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

JUN 29 2004

4APT-APB

Honorable Phil Bredesen
Governor of Tennessee
State Capitol, First Floor
600 Charlotte Avenue
Nashville, TN 37243-0001

Dear Governor Bredesen:

Fine-particle pollution represents one of the most significant barriers to clean air facing our nation today. These tiny particles – about 1/30th the diameter of a human hair – have been scientifically linked to serious human health problems. Their ability to be suspended in air for long periods of time makes them a public health threat far beyond the source of emissions. An important part of our nation's commitment to clean, healthy air deals with reducing levels of this fine particle or PM2.5 pollution.

In February, your State submitted its recommended boundaries for PM2.5 attainment and nonattainment areas. We have thoroughly reviewed your recommendations and the technical information you have submitted to support your recommendations. We appreciate the effort your State has made to develop this supporting information. Consistent with the Clean Air Act, this letter is to notify you that based on the information contained in your submittal, EPA intends to make modifications to recommended designations and boundaries in your State.

The detailed enclosure contains a description of areas where EPA intends to modify your State recommendations, and the basis for such modification. Should you have additional information that you wish to be considered by EPA in this process, we request that you provide it to us by September 1.

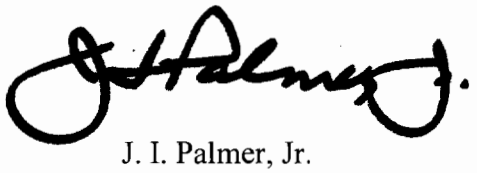
You will hear from us again in November when EPA takes the final step in the PM2.5 designation process and determines those areas that are in attainment and meet the fine particle standards and those areas that do not meet them. For areas in attainment, the challenge will be not only to maintain, but also to continue the progress you have made toward clean air. It is a commitment to no backsliding in your State's clean air status for fine particles. EPA will also issue a proposed fine particle implementation rule prior to final designations, which will allow you to proceed with planning to achieve clean air.

The Bush Administration is addressing fine particle pollution with a comprehensive national clean air strategy. This strategy includes EPA's recent rule to reduce pollution from nonroad diesel engines, and the proposed rule to reduce pollution from power plants in the

eastern U.S. These two rules are important components of EPA's efforts to help States and localities meet the more protective national fine-particle and 8-hour ozone air quality standards. Together these rules will help all areas of the country achieve cleaner air.

Should you or your staff have any questions, I invite you to contact Beverly H. Banister, Director, Air Pesticides and Toxics Management Division, at 404/562-9077, or Kay T. Prince, Chief, Air Planning Branch, at 404/562-9026. We look forward to a continued dialogue with you as we work together to implement the PM2.5 standards.

Sincerely,



J. I. Palmer, Jr.
Regional Administrator

Enclosure

cc: Robert Riley, Governor of Alabama
Sonny Perdue, Governor of Georgia
Betsy L. Child, Commissioner, TDEC
Barry R. Stephens, P.E., Director, TNDAPC
Robert H. Colby, Chattanooga-Hamilton County
Robert Rogers, Memphis-Shelby County
Lyne Liddington, Knox County
Rob Raney, Metro Public Health Dept.

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4APT-APB

Betsy L. Child, Commissioner
Tennessee Department of Environment
and Conservation
21st Floor, L & C Tower
401 Church Street
Nashville, TN 37243-0435

Dear Ms. Child:

Fine-particle pollution represents one of the most significant barriers to clean air facing our nation today. These tiny particles – about 1/30th the diameter of a human hair – have been scientifically linked to serious human health problems. Their ability to be suspended in air for long periods of time makes them a public health threat far beyond the source of emissions. An important part of our nation's commitment to clean, healthy air deals with reducing levels of this fine particle or PM2.5 pollution.

In February, your State submitted its recommended boundaries for PM2.5 attainment and nonattainment areas. We have thoroughly reviewed your recommendations and the technical information you have submitted to support your recommendations. We appreciate the effort your State has made to develop this supporting information. Consistent with the Clean Air Act, this letter is to notify you that based on the information contained in your submittal, EPA intends to make modifications to recommended designations and boundaries in your State.

Your Governor was sent a letter today notifying him that EPA is modifying the State's recommendation. This letter contains a more detailed enclosure containing a description of areas where EPA intends to modify your State recommendations, and the basis for such modification. Should you have additional information that you wish to be considered by EPA in this process, we request that you provide it to us by September 1, 2004.

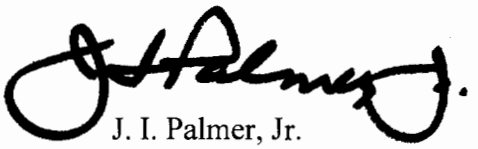
You will hear from us again in November when EPA takes the final step in the PM2.5 designation process and determines those areas that are in attainment and meet the fine particle standards and those areas that do not meet them. For areas in attainment, the challenge will be not only to maintain, but also to continue the progress you have made toward clean air. It is a commitment to no backsliding in your State's clean air status for fine particles. EPA will also issue a proposed fine particle implementation rule prior to final designations, which will allow you to proceed with planning to achieve clean air.

The Bush Administration is addressing fine particle pollution with a comprehensive

national clean air strategy. This strategy includes EPA's recent rule to reduce pollution from nonroad diesel engines, and the proposed rule to reduce pollution from power plants in the eastern U.S. These two rules are important components of EPA's efforts to help States and localities meet the more protective national fine-particle and 8-hour ozone air quality standards. Together these rules will help all areas of the country achieve cleaner air.

Should you or your staff have any questions, I invite you to contact Beverly H. Banister, Director, Air, Pesticides and Toxics Management Division, at 404/562-9077, or Kay T. Prince, Chief, Air Planning Branch, at 404/562-9026. We look forward to a continued dialogue with you as we work together to implement the PM2.5 standards.

Sincerely,



J. I. Palmer, Jr.
Regional Administrator

Enclosure

cc: James Warr, Director, ADEM
Carol A. Couch, Commissioner, GAEPD
Barry R. Stephens, P.E., Director, TNDAPC
Robert H. Colby, Chattanooga-Hamilton County
Robert Rogers, Memphis-Shelby County
Lyne Liddington, Knox County
Rob Raney, Metro Public Health Dept.

Enclosure for 120 Day Letter
Justification for Modification to State Recommendations
PM2.5 Nonattainment Areas
State of Tennessee

An Explanation of EPA's 9-Factor Analysis

Factor 1. Emissions in areas potentially included versus excluded from the nonattainment area:

The analysis for factor 1 looks at emissions of carbonaceous particles ("carbon"), inorganic particles ("crustal"), SO2 , and NOx. EPA computed a composite emission score for each county by multiplying the county's emissions as a fraction of the metropolitan area emissions for each of these pollutants times a corresponding air quality weighting factor. The air quality weighting factors for each area are given below and reflect the percentages of the total estimated "urban excess" value found as, respectively, carbonaceous particles, miscellaneous inorganic particles ("crustal material"), ammonium sulfate, and ammonium nitrate. These scores add to 100 for the metropolitan area counties. Composite scores were also calculated for counties adjacent to the metropolitan area. Tables presented under factor 1 present the emissions of carbonaceous particles, inorganic particles, SO2 , and NOx and the composite emission scores for the counties in the corresponding metropolitan area and adjacent counties. Metropolitan area counties are in bold. Emissions data indicate the potential for a county to contribute to observed violations, often making the emissions data the most important factor in assessing boundaries of nonattainment areas.

"Urban excess" values are derived by comparing urban monitored component concentrations against rural monitored component concentrations. Concentrations of the four PM2.5 components are obtained from local data if available (or, if necessary, from the nearest available urban site), and are compared to available rural concentrations. The monitoring sites used for this purpose are identified below. Although this information is air quality information, it is presented under Factor 1 due to its integration into the analysis of emissions information.

Factor 2. Air quality in potentially included versus excluded areas:

The air quality analysis looks at the annual averaged design value for each area based on data for 2001 to 2003. Counties without monitors are not listed.

Factor 3. Population density and degree of urbanization including commercial development in included versus excluded areas:

Tables presented under factor 3 show the 2003 population for each metropolitan area, as well as the population density for counties in that area. Population data indicate the likelihood of population-based emissions that might contribute to violations.

Factor 4. Traffic and commuting patterns:

The traffic and commuting analysis looks at the number of commuters in each county who drive to another county within the metropolitan area ("Number"), the percent of total commuters in each county who commute to other counties within the metropolitan area ("percent")*, as well as the total Vehicle Miles Traveled (VMT) for each county in thousands of miles. A county with numerous commuters is generally an integral part of the area, and would be an appropriate part of the domain of some mobile source strategies, thus warranting inclusion in the nonattainment area.

*Note that the percent of commuters traveling to counties within the metropolitan area is based on the total number of commuters from that county. This total includes commuters who may travel outside the metropolitan area from their county of origin.

Factor 5. Expected growth:

The expected growth analysis looks at the percent growth for counties in each metropolitan area from 1990 to 2000.

Factor 6. Meteorology:

The meteorology analysis looks at wind data gathered over a ten year period by the National Weather Service. Tables presented under factor 6 list the year round average prevailing wind directions by quadrant for each county in the corresponding metropolitan area. These data show that annual average PM2.5 concentrations are influenced by emissions in any direction at various times, but these data may also suggest that emissions in some directions relative to the violation may be more prone to contribute than emissions in other directions.

Factor 7. Geography/topography:

The geography/topography analysis looks at physical features of the land that might have an effect on the airshed, and therefore, the distribution of particulate matter over an area. The State of Tennessee has no such features that significantly influenced EPA's recommended nonattainment areas.

Factor 8. Jurisdictional boundaries:

The analysis of jurisdictional boundaries looks at the planning and organizational structure of an area to determine if the implementation of controls in a potential nonattainment area can be carried out in a cohesive manner.

Factor 9. Level of control of emission sources:

The level of control analysis looks at what controls are currently implemented in each area.

Summary of Nonattainment Areas for Tennessee

9 Factor Analysis for Knoxville Area

The Knoxville, TN MSA contains the counties of Anderson, Blount, Knox, Loudon, Sevier and Union. Based on air quality data for 2001-2003 the following MSA counties contain PM2.5 ambient air monitors (Design values are included in parenthesis): Knox County (16.8), Blount County (14.4), and Loudon County (15.4). Two adjacent Tennessee counties also contain PM2.5 monitors: Roane County (14.2), and McMinn County (14.6).

In a February 12, 2004 letter, the State recommended that Knox, Roane, and McMinn Counties be designated nonattainment based on 2000-2002 monitoring data. The State revised its recommendation on May 7, 2004, to recommend that McMinn and Roane Counties be designated attainment due to 2001-2003 data. Therefore, the State's current recommendation for the Knoxville MSA PM2.5 nonattainment area only includes Knox County and recommends that all other MSA and adjacent counties be designated attainment. The State submitted some justification for this recommendation, however, they indicated that the detailed emission information would be provided at a later date. Union County has very small amounts of PM2.5 and precursor emissions, indicating no contribution. Therefore, EPA agrees that Union County should be designated attainment/unclassifiable. Roane and McMinn, counties adjacent to the MSA, currently contain attaining ambient air monitors, however, Roane and McMinn counties have significant SO2 and NOx emissions which contribute to the violations. EPA is modifying the State's recommendation and will review the additional information during the 120 day period following the notification letter.

We have included in our recommended nonattainment area Roane County that is adjacent to the Knoxville MSA with a violating monitor, that is generally rural in character, and that contains an identifiable large emitting facility or facilities (e.g., power plants) which we believe contributes to the nearby nonattainment problem. We have included this county in our initial recommendations in order to ensure that a sufficient portion of the county, including such large facilities, is included within the boundaries of the nonattainment area as part of the final designations. We invite you to submit to us a recommendation as to what portion of this adjacent county, encompassing the large facility or facilities, should be designated nonattainment.

Based on EPA's analysis of the available information, EPA is modifying the recommended nonattainment area to include all of the MSA counties, except Union, and the adjacent counties of Roane and McMinn.

Area	EPA Recommendation	State Recommendation
Knoxville, TN	Full counties: Anderson, Blount, Knox, Loudon, Sevier, Roane, and McMinn	Full counties: Knox

Factor 1: Emissions in areas potentially included versus excluded from the nonattainment area

The following table contains the 2001 PM2.5, SOx, NOx, VOC, and ammonia emissions in tons per year and weighted emissions scores for the counties in the Knoxville MSA and some adjacent counties. (MSA counties are in bold.)

County	PM	SOx	NOx	VOC	Amm	Weighted Emissions Score	Cumulative Weighted Emissions Score
Knox	1995	3005	23648	29966	1220	28.6	28.6
Anderson	2891	45986	23020	5328	265	27.5	56.1
Blount	3535	2999	5282	8250	606	22.4	78.5
Sevier	711	433	2838	4756	472	9.4	87.9
Loudon	804	4035	5899	5338	360	8.8	96.7
Union	325	156	1057	1067	184	3.2	99.9
Roane	4967	92,331	30865	4300	285	38.0	
McMinn	3348	10216	10829	5546	1268	27.0	
Rhea	1405	302	2625	3643	149	18.1	
Haywood, NC	1218	8701	8669	4923	547	14.8	
Jefferson	1407	183	3220	4194	662	14.4	
Scott	1113	122	1338	1813	294	11.1	
Monroe	743	154	2387	3420	554	9.6	
Cumberland	682	181	3682	3989	532	8.6	
Whitley, KY	521	675	3646	3017	171	8.1	
Campbell	527	268	3323	3323	161	7.5	
Claiborne	509	165	1420	2554	475	6.0	
McCreary, KY	346	188	1414	904	52	5.8	
Cocke	400	247	2507	2361	357	5.5	

Swain, NC	12.9 328	141	567	1210	199	5.3	
Morgan	288	98	1252	929	222	4.3	
Graham, NC	209	70	377	981	47	3.2	
Grainger	288	80	893	1647	287	3.2	
Meigs	198	112	885	871	118	2.4	

Based on the analysis of emissions, there appears to be very small emissions in Union County for all the relevant pollutants. The other counties in the MSA and the counties of McMinn and Roane have significant emissions of some or all of the relevant pollutants, indicating contribution to the violations.

Factor 2: Air quality in potentially included versus excluded areas

The following table contains the 2001-2003 PM2.5 Design Values for all Knoxville MSA Counties and adjacent counties. (MSA counties are in bold.)

County	2001-2003 design value
Knox	16.8
Blount	14.4
Loudon	15.4 *
Roane	14.2
McMinn	14.6
Haywood, NC	13.6
Swain, NC	12.9

* Incomplete data that is not sufficient to determine attainment/nonattainment. Data substitution does not apply.

There are two monitors in the MSA that are violating and one MSA monitor (Blount County) that is attaining. The four monitors in adjacent counties are attaining.

Factor 3: Population density and degree of urbanization including commercial development in included versus excluded areas

The following table contains the populations for the counties in the Knoxville MSA and some adjacent counties with significant weighted emissions scores. (MSA counties are in bold.)

County	2002 Population	Percent of MSA Population (2002)	Population Density (People/ mile^2)
Knox	389327	55.3	765
Anderson	71627	10.2	212
Blount	109849	15.6	197
Sevier	74456	10.6	126
Loudon	40631	5.8	177
Union	18541	2.6	83
Roane	52316		145
McMinn	50051		116

Based on the analysis for this factor, there appears to be population sufficient to indicate a contribution by Knox, Anderson, Blount, and Sevier Counties and the adjacent counties of Roane and McMinn. Union County has very low population and population density supporting an attainment/unclassifiable designation.

Factor 4: Traffic and commuting patterns

Commuting Information - Following is an analysis of the commuting in the Knoxville MSA. Knox County has the most commuters of any of the MSA counties. As described below, 86 % of the Knox County commuters remain in Knox County, contributing 79 % of the commuting in Knox County. People from Blount and Anderson Counties commute to Knox County contributing approximately 7% and 4 %, respectively, with the remaining MSA counties contributing 3 % or less. Union County has the smallest number of commuters and the least contribution to the Knox County monitor.

Knox County, the core MSA county, has a total of 184,824 commuters.

- Commuters who remain in Knox County: 158,292

Anderson County, an MSA county has a total of 30,688 commuters

- Commuters that remain in Anderson County: 20,029
- Commuters from Anderson County to Knox County: 8,115

Blount County, an MSA county, has a total of 49,250 commuters
- Commuters that remain in Blount County: 31,298
- Commuters from Blount County to Knox County: 13,611

Loudon County, an MSA county, has a total of 17,671 commuters.
- Commuters who remain in Loudon County: 8,951
- Commuters from Loudon County to Knox County: 4,580

Sevier County, an MSA county, has a total of 34,389 commuters
- Commuters who remain in Sevier County: 25,388
- Commuters from Sevier County to Knox County: 6,522

Union County, an MSA county, has a total of 7,302 commuters
- Commuters who remain in Union County: 2,573
- Commuters from Union County to Knox County: 3,873

The following table contains the vehicle miles traveled (thousands of miles) for the counties in the Knoxville MSA and some adjacent counties.

County	2000 VMT (thousand miles/year)
Knox	5135
Anderson	875
Blount	1205
Sevier	724
Loudon	728
Union	126
Roane	784
McMinn	787

Knox and Blount counties contain 58 % and 14 % of the VMT of the MSA VMT, respectively. The remaining counties contribute less than 10 % each of the MSA VMT with Union County contributing 1 %. The small contribution from Union County supports an attainment/unclassifiable designation. The adjacent counties each contribute an amount equivalent to 9 % of the total MSA VMT. (The VMT from the adjacent counties was not used to calculate the total MSA VMT.)

Factor 5: Expected growth

The following table has the population and population growth figures for the Knoxville MSA counties and some adjacent counties with significant weighted emissions scores.

County	2002 Population	Growth (90-00)	% Change (90-00)
Knox	389327	46283	14
Anderson	71627	3080	5
Blount	109849	19854	23
Sevier	74456	20127	39
Loudon	40631	7831	25
Union	18541	4114	30
Roane	52316	4683	10
McMinn	50051	6632	16

The population growth has been relatively high for all of the MSA counties on a percentage basis, except Anderson, indicating potential contribution to the particulate matter levels in the MSA. Anderson County contributed only 3 % of the MSA growth. Although the percent growth in Union County was 30 %, its contribution to the MSA growth was only 4 %. McMinn and Roane Counties (adjacent) have a percent growth of 16 % and 10 %, respectively.

Factor 6: Meteorology

This factor did not play a significant role in the decision making process.

Factor 7: Geography/topography

This factor did not play a significant role in the decision making process.

Factor 8: Jurisdictional boundaries

Knox, Anderson, Blount, Jefferson, Loudon, Sevier Counties and a portion of Cocke County were designated nonattainment for the 8-hour ozone standard.

This factor did not play a significant role in the decision making process.

Factor 9: Level of control of emission sources

Anderson, Blount, Jefferson, Loudon, Sevier- Subject to Prevention of Significant Deterioration (PSD) requirements, Control Technology Guidelines Reasonable Available Control Technology (CTG RACT, Maximum Achievable Control Technology (MACT) for Hazardous Air Pollutants (HAP), New Source Performance Standards (NSPS)

This factor did not play a significant role in the decision making process.

9 Factor Analysis for Chattanooga Area

The Chattanooga MSA contains the following Tennessee counties: Marion and Hamilton; and the following Georgia Counties: Dade, Walker, and Catoosa. Based on air quality data for 2001-2003, the monitor with the highest design value in Hamilton County has a design value of 16.1 and the monitor in Walker County has a design value of 15.6. No other counties in the MSA contain ambient air monitors. The State of Tennessee recommended as nonattainment the county of Hamilton and the State of Georgia recommended as nonattainment the county of Walker. The States have recommended that all other counties be designated attainment. The State of Tennessee submitted some justification for this recommendation, however, they indicated that the detailed emission information would be provided at a later date. EPA is modifying the State of Tennessee's recommendation and will review the additional information during the 120 day period following the notification letter.

EPA has received some information from the State of Tennessee that Marion (MSA) County should be designated attainment for the PM2.5 standard and no justification from the State of Georgia indicating that any other counties should be included or excluded from the Chattanooga PM2.5 nonattainment area. Adjacent counties with significant emissions include McMinn and Roane Counties which are attached to the Knoxville nonattainment area and Floyd County which is a separate nonattainment area.

Additionally we have included in our recommended nonattainment area Jackson County, AL, that is adjacent to the Chattanooga MSA, that is generally rural in character, and that contains an identifiable large emitting facility or facilities (e.g., power plants) which we believe contribute to the nearby nonattainment problem. We have included this county in our initial recommendations in order to ensure that a sufficient portion of this county, including such large facilities, is included within the boundaries of the nonattainment area as part of the final designations. We invite you to submit to us a recommendation as to what portion of this adjacent county, encompassing the large facility or facilities, should be designated nonattainment. Therefore EPA is modifying the States' recommendations to include all of the counties in the MSA and the adjacent county of Jackson, Alabama.

Area	EPA Recommendation	States Recommendations
Chattanooga	Full counties: Marion, Hamilton, TN; Dade, Walker, Catoosa, GA; Jackson, AL	Full counties: Hamilton and Walker

Factor 1: Emissions in areas potentially included versus excluded from the nonattainment area

The following table contains the 2001 PM2.5, SOx, NOx, VOC, and ammonia emissions in tons and weighted emissions scores for the counties in the Chattanooga MSA and some adjacent counties. (MSA counties are in bold.)

County	PM	SOx	NOx	VOC	Amm	Weighted Emissions Score	Cumulative Weighted Emissions Score
Hamilton	**1,498**	**5,300**	**20,048**	**27,150**	**1,022**	**49.5**	**49.5**
Walker	**856**	**632**	**2,798**	**4,516**	**958**	**17.9**	**67.4**
Marion	**679**	**477**	**3,156**	**2,640**	**501**	**14.1**	**81.5**
Catoosa	617	167	3,085	3,601	680	11.9	93.4
Dade	302	107	2,415	1,574	285	6.5	99.9
Roane	4967	92331	30865	4300	285	296.9	
Jackson, AL	4389	44333	31502	4742	1494	176.1	
Floyd, GA	10057	31821	22736	7139	976	154.0	
McMinn	3348	10216	10829	5546	1268	73.3	
Whitfield, GA	2732	1747	7283	7386	991	54.2	
Rhea	1405	302	2625	3643	149	31.2	
Loudon	804	4035	5899	5338	360	24.3	
DeKalb, AL	1193	741	4776	5867	5765	21.3	
Bradley	1233	419	4230	7551	1916	21.1	
Warren	1164	1189	1869	3675	446	20.7	
Monroe	743	154	2387	3420	554	16.4	
Gordon, GA	872	200	3645	4019	2630	15.8	
Fannin, GA	614	65	887	1266	283	14.2	
Franklin	644	482	2100	2929	1512	13.4	
Chattooga, GA	450	1228	1834	1634	197	11.7	
Murray, GA	576	130	2067	1700	910	11.4	
Polk	295	2066	900	949	553	11.3	
Cherokee, NC	428	143	921	1753	111	10.6	
Grundy	202	164	1000	1150	1170	4.8	
Bledsoe	203	31	475	528	335	4.5	
Meigs	198	112	885	871	118	4.3	
Sequatchie	140	22	304	591	173	3.4	
Van Buren	118	178	291	320	74	3.3	

Based on the analysis for this factor there appears to be emissions in all MSA counties and the adjacent county of Jackson, AL, which show a potential to contribute. Other adjacent counties with large emissions (McMinn and Roane, TN and Floyd, GA) are included in other nonattainment areas.

Factor 2: Air quality in potentially included versus excluded areas

The following table contains the 2001-2003 PM2.5 Design Values for all Chattanooga MSA Counties and adjacent counties. (MSA counties are in bold.)

County	2001-2003 design value
Hamilton	16.1
Walker	15.6
Roane	14.2
Floyd, GA	15.7
McMinn	14.6
Loudon	15.4 *
DeKalb, AL	14.7

* Incomplete data that is not sufficient to determine attainment/nonattainment. Data substitution does not apply.

Based on this factor, Hamilton County, TN and Walker and Floyd Counties in GA are violating the PM 2.5 standard. Catoosa County, GA is located between violating monitors in Hamilton and Walker Counties.

Factor 3: Population density and degree of urbanization including commercial development in included versus excluded areas

The following table contains the populations for the counties in the Chattanooga MSA and some adjacent counties. Urban population figures were not available. (MSA counties are in bold.)

County	2002 Population	Percent of MSA Population (2002)	2002 Population Density (people/mile^2)
Hamilton	309,321	65.7	570
Walker	61,949	13.2	139
Marion	27,654	5.9	55
Catoosa	56,341	12.0	348
Dade	15,615	3.3	90
Roane	52,316		145
Jackson, AL	54,035		50
Floyd, GA	92,606		181
McMinn	50,051		116
Whitfield, GA	87,037		300

Based on the analysis for this factor, there appears to be population sufficient to indicate a contribution by the following MSA counties: Hamilton, Walker, and Catoosa. The five adjacent counties also have population with a potential to contribute.

Factor 4: Traffic and commuting patterns

Commuting Information

Hamilton has a working population of 146, 824
–Commuters who remain in Hamilton: 133,644 (91%)

Marion has a working population 11766.
–Commuters who remain in Marion: 5596 (48%)
–Commuters from Marion to Hamilton: 4271

Dade has a working population of 6983.
–Commuters who remain in Dade: 2363
–Commuters from Dade to Hamilton:3091 (44%)
–Commuters from Dade to Walker: 747

Catoosa has a working population of 26710.
–Commuters who remain in Catoosa: 7167
–Commuters from Catoosa to Hamilton: 12320 (46%)
–Commuters from Catoosa to Walker:1937

Walker has a working population of 27223.
–Commuters who remain in Walker: 11244 (41%)
–Commuters from Walker to Hamilton: 9098

Whitfield, GA has a working population of 38,909
–Commuters who remain in Whitfield: 33,796 (87%)
–Remaining commuters do not commute to the Chattanooga MSA

DeKalb, AL has a working population of 7798
–Commuters who remain in DeKalb: 5179 (66%)
–Remaining commuters do not commute to the Chattanooga MSA

The following table contains the vehicle miles traveled (thousand miles) for the counties in the Chattanooga MSA and some adjacent counties with significant weighted emissions scores. (MSA counties are in bold.)

County	2002 VMT (thousand miles/year)
Hamilton	3,743
Walker	742
Marion	654
Catoosa	810
Dade	512
Roane	784
Jackson, AL	786
Floyd, GA	948
McMinn	787
Whitfield, GA	1423

Based on the analysis for this factor the VMT for all MSA counties indicate a potential to contribute. Although Whitfield County has a relatively high VMT, none of the commuters go to the Chattanooga MSA.

Factor 5: Population Growth

The following table has the population and population growth figures for the Chattanooga MSA and some adjacent counties with significant weighted emissions scores. (MSA counties are in bold.)

County	2002 Population	Growth (90-00)	% Growth (90-00)
Hamilton	309,321	22360	8
Walker	61,949	2713	5
Marion	27,654	2916	12
Catoosa	56,341	10818	25
Dade	15,615	2007	15
Roane	52,316	4683	10
Jackson, AL	54,035	6130	13
Floyd, GA	92,606	9314	11
McMinn	50,051	6632	16
Whitfield, GA	87,037	11063	15

Based on the analysis for this factor, there appears to be significant growth on a percentage basis in Catoosa County that indicates a contribution to the air quality in the Chattanooga MSA.

Factor 6: Meteorology

This factor did not play a significant role in the decision making process.

Factor 7: Geography/topography

The Chattanooga area does not have any geographical or topographical boundaries limiting its airshed.

Factor 8: Jurisdictional boundaries

Hamilton and Meigs Counties, TN and Catoosa County, GA were designated nonattainment for the 8-hour ozone standard on April 15, 2004.

This factor did not play a significant role in the decision making process.

Factor 9: Level of control of emission sources

Sources in the Chattanooga area are subject to Prevention of Significant Deterioration (PSD) requirements, Control Technology Guidelines Reasonable Available Control Technology (CTG RACT) - (Hamilton County only), Maximum Achievable Control Technology (MACT) for Hazardous Air Pollutants (HAP), New Source Performance Standards (NSPS), and the NOx SIP call.

This factor did not play a significant role in the decision making process.