoring Network

6.1 Continued Operation of Monitoring Network

To verify the attainment status of the area over the maintenance period, the LMP should contain provisions for continued operation of an EPA-approved air quality monitoring network, in accordance with the 40 CFR Part 58. This is particularly important for areas using LMPs because there is essentially no cap on emissions.

As listed in Table 2-1, currently there are nine ambient ozone monitors operating at various locations in the Atlanta maintenance area. Georgia will continue to operate the monitoring network in accordance with 40 CFR 58 for the duration of the second ten years of the maintenance period, unless a change is approved by EPA. There are currently no plans to discontinue operation, relocate, or otherwise affect the ambient monitoring network that is in place. Current ozone monitoring operations are consistent with the requirements of 40 CFR Part 58, and any EPA-approved changes that are made will also be consistent with 40 CFR Part 58 requirements.

7.0 Contingency Plan

Section 175A(d) of the Clean Air Act Amendments requires that the maintenance plan include provisions for contingency measures that would promptly be implemented by the state to correct any violation of the 1997 8-hour ozone NAAQS after redesignation to attainment. A list of potential contingency measures that could be considered for future implementation in such an event should also be included in the maintenance plan. The minimum requirement for contingency measures is the implementation of all measures that were contained in the SIP for the area (i.e., the nonattainment plan) before the redesignation. In addition, EPA guidance (John Calcagni memo dated September 4, 1992) specifies the following pertaining to contingency provisions in the maintenance plan:

- identification of additional measures that would be considered for implementation should a violation occur;
- identification of triggers for the implementation of additional contingency measures; and
- a schedule and procedure for adoption and implementation of additional measures (with time limit).

EPD developed a contingency plan for the Atlanta 8-hour ozone maintenance area for the first 10-year maintenance plan that will continue during the second 10-year maintenance plan. Contingency measures are intended to provide further emission reductions in the event that violations of the 1997 8-hour NAAQS occur after redesignation to attainment. Consistent with this plan, EPD agrees to adopt and implement, as expeditiously as practicable, the necessary corrective actions in the event that violations of the 1997 8-hour ozone NAAQS occur anywhere within the Atlanta maintenance area after redesignation to attainment. Contingency measures as described below will be implemented within 24 months of a contingency measure trigger.

The State of Georgia will use ambient monitoring data and emissions inventory trends as the indicators to determine whether contingency measures would be implemented. In accordance with 40 CFR Part 58, ambient ozone monitoring data that indicates a violation of the ozone NAAQS will begin the process to implement these contingency measures according to the protocols identified below. The contingency plan provides for corrective responses should the 8-hour ozone NAAQS be violated, or if emissions in the Atlanta maintenance area increase significantly above current levels.

7.1 Contingency Measure Trigger

Tier I: Any 8-hour ozone monitoring reading exceeding 84 ppb at an ambient monitoring station located in the Atlanta maintenance area or periodic emissions inventory updates that reveal excessive or unanticipated growth greater than 10% in emissions of either NOx or VOCs over the attainment or intermediate emissions inventories for the Atlanta maintenance area (as determined by the triennial emission reporting required by AERR (80 FR 8787)).

The ozone trigger concentrations described above apply to each monitor in the maintenance area. EPD will evaluate the exceedances as expeditiously as practicable to determine if the trend is likely to continue. If it is determined that additional emission reductions are necessary, EPD will implement the Tier II schedule below to implement any required measures as expeditiously as practicable, taking into consideration the ease of implementation and the technical and economic feasibility of selected measures. It should be noted that EPA does not require a state to implement contingency measures when occasional exceedances are recorded.

Tier II: Any recorded violation of the 1997 8-hour ozone NAAQS at any of the metro Atlanta ambient monitoring stations in the Atlanta maintenance area. EPD will conduct a comprehensive study to determine the cause(s) of the violation and to determine if the trend is likely to continue.

The comprehensive analysis, based on quality assured ambient data, will examine:

- The number and severity of the ambient ozone violations of the standard;
- The meteorological conditions contributing to ozone levels;
- Potential local contributing emissions sources;
- Potential contributing emission sources of transport;
- The geographic applicability of possible contingency measures;
- Emission trends, including implementation timelines of potential control measures;
- Current and recently identified control technologies; and

If it is determined that the violation is due to local or in-state sources, EPD will implement the necessary controls as expeditiously as possible. At least one contingency measure will be implemented within 18 to 24 months after Georgia makes a determination, based on quality-assured ambient data, that a violation of the NAAQS has occurred.

Table 7-1. Timeline and Steps for Implementing Contingency Measures.

Steps for Implementing Contingency Measures	**Timeline***
Comprehensive analysis	6 months
Identify potential sources for reductions.	3 months
Identify applicable control measures.	3 months
Initiate a stakeholder process.	3 months
Draft SIP regulations.	3 months
Complete rulemaking process (including public comment period, hearing, DNR Board adoption, and final submission to EPA). This process may be initiated simultaneously with drafting of regulations.	6 months
Completion no later than:	**24 months**

*Timeline begins when a determination is made based on quality-assured data that a trigger has occurred.

7.2 Contingency Measures

If the analysis required above determines that the Atlanta maintenance area is the source of emissions that contribute to the 1997 ozone NAAQS violation, EPD will evaluate those measures as specified in Section 172 of the CAA for control options as well as other available measures. Contingency measure(s) will be selected from those identified below or from any other measure deemed appropriate and effective at the time the selection is made. Any resulting contingency measure(s) will be based upon cost effectiveness, emission reduction potential, economic and social considerations, ease and timing of implementation, and other appropriate factors. Implementation of necessary controls will take place as expeditiously as possible. At least one contingency measure will be implemented within 18 to 24 months after Georgia makes a determination, based on quality-assured ambient data, that a violation of the NAAQS has occurred. Below are some controls that will be considered by EPD:

- Reasonably Available Control Measures (RACM) for all sources of NO_x and VOC
- Reasonably Available Control Technology (RACT) for existing point sources of NO_x and VOC
- Expansion of RACM/RACT to area(s) of transport within the State
- Mobile Source NO_x and VOC control measures
- Additional NO_x and VOC reduction measures yet to be identified

Adoption of additional control measures is subject to the necessary administrative and legal processes. EPD will solicit input from interested and affected persons (stakeholders) in the area prior to selecting appropriate contingency measures. No contingency measure will be implemented without providing the opportunity for full public participation. This process will include publication of notices, an opportunity for public hearing, and other measures required by Georgia law.

8.0 Conclusion

The 2018-2020 ozone design value for the Atlanta maintenance area demonstrates continued compliance with the 1997 8-hour ozone NAAQS. In addition, the 2018-2020 ozone design value for the Atlanta maintenance area was less than 85% of the level of the 1997 ozone standard which qualifies the Atlanta maintenance area for the submittal of an LMP for the second 10-year period. The emissions controls adopted in the first 10-year maintenance plan continue to be permanent and enforceable. The Atlanta maintenance area will continue to monitor ozone levels, calculate and report design values annually, and identify any violations of the NAAQS.

The second Atlanta maintenance plan provides a contingency plan listing steps that the region will take in case a violation or threat of violation would occur, including a 24-month timeline and list of specific controls or procedures that would be considered for implementation. Since the late 1970s, major programs have been enacted which have led to significant emissions reductions and improvements in the air quality in the Atlanta maintenance area. Those regulations are currently in place and will allow the Atlanta maintenance area to maintain the 1997 8-hour ozone NAAQS.

In summary, this second 10-year LMP fulfills the requirements of Section 175A(b) of the Clean Air Act for second 10-year maintenance plans and Georgia hereby requests that this maintenance plan be approved and finalized in the Federal Register.