

US EPA ARCHIVE DOCUMENT



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Air Pollution Control Division
9th Floor, L & C Annex, 401 Church Street, Nashville, TN 37243

March 30, 2004

J.I. Palmer, Jr.
Regional Administrator
US EPA, Region IV
Sam Nunn Atlanta Federal Center
61 Forsythe Street, SW
Atlanta, GA 30303

RE: Tennessee Early Action Compact Submittal for March 31, 2004 Milestone

Dear Mr. Palmer:

In accordance with the Early Action Compact (EAC) agreements, you will find enclosed air quality improvement plans for each of the seven (7) EAC Areas in Tennessee. The enclosed documentation is being submitted on behalf of each EAC area. This submittal is for the purpose of complying with the March 31, 2004 deadline to submit local air quality plans defining the measures to be taken to achieve compliance with the 8-hour ozone National Ambient Air Quality Standard no later than December 31, 2007.

Each local plan includes local measures that are specific and can be federally enforceable as either a part of the State Implementation Plan or Transportation Improvement Program no later than December 31, 2004. The documentation supporting each local plan and the modeling analysis are based on local controls demonstrating attainment of the 8-hour standard. The following information is enclosed:

- Chattanooga EAC Air Quality Improvement Plan
for Hamilton, Marion, and Meigs Counties
(Catoosa and Walker County, GA will make separate submittals)
- Knoxville EAC Air Quality Improvement Plan
for Anderson, Blount, Jefferson, Loudon, Knox, Sevier, and Union
Counties

- Nashville EAC Air Quality Improvement Plan
for Cheatham, Davidson, Dickson, Robertson, Rutherford, Sumner,
Williamson, and Wilson Counties
- Memphis EAC Air Quality Improvement Plan
for Fayette, Tipton, and Shelby Counties
(Desoto County, MS and Crittenden County, AR are to be submitted
separately)
- Tri-Cities EAC Air Quality Improvement Plan
for Carter, Hawkins, Sullivan, Unicoi, and Washington Counties
- Haywood County Air Quality Improvement Plan (Attainment)
- Putnam County Air Quality Improvement Plan (Attainment)
- Status of Statewide Measures
- Modeling Analysis Technical Support Documentation (TSD)
(ATMOS TSD Final and Appendices A & B)
- Additional Technical Support Documentation (see CD)
 - Nashville EAC Report from UT 032204
 - TDOT VMT Emissions Growth 1999-2030
 - ATMOS Presentation 040212

The 2001-2003 ozone monitoring data shows that both Haywood and Putman Counties have demonstrated attainment for the 8-hour ozone National Ambient Air Quality Standard. Haywood and Putnam Counties recognize the importance of air quality as it relates to the health and welfare of its citizens, and for this reason are volunteering to take additional measures. Their efforts at the local level are an attempt to target citizen behavior through education and outreach.

All of the Early Action Compact areas in Tennessee will be substantially impacted by forthcoming federal measures. The Regional impacts of low sulfur diesel fuel and Heavy-Duty Diesel Engine standards will have significant impacts on regional NOx and VOC emissions as well as an expected benefit from lowering the gasoline sulfur content beginning in 2004. The change in gasoline sulfur content is expected to make considerable emissions reductions from light and some heavy-duty gasoline powered vehicles. Following the implementation of these federal measures, some of the EAC areas in Tennessee with a minimal amount of local voluntary control measures should be able to achieve attainment of the 8-hour ozone standard by 2007.

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Due to time constraints, some documents may not have all of the local signatures. The documents have been signed, we have just not received the originals. They will be forwarded to EPA upon our receipt. I believe this submittal satisfies all requirements of the March 31, 2004 EAC milestone, but if more information is needed do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Barry R. Stephens". The signature is fluid and cursive, with the first name "Barry" and last name "Stephens" clearly distinguishable.

Barry R. Stephens, P.E.
Director
Division of Air Pollution Control

cc: Kay Prince, Karen Borel, Dick Schutt, Clifford Beller, and Kenny Richardson
at EPA Region IV
Local Air Programs
Tennessee Air Pollution Control Board
EAC Signatories

Nashville MSA

Local Air Quality Improvement Plan

Tennessee MSA Areas Pre-2000 Census



Nashville MSA Area

The Nashville Metropolitan Statistical Area encompasses eight counties. It includes Cheatham, Davidson, Dickson, Robertson, Rutherford, Sumner, Williamson, and Wilson counties in northern Middle Tennessee. In 2000, this MSA was listed as the 38th largest MSA within the United States.

Cheatham County, Tennessee

Geography/Topography

Cheatham County has a land area of 302.66 square miles and is located in the rolling terrain of the Middle Grand Division of the state along the Interstate 24 corridor west of Nashville-Davidson County. Most of Cheatham County lies on the western portion of the Highland Rim with the easternmost portion of the county bounding the Central Basin.

Meteorological Information

Wind data from Nashville for the period of record from 1988 through 1992 was determined to be representative for Cheatham County. The predominate wind direction and speed is from the south at 7 to 10 knots (see Figure 1 A). The mean high temperature for July is 88.7 F, while the mean low is 69.5 F. The mean July precipitation is 3.8 inches. The period of record for this data is from 1971 through 2000.

Planning Authority

The authority for air quality planning for Cheatham County resides with the Tennessee Department of Environment and Conservation. Transportation planning for Cheatham County is performed by the Nashville Area Metropolitan Planning Organization.

Air Monitoring

Cheatham County does not have an ozone monitor.

Population

Based on projections to 2002 from the 2000 census data, there are 36,986 persons living in Cheatham County (see Table 1 C). This indicates a population density of 122.2 persons per square mile. The population of Cheatham County is approximately 93.2% rural with the remaining 6.8% living in incorporated areas. The largest cities in Cheatham County are Ashland City and Pleasant View (see Table 1 C).

Cheatham County's population from 1990 through 2000 increased by approximately 31.4% (27,327 to 35,912). The population is expected to increase by 38.5% between 2000 and 2010 (see Table 1 B).

Based on the 2002 population data for the entire Nashville MSA, Cheatham County represents approximately 3% of the total Nashville MSA population (see Table 1 C).

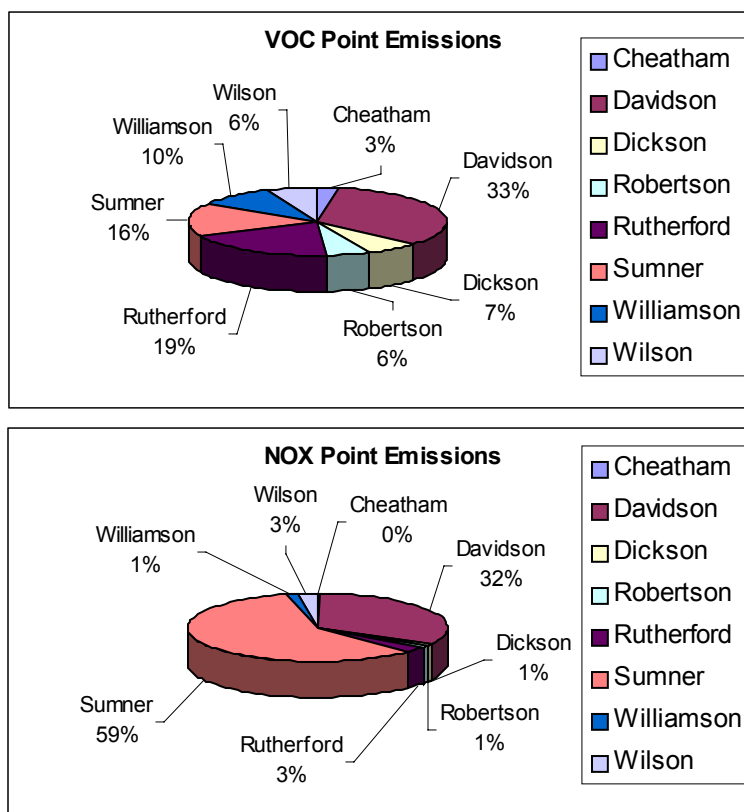
Air Emissions

All air emission estimates were derived from EPA's 1999 National Emission Inventory (NEI) database.

Point source NOX emissions from Cheatham County were estimated at .33 ton/day in 1999 which represents approximately 0% of the 101 ton/day of overall NOX point source emissions from the Nashville MSA (see Table 1 D).

Point source VOC emissions from Cheatham County were estimated at 3.95 ton/day in 1999 which represents approximately 3% of the 145 ton/day of overall VOC point source emissions from the Nashville MSA (see Table 1 D).

1999 NEI Point Source Emissions (ton/day)

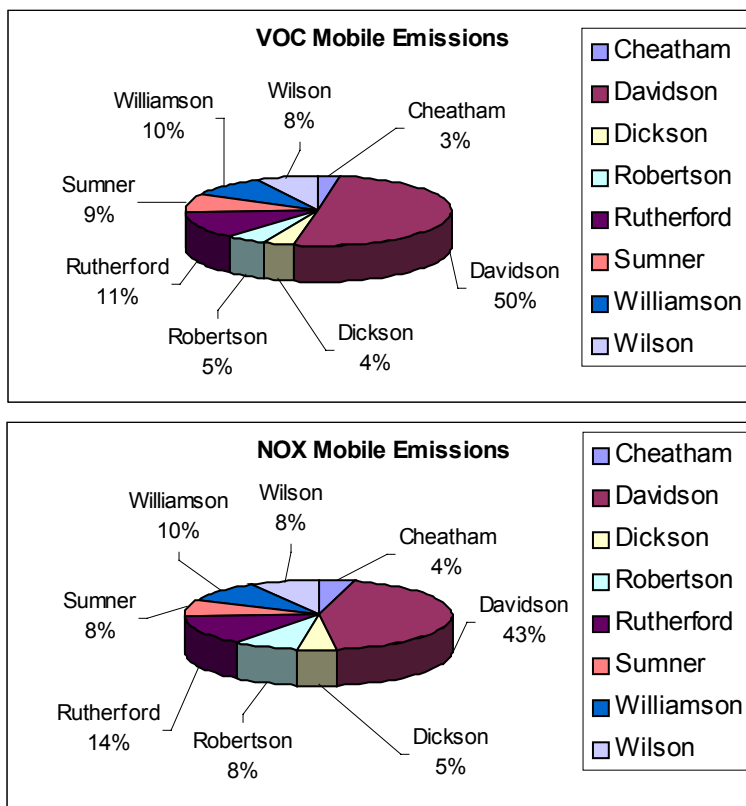


For NOX and VOC control, point sources located within Cheatham County are subject to Prevention of Significant Deterioration (PSD) requirements, Control Technology Guideline Reasonable Available Control Technology (CTG RACT) requirements, Maximum Achievable Control Technology (MACT) requirements for Hazardous Air Pollutants (HAP), and New Source Performance Standards (NSPS).

Mobile source NOX emissions from Cheatham County were estimated at 10.92 ton/day in 1999 which represents approximately 4% of the 252 ton/day of overall NOX mobile source emissions from the Nashville MSA (see Table 1 D).

Mobile source VOC emissions from Cheatham County were estimated at 2.67 ton/day in 1999 which represents approximately 3% of the 106 ton/day of overall VOC mobile source emissions from the Nashville MSA (see Table 1 D).

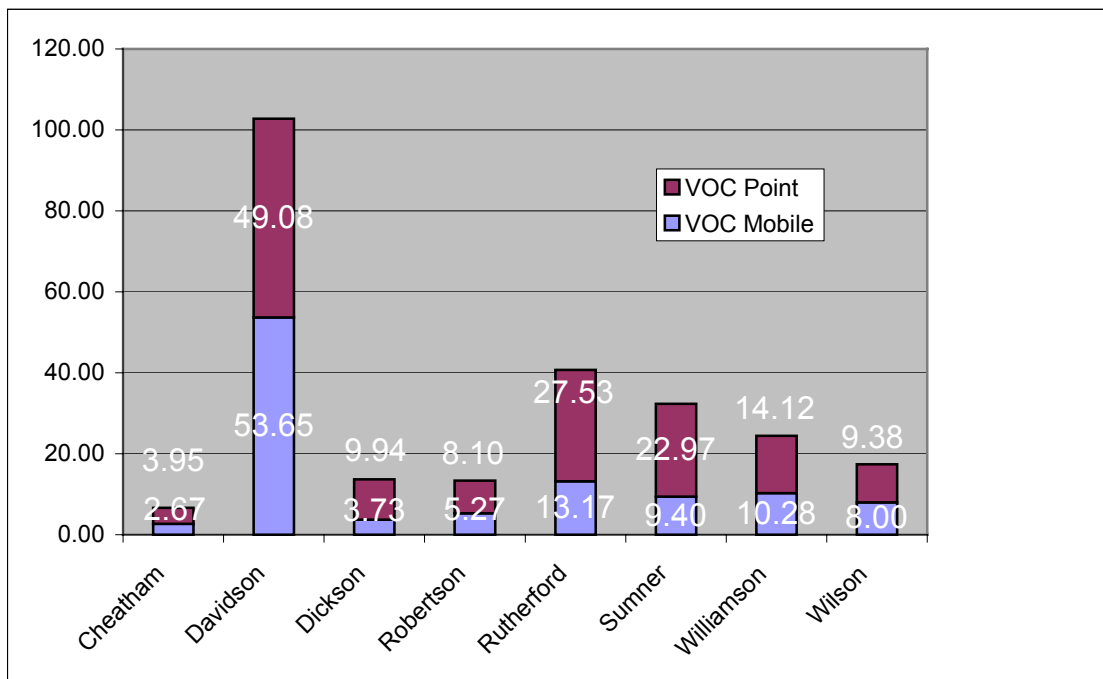
1999 NEI Mobile Source Emissions (ton/day)



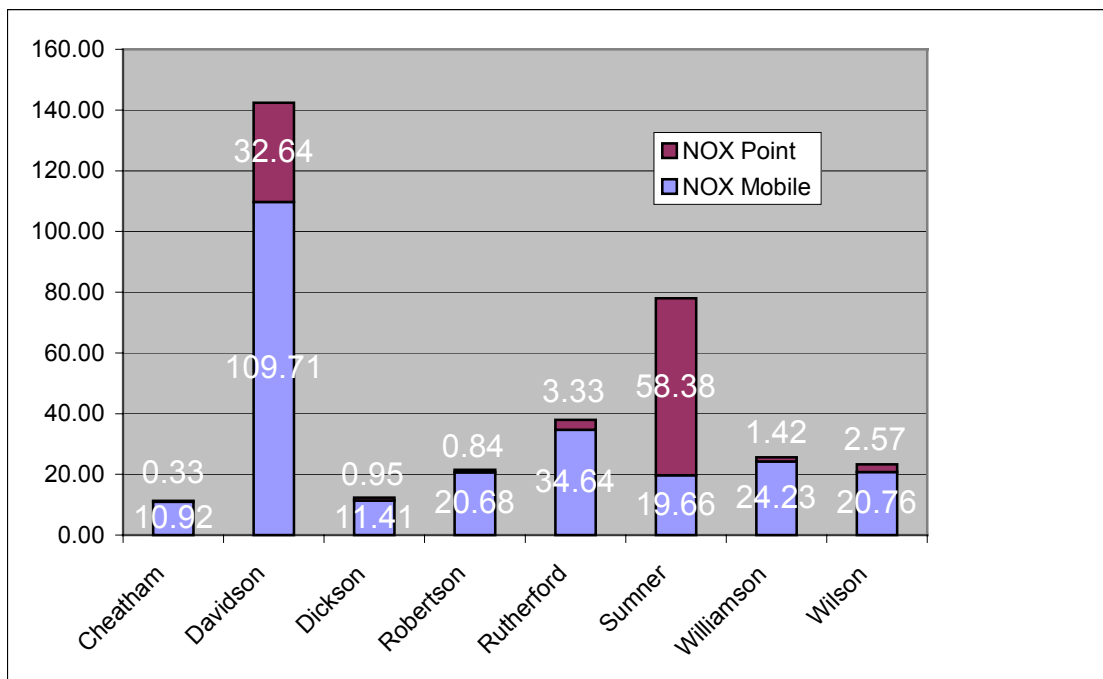
Commuting traffic from surrounding counties into Cheatham County is high.
Commuting traffic from Cheatham County into surrounding counties is high.

Commuting Classifications	
Not Significant	0-10%
Minimal	11-30%
High	31-50%
Significant	51% or more

1999 NEI VOC Contribution (ton/day)



1999 NEI NOX Contribution (ton/day)



Summary

Local air pollution emission reductions for Cheatham County are listed in the Quantification of Control Measures Table. The local measures listed are to be implemented by the local government of Cheatham County. All local measures are to be implemented by ozone season of 2007, at the latest. The most desirable implementation is the soonest time possible (ideally ozone season of 2005). Local jurisdictions understand that measures are to be implemented on a schedule that concurs with the schedule in the attainment demonstration modeling.

Attainment demonstration modeling analysis conducted by Systems Application International (SAI) demonstrates that the Nashville EAC will achieve the NAAQS for ozone by the end of 2007. The projected 2007 estimated ozone design value for the Nashville EAC is: 82.

For a Weight of Evidence Analysis, review the summary Attainment Demonstration for the Nashville Area and see the complete Weight of Evidence discussion presented in Chapter 8 of the Modeling Analysis Technical Support Documentation (TSD) for details.

Some voluntary measures were not included in the modeling demonstration. These measures will, it is expected, create even further reductions in the ozone level of the EAC. Effectiveness of these measures may not necessarily be quantifiable, however, given the concern for air quality in the region, any reduction is viewed as positive.

Please review the detailed attainment demonstration contained in the Modeling Analysis Technical Support Documentation, which includes specific information on the EAC's control measures and subsequent ozone design value. County level endorsement of their local control measures can be found in Attachment 1 at the end of this section.

Davidson County, Tennessee

Geography/Topography

Davidson County has a land area of 502.3 square miles and is located in the rolling terrain of the Middle Grand Division of the state along the Interstate 40 corridor nearly midway between Knoxville and Memphis. Davidson County lies almost entirely in the Central Basin, with the western edge of the county bounding the edge of the Highland Rim.

Meteorological Information

Wind data from Nashville for the period of record from 1988 through 1992 was determined to be representative for Wilson County. The predominate wind direction and speed is from the south at 7 to 10 knots (see Figure 1 A). The mean high temperature for July is 88.7 F, while the mean low is 69.5 F. The mean July precipitation is 3.8 inches. The period of record for this data is from 1971 through 2000.

Planning Authority

The authority for air quality planning for Davidson County resides with the Nashville Metropolitan Government, the Division of Pollution Control. Transportation planning for Davidson County is performed by the Nashville Area Metropolitan Planning Organization.

Air Monitoring

For the 2001-2003 monitoring period, the ozone monitor 471650007 - 1 located in Sumner County shows an 8-hour design value of 0.086 parts per million (ppm) which would be classified as nonattainment (see Table 1 A).

Population

Based on projections to 2002 from the 2000 census data, there are 570,785 persons living in Davidson County (see Table 1 C). This indicates a population density of 1,134.6 persons per square mile. The population of Davidson County is approximately 4.6% rural with the remaining 95.4% living in incorporated areas. The largest city in Davidson County is Nashville (see Table 1 C).

Davidson County's population from 1990 through 2000 increased by approximately 11.5% (511,194 to 569,891). The population is expected to increase by 0.8% between 2000 and 2010 (see Table 1B).

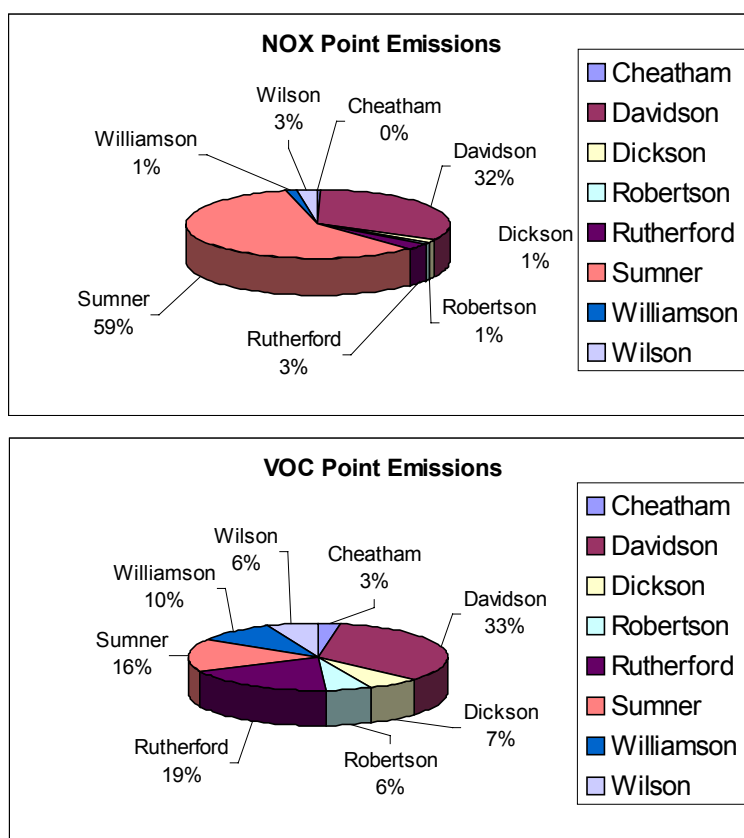
Based on the 2002 population data for the entire Nashville MSA, Davidson County represents approximately 45% of the total Nashville MSA population (see Table 1 C).

Air Emissions

Point source NOX emissions from Davidson County were estimated at 32.64 ton/day in 1999 which represents approximately 32% of the 101 ton/day of overall NOX point source emissions from the Nashville MSA (see Table 1 D).

Point source VOC emissions from Davidson County were estimated at 49.08 ton/day in 1999 which represents approximately 33% of the 145 ton/day of overall VOC point source emissions from the Nashville MSA (see Table 1 D).

1999 NEI Point Source Emissions (ton/day)

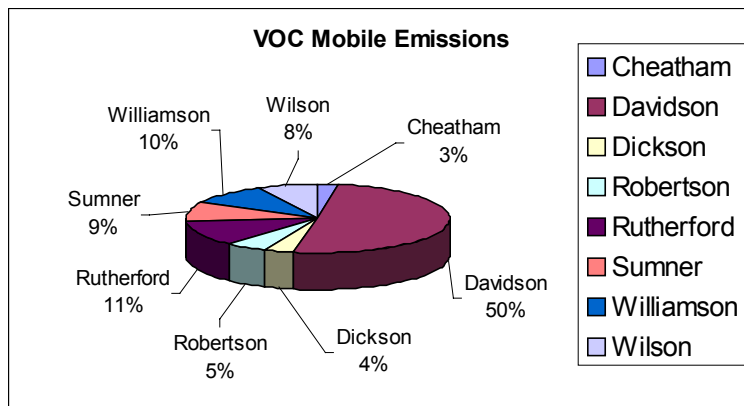
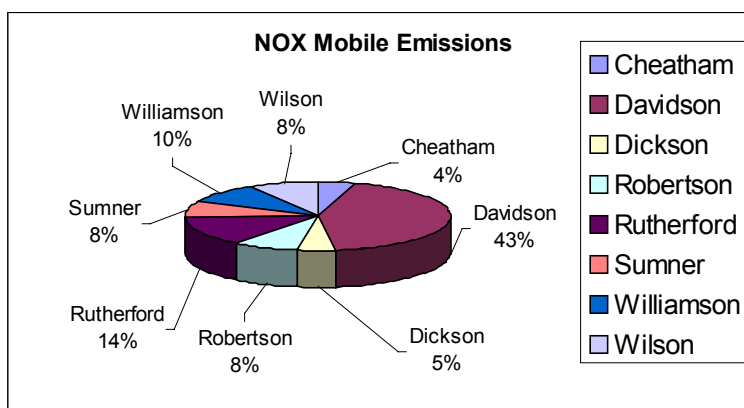


For NOX and VOC control, point sources located within Davidson County are subject to PSD requirements, CTG RACT requirements, Maximum Achievable Control Technology (MACT) requirements for Hazardous Air Pollutants (HAP), and New Source Performance Standards (NSPS).

Mobile source NOX emissions from Davidson County were estimated at 109.71 ton/day in 1999 which represents approximately 43% of the 252 ton/day of overall NOX mobile source emissions from the Nashville MSA (see Table 1 D).

Mobile source VOC emissions from Davidson County were estimated at 53.65 ton/day in 1999 which represents approximately 50% of the 106 ton/day of overall VOC mobile source emissions from the Nashville MSA (see Table 1 D).

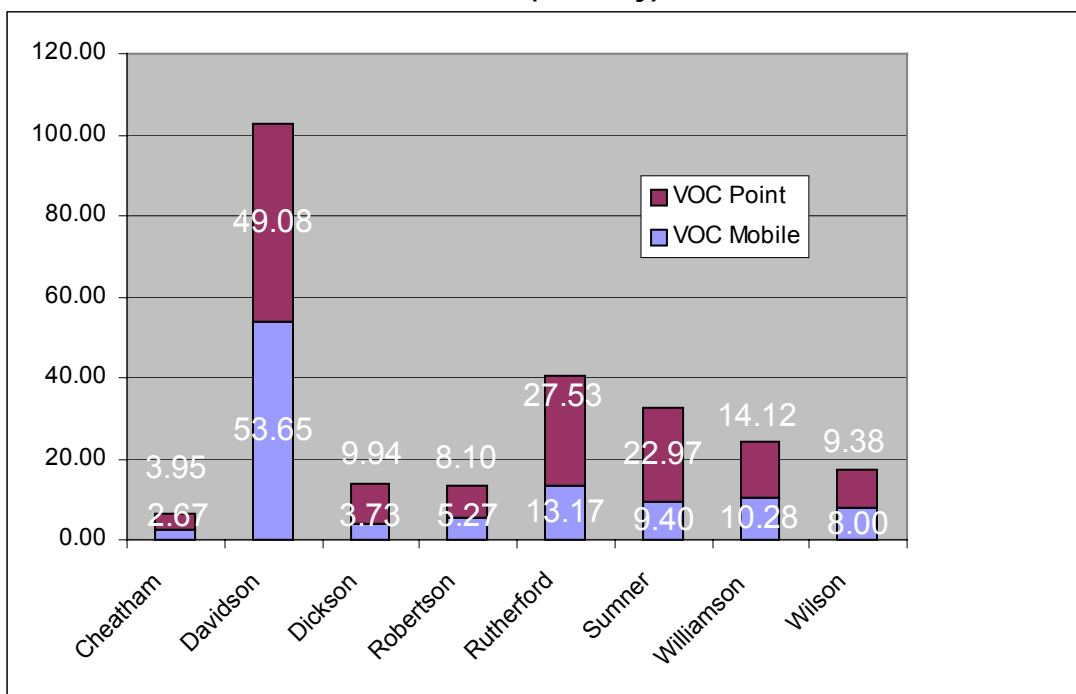
1999 NEI Mobile Source Emissions (ton/day)



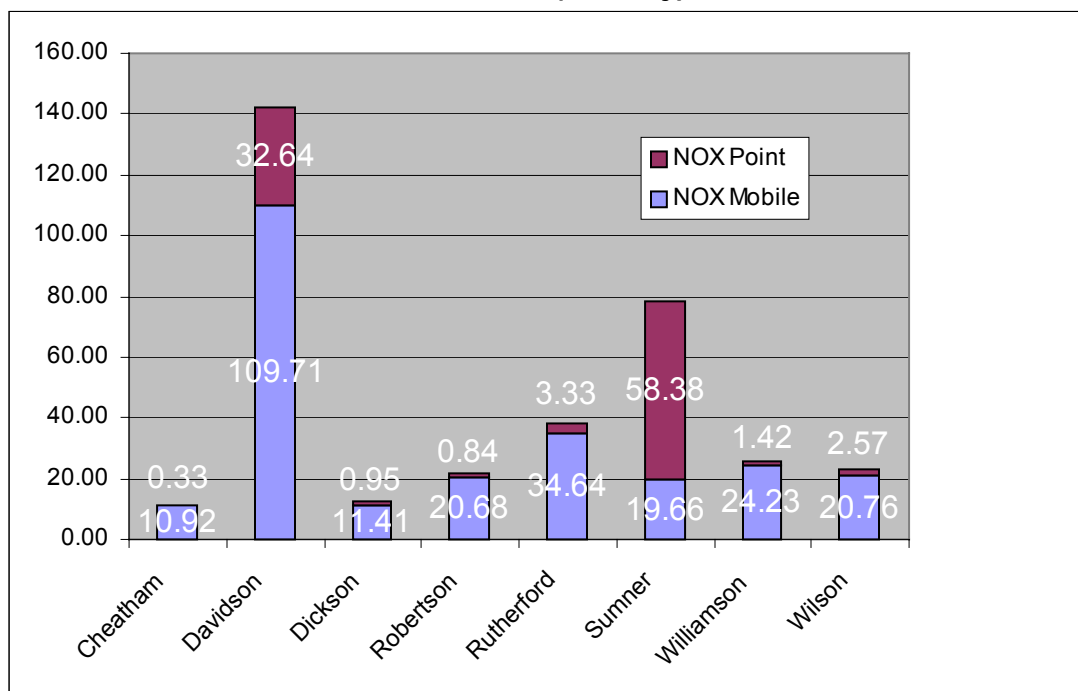
Commuting traffic from surrounding counties into Davidson County is high.
Commuting traffic from Davidson County into surrounding counties is minimal.

Commuting Classifications	
Not Significant	0-10%
Minimal	11-30%
High	31-50%
Significant	51% or more

1999 NEI VOC Contribution (ton/day)



1999 NEI NOX Contribution (ton/day)



Summary

Local air pollution emission reductions for Davidson County are listed in the Quantification of Control Measures Table. The local measures listed are to be implemented by the local government of Davidson County. All local measures are to be implemented by ozone season of 2007, at the latest. The most desirable implementation is the soonest time possible (ideally ozone season of 2005). Local jurisdictions understand that measures are to be implemented on a schedule that concurs with the schedule in the attainment demonstration modeling.

Attainment demonstration modeling analysis conducted by Systems Application International (SAI) demonstrates that the Nashville EAC will achieve the NAAQS for ozone by the end of 2007. The projected 2007 estimated ozone design value for the Nashville EAC is: 82.

For a Weight of Evidence Analysis, review the summary Attainment Demonstration for the Nashville Area and see the complete Weight of Evidence discussion presented in Chapter 8 of the Modeling Analysis Technical Support Documentation (TSD) for details.

Some voluntary measures were not included in the modeling demonstration. These measures will, it is expected, create even further reductions in the ozone level of the EAC. Effectiveness of these measures may not necessarily be quantifiable, however, given the concern for air quality in the region, any reduction is viewed as positive.

Please review the detailed attainment demonstration contained in the Modeling Analysis Technical Support Documentation, which includes specific information on the EAC's control measures and subsequent ozone design value. County level endorsement of their local control measures can be found in Attachment 1 at the end of this section.

Dickson County, Tennessee

Geography/Topography

Dickson County has a land area of 489.87 square miles and is located in the rolling terrain of the Middle Grand Division of the state west of Interstate 40 corridor and west of Nashville-Davidson County. Dickson County is entirely in the Highland Rim physiographic province.

Meteorological Information

Wind data from Nashville for the period of record from 1988 through 1992 was determined to be representative for Dickson County. The predominate wind direction and speed is from the south at 7 to 10 knots (see Figure 1 A). The mean high temperature for July is 88.7 F, while the mean low is 69.5 F. The mean July precipitation is 3.8 inches. The period of record for this data is from 1971 through 2000.

Planning Authority

The authority for air quality planning for Dickson County resides with the Tennessee Department of Environment and Conservation. Transportation planning for Dickson County is performed by the Nashville Area Metropolitan Planning Organization.

Air Monitoring

Dickson County does not have an ozone monitor.

Population

Based on projections to 2002 from the 2000 census data, there are 44,231 persons living in Dickson County (see Table 1 C). This indicates a population density of 90.3 persons per square mile. The population of Dickson County is approximately 68.8% rural with the remaining 31.2% living in incorporated areas. The largest city in Dickson County is Dickson (see Table 1 C).

Dickson County's population from 1990 through 2000 increased by approximately 22.4% (35,266 to 43,156). The population is expected to increase by 24.2% between 2000 and 2010 (see Table 1 B).

Based on the 2002 population data for the entire Nashville MSA, Dickson County represents approximately 3% of the total Nashville MSA population (see Table 1 C).

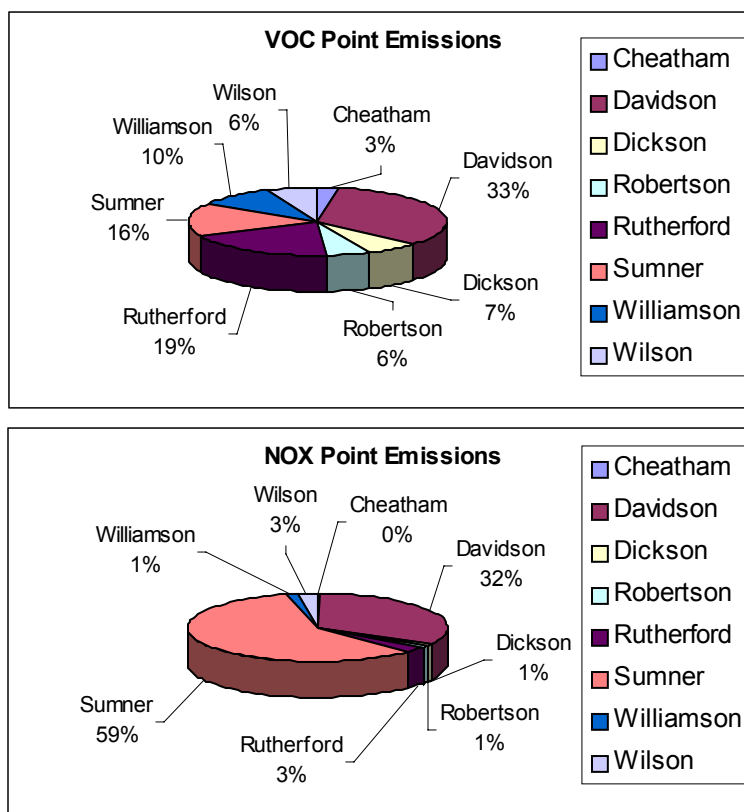
Air Emissions

All air emission estimates were derived from EPA's 1999 National Emission Inventory (NEI) database.

Point source NOX emissions from Dickson County were estimated at .95 ton/day in 1999 which represents approximately 1% of the 101 ton/day of overall NOX point source emissions from the Nashville MSA (see Table 1 D).

Point source VOC emissions from Dickson County were estimated at 9.94 ton/day in 1999 which represents approximately 7% of the 145 ton/day of overall VOC point source emissions from the Nashville MSA (see Table 1 D).

1999 NEI Point Source Emissions (ton/day)

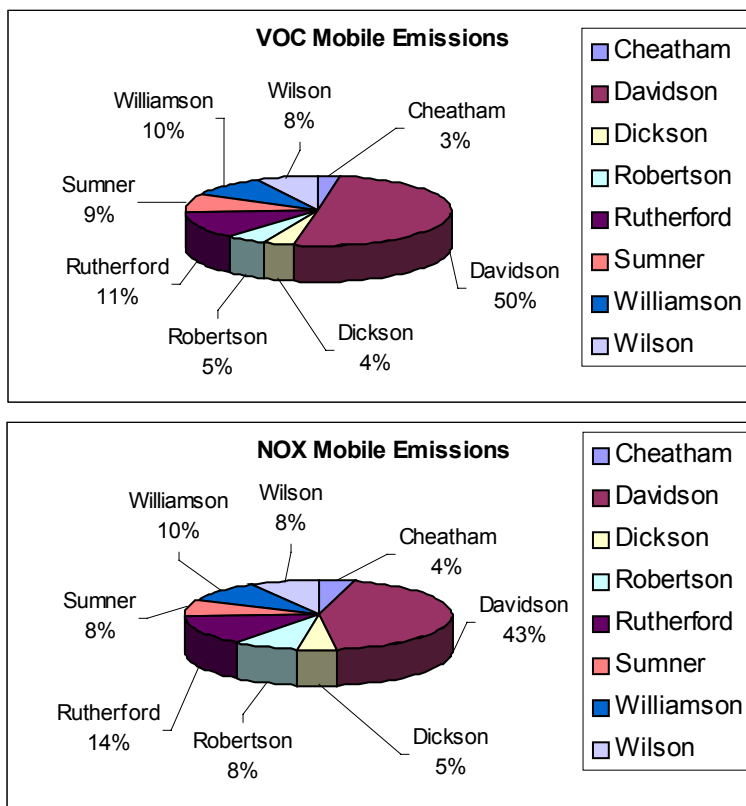


For NOX and VOC control, point sources located within Dickson County are subject to Prevention of Significant Deterioration (PSD) requirements, Control Technology Guideline Reasonable Available Control Technology (CTG RACT) requirements, Maximum Achievable Control Technology (MACT) requirements for Hazardous Air Pollutants (HAP), and New Source Performance Standards (NSPS).

Mobile source NOX emissions from Dickson County were estimated at 11.41 ton/day in 1999 which represents approximately 5% of the 252 ton/day of overall NOX mobile source emissions from the Nashville MSA (see Table 1 D).

Mobile source VOC emissions from Dickson County were estimated at 3.73 ton/day in 1999 which represents approximately 4% of the 106 ton/day of overall VOC mobile source emissions from the Nashville MSA (see Table 1 D).

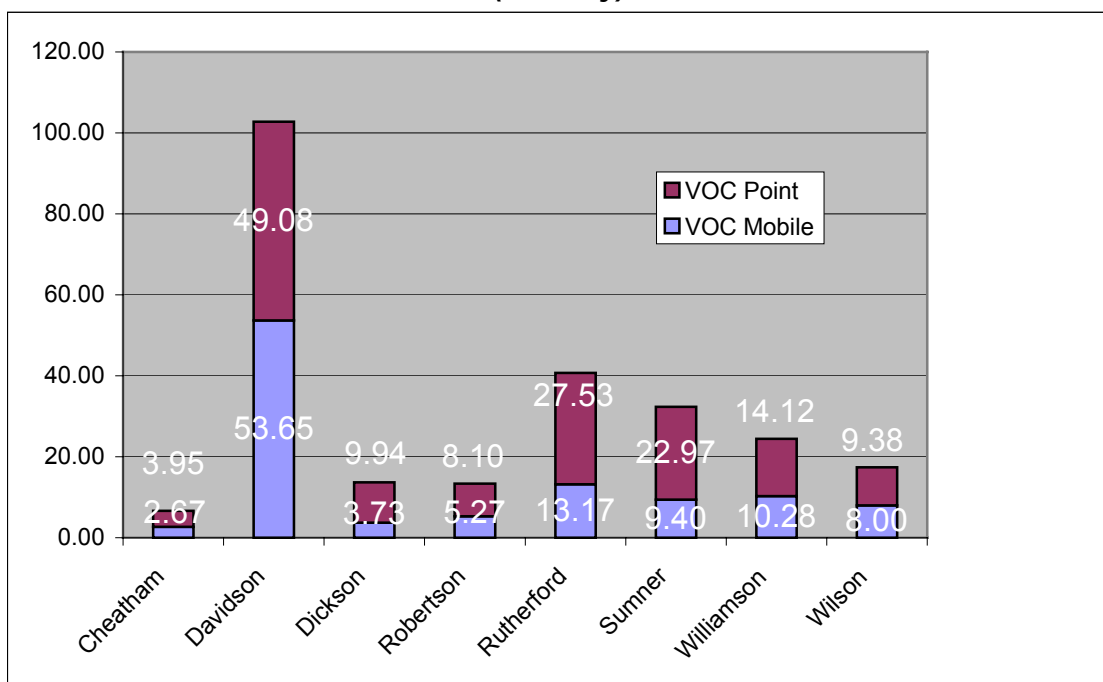
1999 NEI Mobile Source Emissions (ton/day)



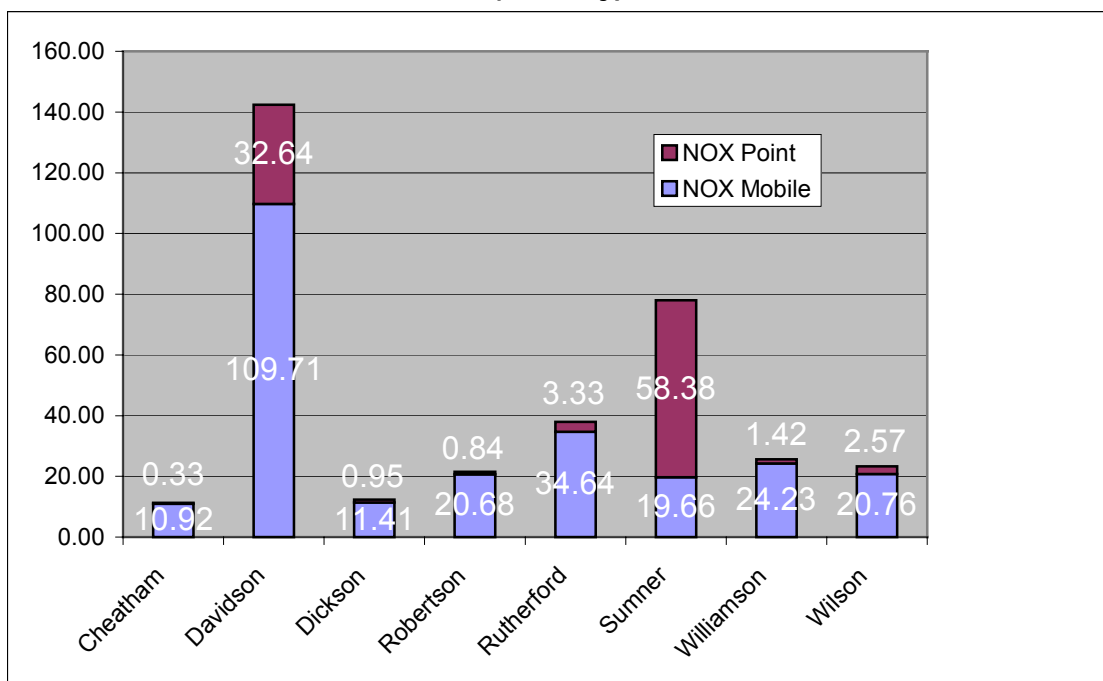
Commuting traffic from surrounding counties into Dickson County is minimal. Commuting traffic from Dickson County into surrounding counties is high.

Commuting Classifications	
Not Significant	0-10%
Minimal	11-30%
High	31-50%
Significant	51% or more

1999 NEI VOC Contribution (ton/day)



1999 NEI NOX Contribution (ton/day)



Summary

Local air pollution emission reductions for Dickson County are listed in the Quantification of Control Measures Table. The local measures listed are to be implemented by the local government of Dickson County. All local measures are to be implemented by ozone season of 2007, at the latest. The most desirable implementation is the soonest time possible (ideally ozone season of 2005). Local jurisdictions understand that measures are to be implemented on a schedule that concurs with the schedule in the attainment demonstration modeling.

Attainment demonstration modeling analysis conducted by Systems Application International (SAI) demonstrates that the Nashville EAC will achieve the NAAQS for ozone by the end of 2007. The projected 2007 estimated ozone design value for the Nashville EAC is: 82.

For a Weight of Evidence Analysis, review the summary Attainment Demonstration for the Nashville Area and see the complete Weight of Evidence discussion presented in Chapter 8 of the Modeling Analysis Technical Support Documentation (TSD) for details.

Some voluntary measures were not included in the modeling demonstration. These measures will, it is expected, create even further reductions in the ozone level of the EAC. Effectiveness of these measures may not necessarily be quantifiable, however, given the concern for air quality in the region, any reduction is viewed as positive.

Please review the detailed attainment demonstration contained in the Modeling Analysis Technical Support Documentation, which includes specific information on the EAC's control measures and subsequent ozone design value. County level endorsement of their local control measures can be found in Attachment 1 at the end of this section.

Robertson County, Tennessee

Geography/Topography

Robertson County has a land area of 476.47 square miles and is located in the rolling terrain of the Middle Grand Division of the state east of Interstate 24 corridor and north of Nashville-Davidson County. Robertson County is located in the Highland Rim physiographic province of the state; it's northern border forms part of the state line with Kentucky.

Meteorological Information

Wind data from Nashville for the period of record from 1988 through 1992 was determined to be representative for Robertson County. The predominate wind direction and speed is from the south at 7 to 10 knots (see Figure 1 A). The mean high temperature for July is 88.7 F, while the mean low is 69.5 F. The mean July precipitation is 3.8 inches. The period of record for this data is from 1971 through 2000.

Planning Authority

The authority for air quality planning for Robertson County resides with the Tennessee Department of Environment and Conservation. Transportation planning for Robertson County is performed by the Nashville Area Metropolitan Planning Organization.

Air Monitoring

Robertson County does not have an ozone monitor.

Population

Based on projections to 2002 from the 2000 census data, there are 57,446 persons living in Robertson County (see Table 1 C). This indicates a population density of 120.6 persons per square mile. The population of Robertson County is approximately 57.8% rural with the remaining 42.2% living in incorporated areas. The largest city in Robertson County is Springfield (see Table 1 C).

Robertson County's population from 1990 through 2000 increased by approximately 30.6% (41,690 to 54,433). The population is expected to increase by 16% between 2000 and 2010 (see Table 1 B).

Based on the 2002 population data for the entire Nashville MSA, Robertson County represents approximately 4.5% of the total Nashville MSA population (see Table 1 C).

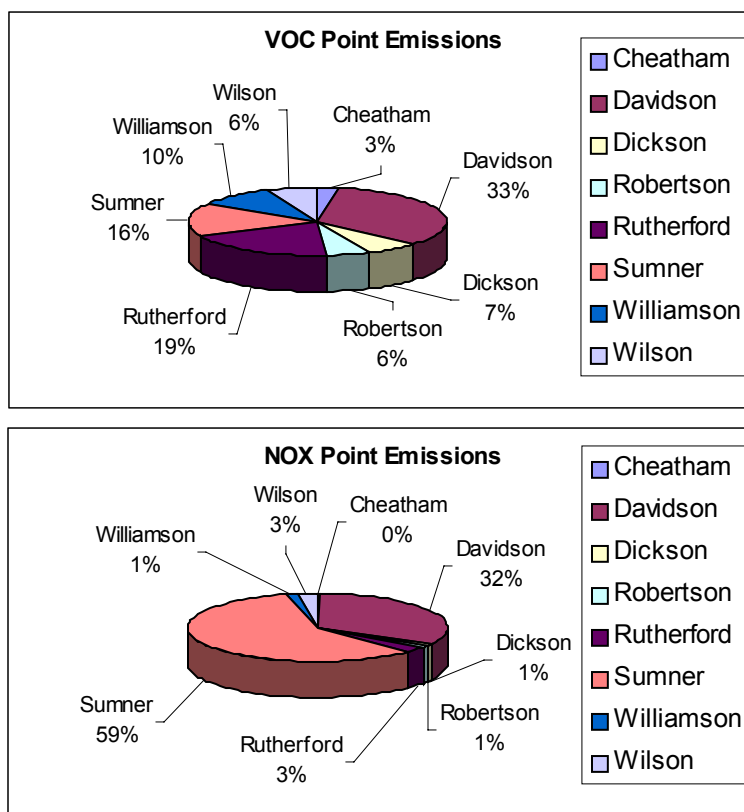
Air Emissions

All air emission estimates were derived from EPA's 1999 National Emission Inventory (NEI) database.

Point source NOX emissions from Robertson County were estimated at .84 ton/day in 1999 which represents approximately 1% of the 101 ton/day of overall NOX point source emissions from the Nashville MSA (see Table 1 D).

Point source VOC emissions from Robertson County were estimated at 8.10 ton/day in 1999 which represents approximately 6% of the 145 ton/day of overall VOC point source emissions from the Nashville MSA (see Table 1 D).

1999 NEI Point Source Emissions (ton/day)

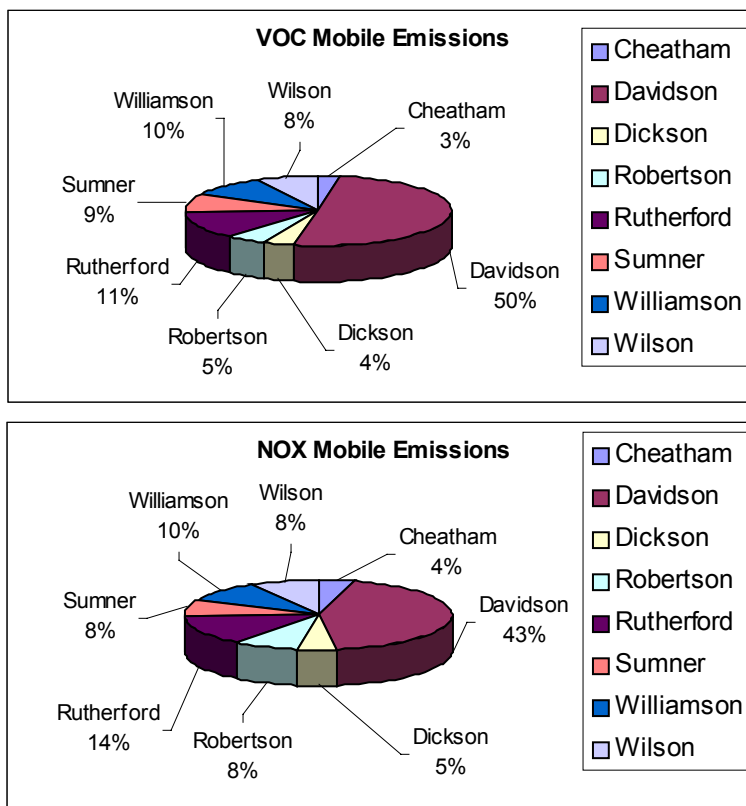


For NOX and VOC control, point sources located within Robertson County are subject to Prevention of Significant Deterioration (PSD) requirements, Control Technology Guideline Reasonable Available Control Technology (CTG RACT) requirements, Maximum Achievable Control Technology (MACT) requirements for Hazardous Air Pollutants (HAP), and New Source Performance Standards (NSPS).

Mobile source NOX emissions from Robertson County were estimated at 20.68 ton/day in 1999 which represents approximately 8% of the 252 ton/day of overall NOX mobile source emissions from the Nashville MSA (see Table 1 D).

Mobile source VOC emissions from Robertson County were estimated at 5.27 ton/day in 1999 which represents approximately 5% of the 106 ton/day of overall VOC mobile source emissions from the Nashville MSA (see Table 1 D).

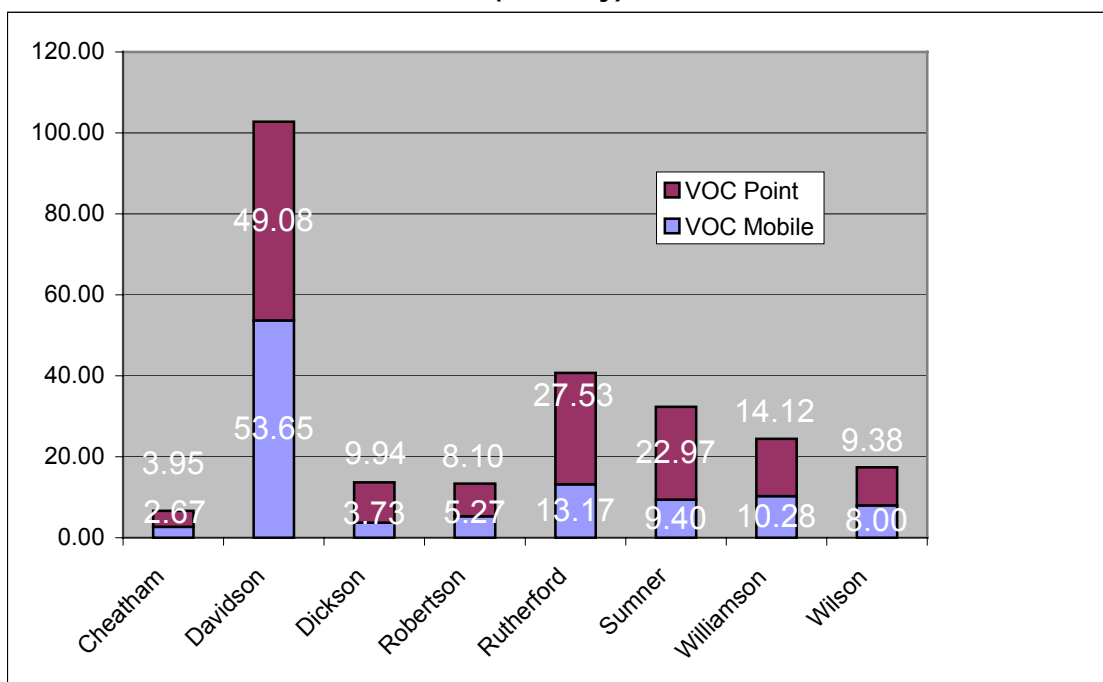
1999 NEI Mobile Source Emissions (ton/day)



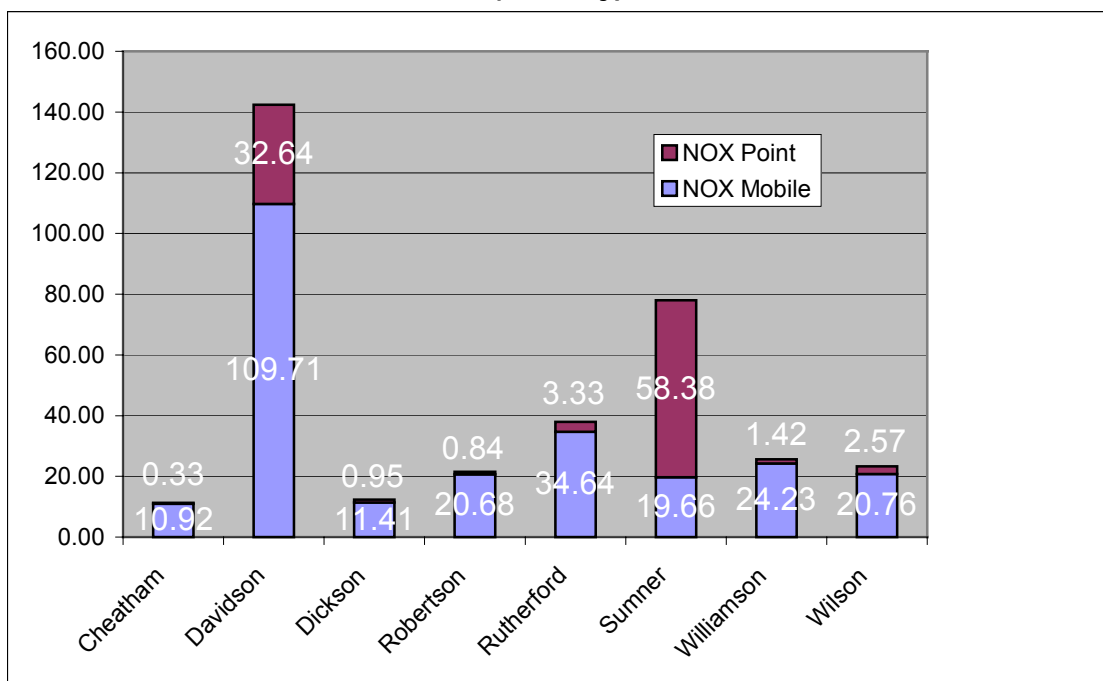
Commuting traffic from surrounding counties into Robertson County is minimal. Commuting traffic from Robertson County into surrounding counties is significant.

Commuting Classifications	
Not Significant	0-10%
Minimal	11-30%
High	31-50%
Significant	51% or more

1999 NEI VOC Contribution (ton/day)



1999 NEI NOX Contribution (ton/day)



Summary

Local air pollution emission reductions for Robertson County are listed in the Quantification of Control Measures Table. The local measures listed are to be implemented by the local government of Robertson County. All local measures are to be implemented by ozone season of 2007, at the latest. The most desirable implementation is the soonest time possible (ideally ozone season of 2005). Local jurisdictions understand that measures are to be implemented on a schedule that concurs with the schedule in the attainment demonstration modeling.

Attainment demonstration modeling analysis conducted by Systems Application International (SAI) demonstrates that the Nashville EAC will achieve the NAAQS for ozone by the end of 2007. The projected 2007 estimated ozone design value for the Nashville EAC is: 82.

For a Weight of Evidence Analysis, review the summary Attainment Demonstration for the Nashville Area and see the complete Weight of Evidence discussion presented in Chapter 8 of the Modeling Analysis Technical Support Documentation (TSD) for details.

Some voluntary measures were not included in the modeling demonstration. These measures will, it is expected, create even further reductions in the ozone level of the EAC. Effectiveness of these measures may not necessarily be quantifiable, however, given the concern for air quality in the region, any reduction is viewed as positive.

Please review the detailed attainment demonstration contained in the Modeling Analysis Technical Support Documentation, which includes specific information on the EAC's control measures and subsequent ozone design value. County level endorsement of their local control measures can be found in Attachment 1 at the end of this section.

Rutherford County, Tennessee

Geography/Topography

Rutherford County has a land area of 619 square miles and is located in the rolling terrain of the Middle Grand Division of the state along the Interstate 24 southeast of Nashville. Rutherford County lies in the center of the Central Basin physiographic province of the state.

Meteorological Information

Wind data from Nashville for the period of record from 1988 through 1992 was determined to be representative for Rutherford County. The predominate wind direction and speed is from the south at 7 to 10 knots (see Figure 1 A). The mean high temperature for July is 88.7 F, while the mean low is 69.5 F. The mean July precipitation is 3.8 inches. The period of record for this data is from 1971 through 2000.

Planning Authority

The authority for air quality planning for Rutherford County resides with the Tennessee Department of Environment and Conservation. Transportation planning for Rutherford County is performed by the Nashville Area Metropolitan Planning Organization.

Air Monitoring

For the 2001-2003 monitoring period, the ozone monitor 471650007 - 1 located in Sumner County shows an 8-hour design value of 0.086 parts per million (ppm) which would be classified as nonattainment (see Table 1 A).

Population

Based on projections to 2002 from the 2000 census data, there are 194,934 persons living in Rutherford County (see Table 1 C). This indicates a population density of 315 persons per square mile. The population of Rutherford County is approximately 24.7% rural with the remaining 75.3% living in incorporated areas. The largest cities in Rutherford County are Murfreesboro and Smyrna (see Table 1 C).

Rutherford County's population from 1990 through 2000 increased by approximately 52% (119,722 to 182,023). The population is expected to increase by 18% between 2000 and 2010 (see Table 1 C).

Based on the 2002 population data for the entire Nashville MSA, Rutherford County represents approximately 15% of the total MSA population (see Table 1 C).

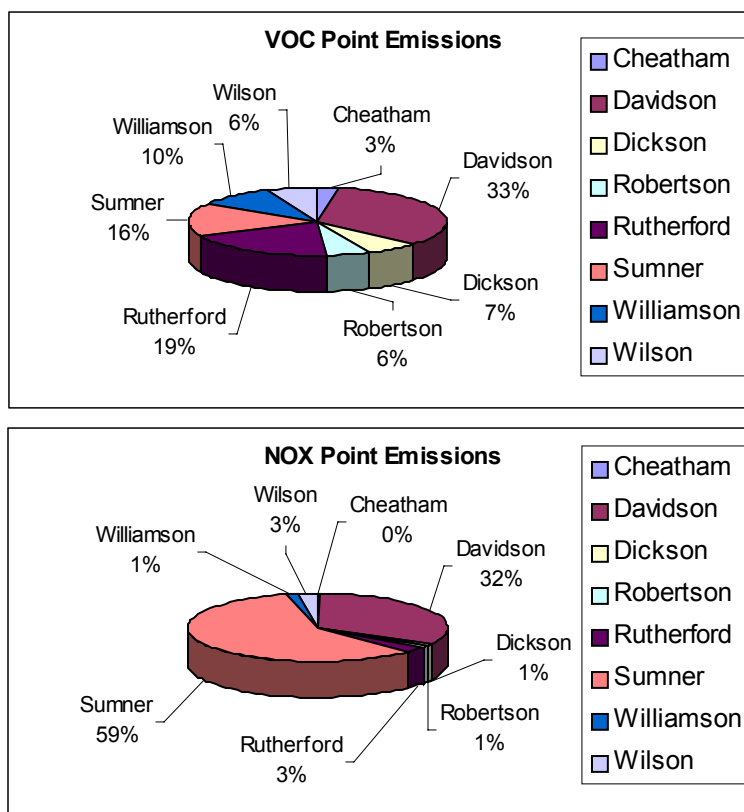
Air Emissions

All air emission estimates were derived from EPA's 1999 National Emission Inventory (NEI) database.

Point source NOX emissions from Rutherford County were estimated at 3.33 ton/day in 1999 which represents approximately 3% of the 101 ton/day of overall NOX point source emissions from the Nashville MSA (see Table 1 D).

Point source VOC emissions from Rutherford County were estimated at 27.53 ton/day in 1999 which represents approximately 19% of the 145 ton/day of overall VOC point source emissions from the Nashville MSA (see Table 1 D).

1999 NEI Point Source Emissions (ton/day)

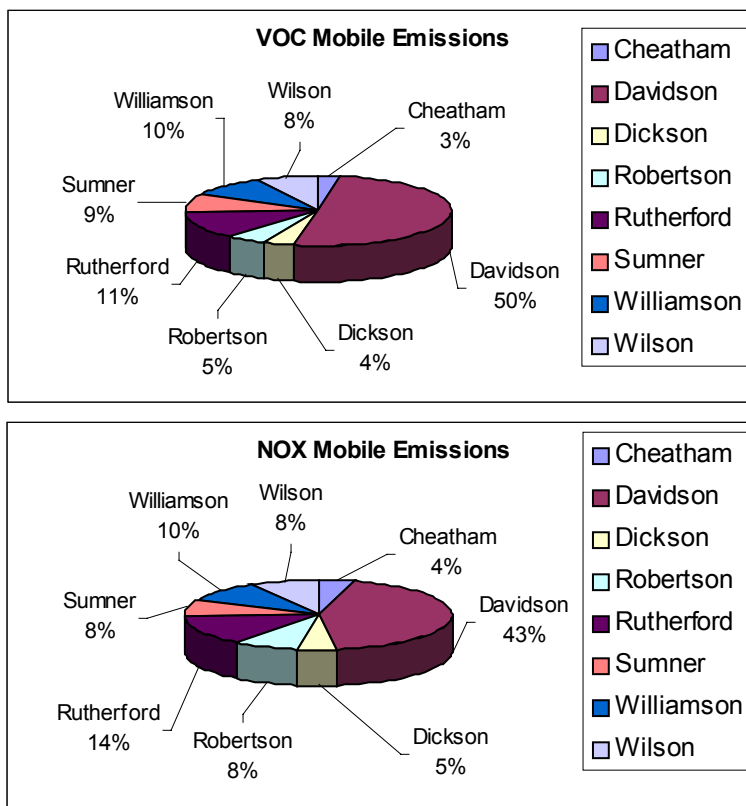


For NOX and VOC control, point sources located within Rutherford County are subject to Prevention of Significant Deterioration (PSD) requirements, Control Technology Guideline Reasonable Available Control Technology (CTG RACT) requirements, Maximum Achievable Control Technology (MACT) requirements for Hazardous Air Pollutants (HAP), and New Source Performance Standards (NSPS).

Mobile source NOX emissions from Rutherford County were estimated at 34.64 ton/day in 1999 which represents approximately 14% of the 252.01 ton/day of overall NOX mobile source emissions from the Nashville MSA (see Table 1 D).

Mobile source VOC emissions from Rutherford County were estimated at 13.17 ton/day in 1999 which represents approximately 11% of the 106 ton/day of overall VOC mobile source emissions from the Nashville MSA (see Table 1 D).

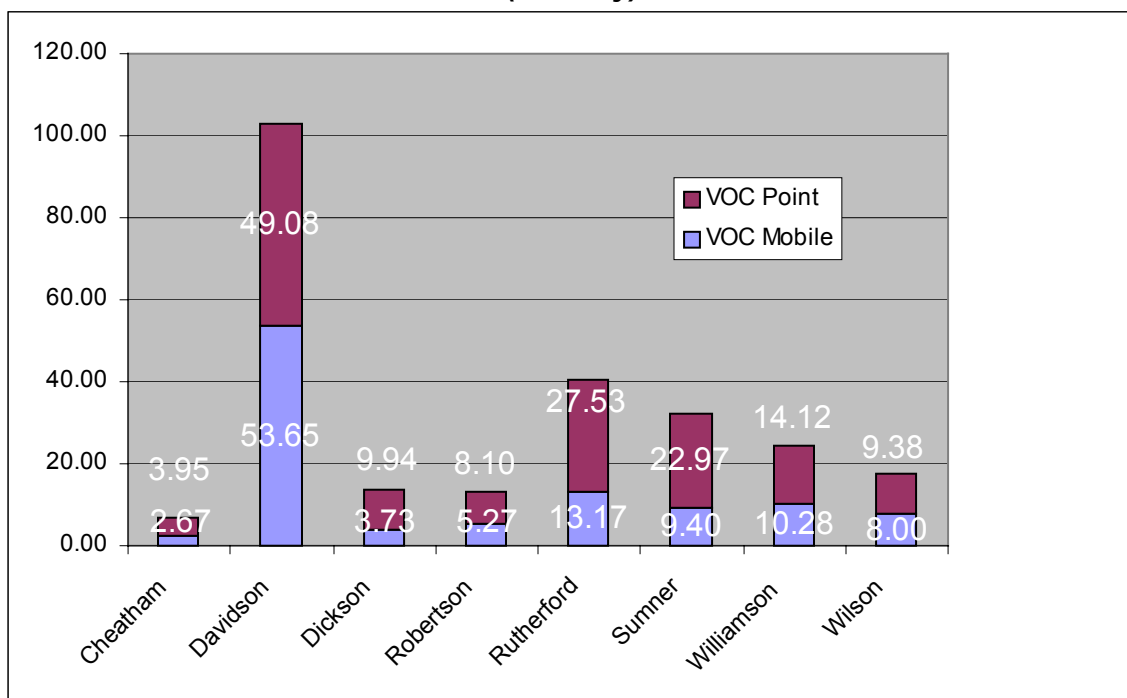
1999 NEI Mobile Source Emissions (ton/day)



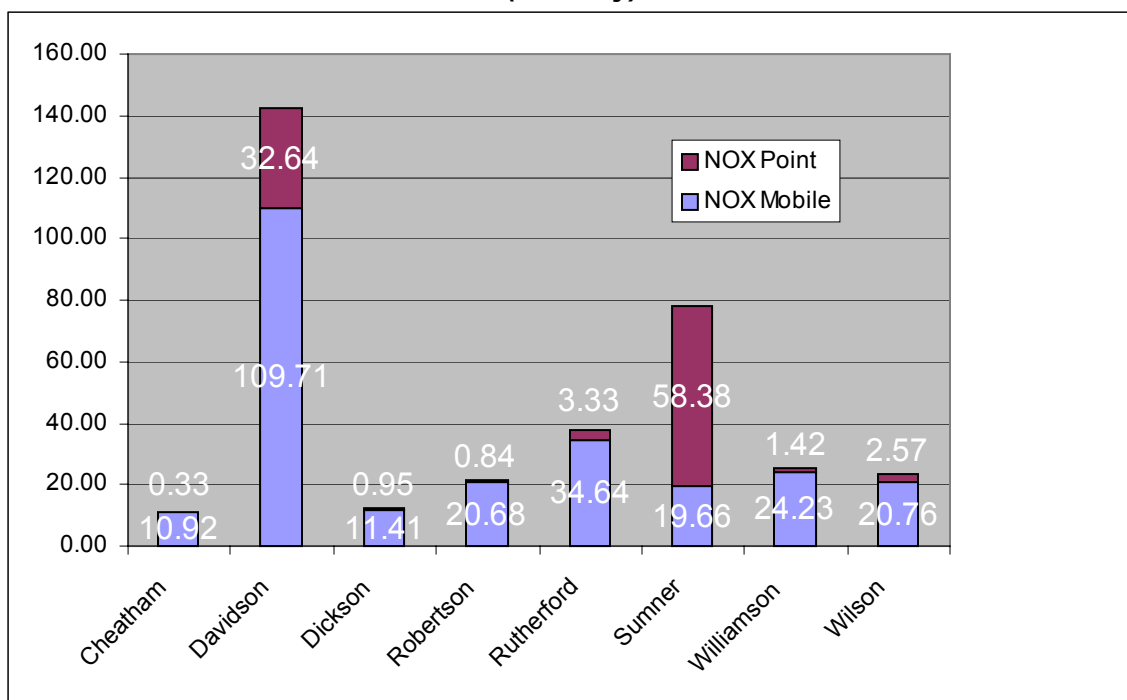
Commuting traffic from surrounding counties into Rutherford County is minimal. Commuting traffic from Rutherford County into surrounding counties is high.

Commuting Classifications	
Not Significant	0-10%
Minimal	11-30%
High	31-50%
Significant	51% or more

1999 NEI VOC Contribution (ton/day)



1999 NEI NOX Contribution (ton/day)



Summary

Local air pollution emission reductions for Rutherford County are listed in the Quantification of Control Measures Table. The local measures listed are to be implemented by the local government of Rutherford County. All local measures are to be implemented by ozone season of 2007, at the latest. The most desirable implementation is the soonest time possible (ideally ozone season of 2005). Local jurisdictions understand that measures are to be implemented on a schedule that concurs with the schedule in the attainment demonstration modeling.

Attainment demonstration modeling analysis conducted by Systems Application International (SAI) demonstrates that the Nashville EAC will achieve the NAAQS for ozone by the end of 2007. The projected 2007 estimated ozone design value for the Nashville EAC is: 82.

For a Weight of Evidence Analysis, review the summary Attainment Demonstration for the Nashville Area and see the complete Weight of Evidence discussion presented in Chapter 8 of the Modeling Analysis Technical Support Documentation (TSD) for details.

Some voluntary measures were not included in the modeling demonstration. These measures will, it is expected, create even further reductions in the ozone level of the EAC. Effectiveness of these measures may not necessarily be quantifiable, however, given the concern for air quality in the region, any reduction is viewed as positive.

Please review the detailed attainment demonstration contained in the Modeling Analysis Technical Support Documentation, which includes specific information on the EAC's control measures and subsequent ozone design value. County level endorsement of their local control measures can be found in Attachment 1 at the end of this section.

Sumner County, Tennessee

Geography/Topography

Sumner County has a land area of 529 square miles and is located in the rolling terrain of the Middle Grand Division of the state northeast of Nashville. The northern portion of Sumner County is on the Highland Rim, while the southern portion of the county lies within the Central Basin.

Meteorological Information

Wind data from Nashville for the period of record from 1988 through 1992 was determined to be representative for Sumner County. The predominate wind direction and speed is from the south at 7 to 10 knots (see Figure 1 A). The mean high temperature for July is 88.7 F, while the mean low is 69.5 F. The mean July precipitation is 3.8 inches. The period of record for this data is from 1971 through 2000.

Planning Authority

The authority for air quality planning for Sumner County resides with the Tennessee Department of Environment and Conservation. Transportation planning for Sumner County is performed by the Nashville Areas Metropolitan Planning Organization.

Air Monitoring

For the 2001-2003 monitoring period, the ozone monitor 471650007 - 1 located in Sumner County shows an 8-hour design value of 0.086 parts per million (ppm) which would be classified as nonattainment (see Table 1 A).

Population

Based on projections to 2002 from the 2000 census data, there are 136,170 persons living in Sumner County (see Table 1 C). This indicates a population density of 257 persons per square mile. The population of Sumner County is approximately 30.6% rural with the remaining 69.4% living in incorporated areas. The largest cities in Sumner County are Hendersonville and Gallatin (see Table 1 C).

Sumner County's population from 1990 through 2000 increased by approximately 25.8% (103,702 to 130,449). The population is expected to increase by 21.3% between 2000 and 2010 (see Table 1 C).

Based on the 2002 population data for the entire Nashville MSA, Sumner County represents approximately 11% of the total MSA population (see Table 1 C).

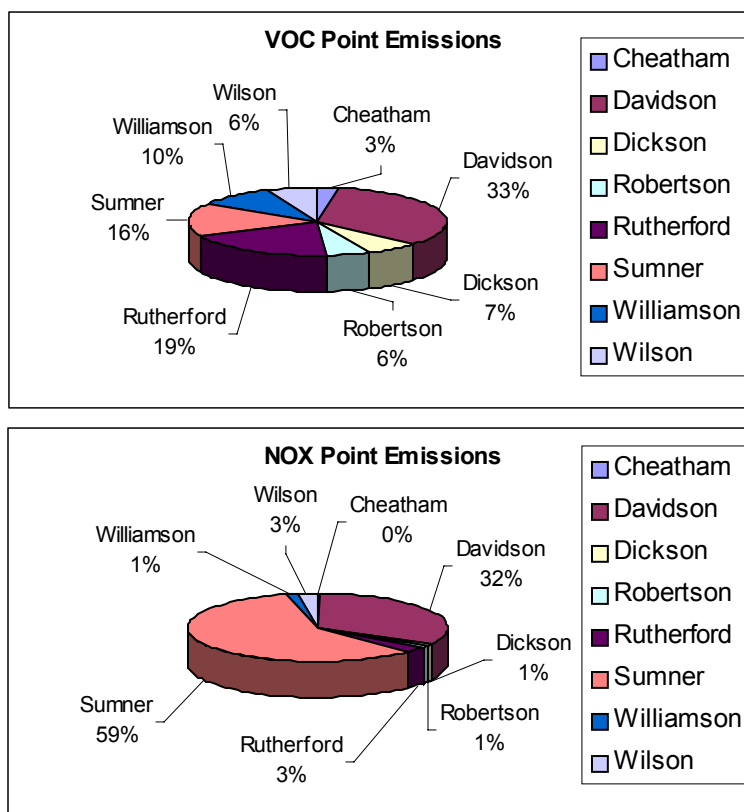
Air Emissions

All air emission estimates were derived from EPA's 1999 National Emission Inventory (NEI) database.

Point source NOX emissions from Sumner County were estimated at 58.38 ton/day in 1999 which represents approximately 59% of the 101 ton/day of overall NOX point source emissions from the Nashville MSA (see Table 1 D).

Point source VOC emissions from Sumner County were estimated at 22.97 ton/day in 1999 which represents approximately 16% of the 145 ton/day of overall VOC point source emissions from the Nashville MSA (see Table 1 D).

1999 NEI Point Source Emissions (ton/day)

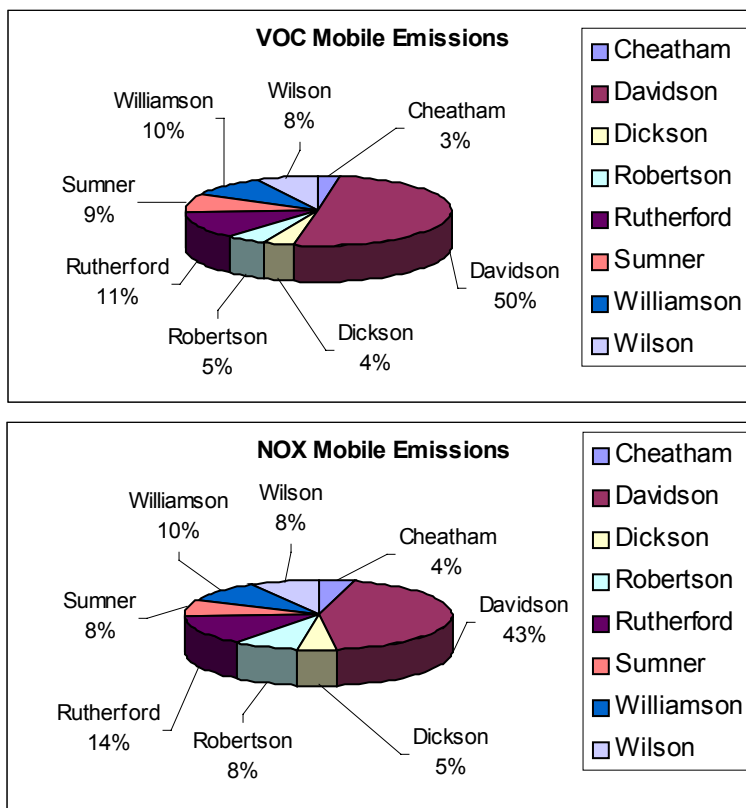


For NOX and VOC control, point sources located within Sumner County are subject to Prevention of Significant Deterioration (PSD) requirements, Control Technology Guideline Reasonable Available Control Technology (CTG RACT) requirements, Maximum Achievable Control Technology (MACT) requirements for Hazardous Air Pollutants (HAP), and New Source Performance Standards (NSPS).

Mobile source NOX emissions from Sumner County were estimated at 19.66 ton/day in 1999 which represents approximately 8% of the 252.01 ton/day of overall NOX mobile source emissions from the Nashville MSA (see Table 1 D).

Mobile source VOC emissions from Sumner County were estimated at 9.40 ton/day in 1999 which represents approximately 9% of the 106 ton/day of overall VOC mobile source emissions from the Nashville MSA (see Table 1 D).

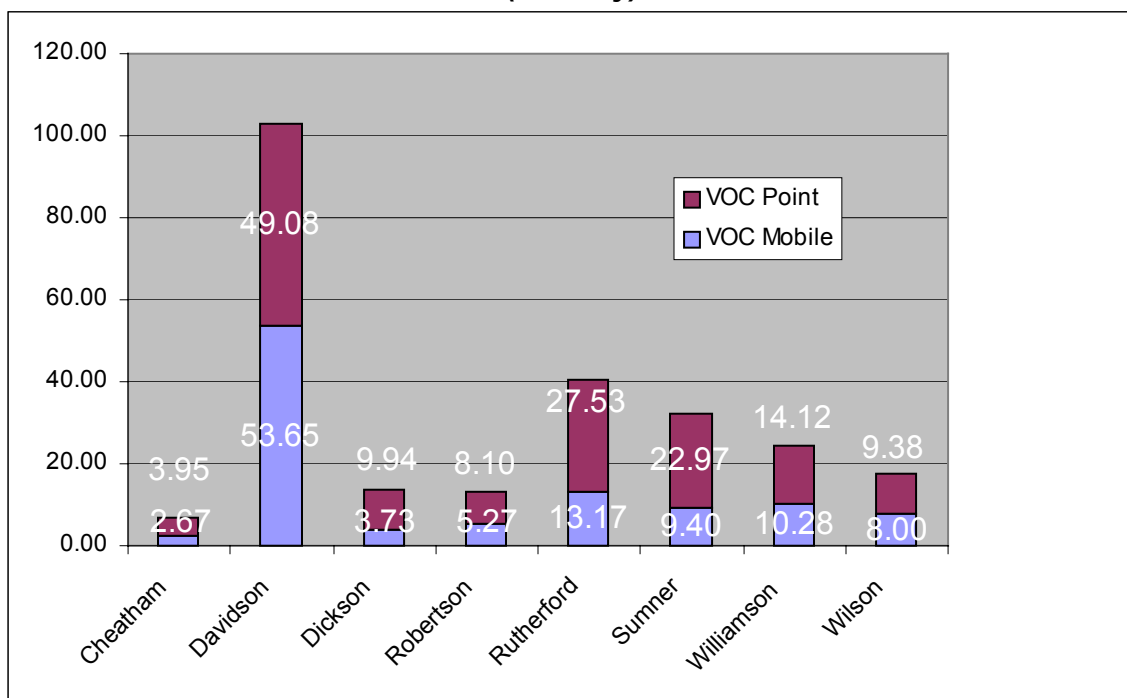
1999 NEI Mobile Source Emissions (ton/day)



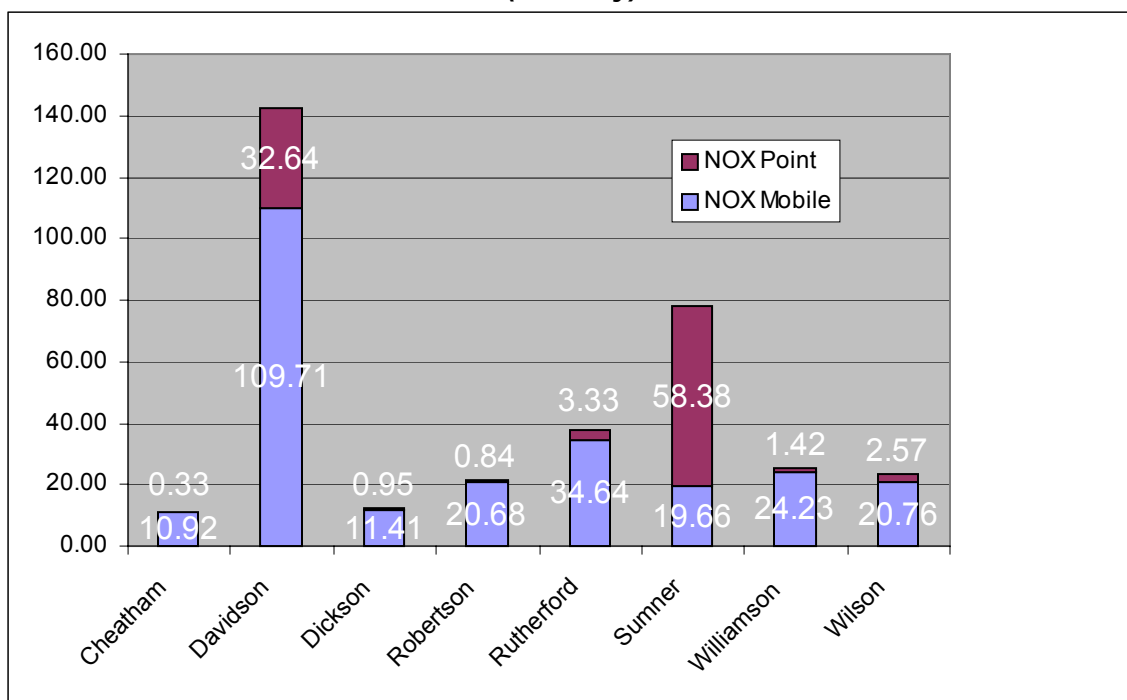
Commuting traffic from surrounding counties into Sumner County is minimal. Commuting traffic from Sumner County into surrounding counties is significant.

Commuting Classifications	
Not Significant	0-10%
Minimal	11-30%
High	31-50%
Significant	51% or more

1999 NEI VOC Contribution (ton/day)



1999 NEI NOX Contribution (ton/day)



Summary

Local air pollution emission reductions for Sumner County are listed in the Quantification of Control Measures Table. The local measures listed are to be implemented by the local government of Sumner County. All local measures are to be implemented by ozone season of 2007, at the latest. The most desirable implementation is the soonest time possible (ideally ozone season of 2005). Local jurisdictions understand that measures are to be implemented on a schedule that concurs with the schedule in the attainment demonstration modeling.

Attainment demonstration modeling analysis conducted by Systems Application International (SAI) demonstrates that the Nashville EAC will achieve the NAAQS for ozone by the end of 2007. The projected 2007 estimated ozone design value for the Nashville EAC is: 82.

For a Weight of Evidence Analysis, review the summary Attainment Demonstration for the Nashville Area and see the complete Weight of Evidence discussion presented in Chapter 8 of the Modeling Analysis Technical Support Documentation (TSD) for details.

Some voluntary measures were not included in the modeling demonstration. These measures will, it is expected, create even further reductions in the ozone level of the EAC. Effectiveness of these measures may not necessarily be quantifiable, however, given the concern for air quality in the region, any reduction is viewed as positive.

Please review the detailed attainment demonstration contained in the Modeling Analysis Technical Support Documentation, which includes specific information on the EAC's control measures and subsequent ozone design value. County level endorsement of their local control measures can be found in Attachment 1 at the end of this section.

Williamson County, Tennessee

Geography/Topography

Williamson County has a land area of 583 square miles and is located in the rolling terrain of the Middle Grand Division of the state along the Interstate 65 corridor south of Nashville. Williamson County is divided by both Highland Rim and Central Basin physiography. The eastern portion of the county is within the Central Basin, while the western portion is on the Highland Rim.

Meteorological Information

Wind data from Nashville for the period of record from 1988 through 1992 was determined to be representative for Williamson County. The predominate wind direction and speed is from the south at 7 to 10 knots (see Figure 1 A). The mean high temperature for July is 88.7 F, while the mean low is 69.5 F. The mean July precipitation is 3.8 inches. The period of record for this data is from 1971 through 2000.

Planning Authority

The authority for air quality planning for Williamson County resides with the Tennessee Department of Environment and Conservation. Transportation planning for Williamson County is performed by the Nashville Area Metropolitan Planning Organization.

Air Monitoring

For the 2001-2003 monitoring period, the ozone monitor 471650007 - 1 located in Sumner County shows an 8-hour design value of 0.086 parts per million (ppm) which would be classified as nonattainment (see Table 1 A).

Population

Based on projections to 2002 from the 2000 census data, there are 136,889 persons living in Williamson County (see Table 1 C). This indicates a population density of 217 persons per square mile. The population of Williamson County is approximately 29.3% rural with the remaining 70.7% living in incorporated areas. The largest cities in Williamson County are Franklin and Brentwood (see Table 1 C).

Williamson County's population from 1990 through 2000 increased by approximately 54.8% (81,797 to 126,638). The population is expected to increase by 21.3% between 2000 and 2010 (see Table 1 B).

Based on the 2002 population data for the entire Nashville MSA, Williamson County represents approximately 10.8% of the total Nashville MSA population (see Table 1 C).

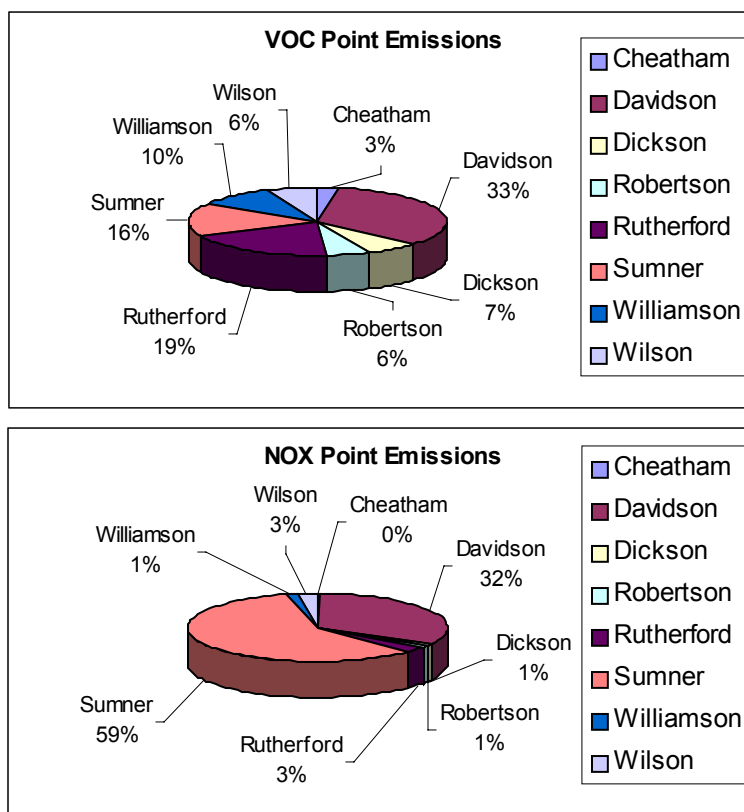
Air Emissions

All air emission estimates were derived from EPA's 1999 National Emission Inventory (NEI) database.

Point source NOX emissions from Williamson County were estimated at 1.42 ton/day in 1999 which represents approximately 1% of the 101 ton/day of overall NOX point source emissions from the Nashville MSA (see Table 1 D).

Point source VOC emissions from Williamson County were estimated at 14.12 ton/day in 1999 which represents approximately 10% of the 145 ton/day of overall VOC point source emissions from the Nashville MSA (see Table 1 D).

1999 NEI Point Source Emissions (ton/day)

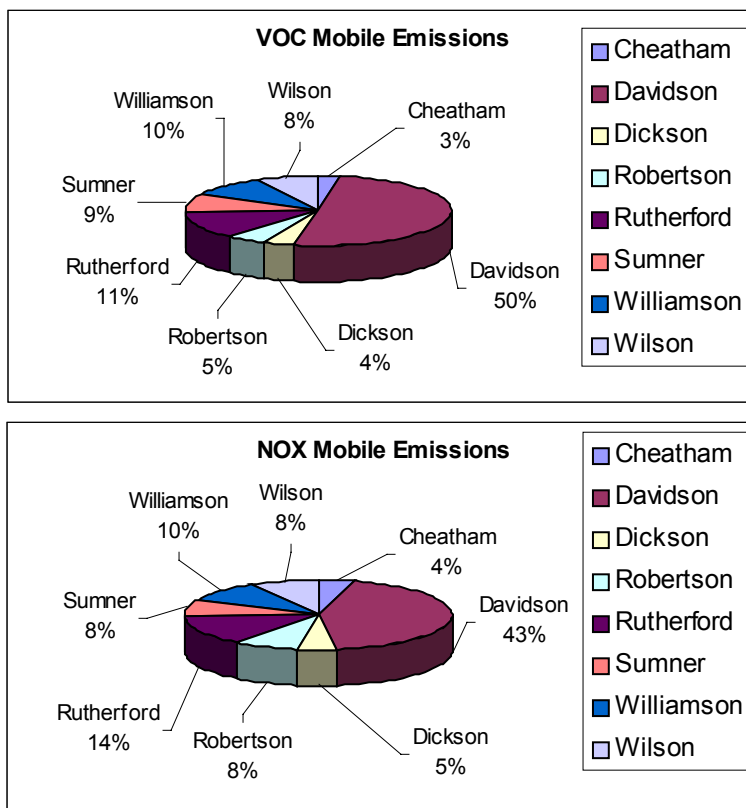


For NOX and VOC control, point sources located within Williamson County are subject to Prevention of Significant Deterioration (PSD) requirements, Control Technology Guideline Reasonable Available Control Technology (CTG RACT) requirements, Maximum Achievable Control Technology (MACT) requirements for Hazardous Air Pollutants (HAP), and New Source Performance Standards (NSPS).

Mobile source NOX emissions from Williamson County were estimated at 24.23 ton/day in 1999 which represents approximately 10% of the 252 ton/day of overall NOX mobile source emissions from the Nashville MSA (see Table 1 D).

Mobile source VOC emissions from Williamson County were estimated at 10.28 ton/day in 1999 which represents approximately 10% of the 106 ton/day of overall VOC mobile source emissions from the Nashville MSA (see Table 1 D).

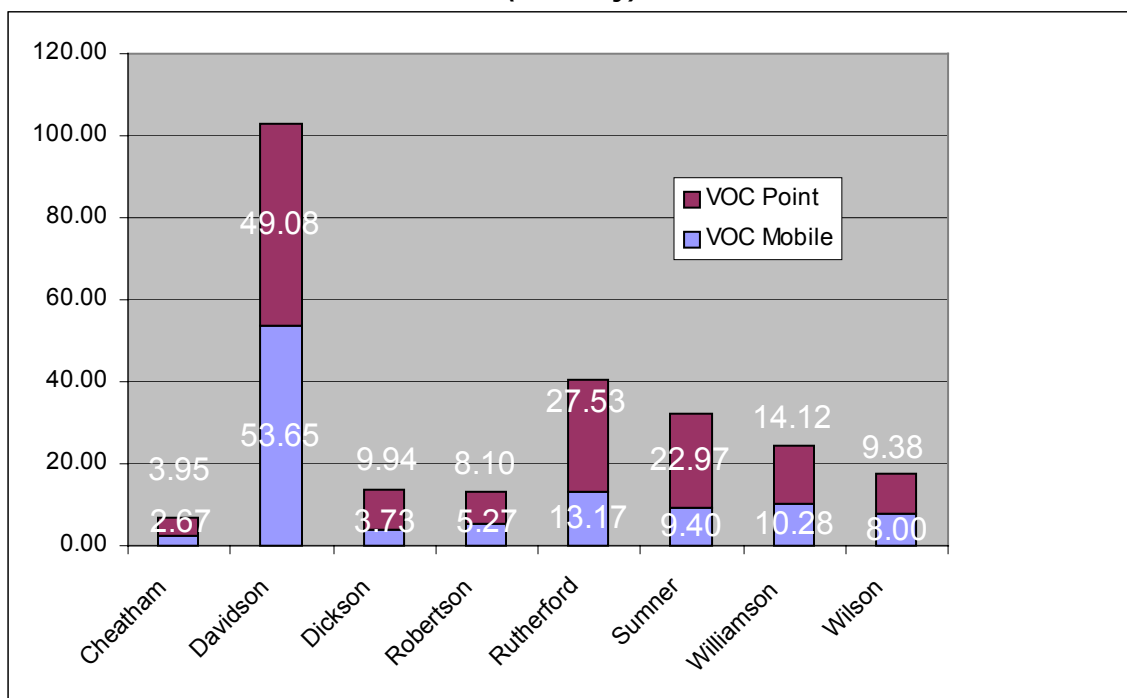
1999 NEI Mobile Source Emissions (ton/day)



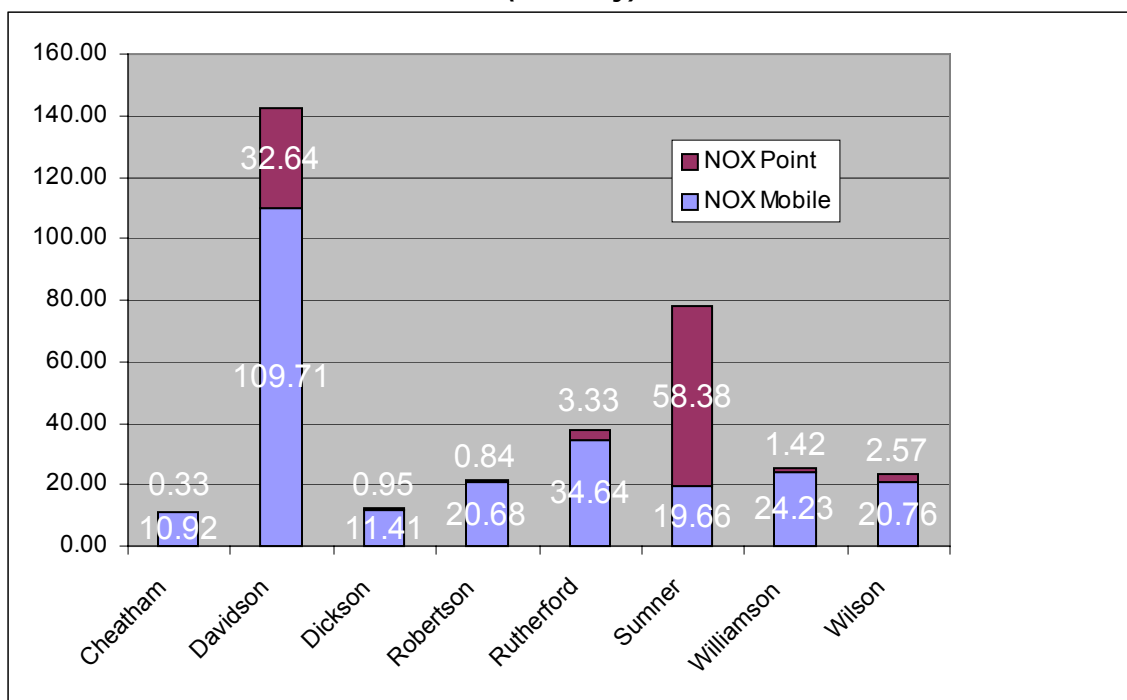
Commuting traffic from surrounding counties into Williamson County is high.
Commuting traffic from Williamson County into surrounding counties is high.

Commuting Classifications	
Not Significant	0-10%
Minimal	11-30%
High	31-50%
Significant	51% or more

1999 NEI VOC Contribution (ton/day)



1999 NEI NOX Contribution (ton/day)



Summary

Local air pollution emission reductions for Williamson County are listed in the Quantification of Control Measures Table. The local measures listed are to be implemented by the local government of Williamson County. All local measures are to be implemented by ozone season of 2007, at the latest. The most desirable implementation is the soonest time possible (ideally ozone season of 2005). Local jurisdictions understand that measures are to be implemented on a schedule that concurs with the schedule in the attainment demonstration modeling.

Attainment demonstration modeling analysis conducted by Systems Application International (SAI) demonstrates that the Nashville EAC will achieve the NAAQS for ozone by the end of 2007. The projected 2007 estimated ozone design value for the Nashville EAC is: 82.

For a Weight of Evidence Analysis, review the summary Attainment Demonstration for the Nashville Area and see the complete Weight of Evidence discussion presented in Chapter 8 of the Modeling Analysis Technical Support Documentation (TSD) for details.

Some voluntary measures were not included in the modeling demonstration. These measures will, it is expected, create even further reductions in the ozone level of the EAC. Effectiveness of these measures may not necessarily be quantifiable, however, given the concern for air quality in the region, any reduction is viewed as positive.

Please review the detailed attainment demonstration contained in the Modeling Analysis Technical Support Documentation, which includes specific information on the EAC's control measures and subsequent ozone design value. County level endorsement of their local control measures can be found in Attachment 1 at the end of this section.

Wilson County, Tennessee

Geography/Topography

Wilson County has a land area of 571 square miles and is the rolling terrain of the Middle Grand Division of the state along the Interstate 40 corridor nearly midway between Knoxville and Memphis. Wilson County lies entirely within the Central Basin physiography of Middle Tennessee.

Meteorological Information

Wind data from Nashville for the period of record from 1988 through 1992 was determined to be representative for Wilson County. The predominate wind direction and speed is from the south at 7 to 10 knots (see Figure 1 A). The mean high temperature for July is 88.7 F, while the mean low is 69.5 F. The mean July precipitation is 3.8 inches. The period of record for this data is from 1971 through 2000.

Planning Authority

The authority for air quality planning for Wilson County resides with the Tennessee Department of Environment and Conservation. Transportation planning for Wilson County is performed by the Nashville Area Metropolitan Planning Organization.

Air Monitoring

For the 2001-2003 monitoring period, the ozone monitor 471650007 - 1 located in Sumner County shows an 8-hour design value of 0.086 parts per million (ppm) which would be classified as nonattainment (see Table 1 A).

Population

Based on projections to 2002 from the 2000 census data, there are 93,079 persons living in Wilson County (see Table 1 C). This indicates a population density of 163 persons per square mile. The population of Wilson County is approximately 46.1% rural with the remaining 53.9% living in incorporated areas. The largest cities in Wilson County are Lebanon and Mt. Juliet (see Table 1 C).

Wilson County's population from 1990 through 2000 increased by approximately 30.6% (67,999 to 88,809). The population is expected to increase by 21.4% between 2000 and 2010 (see Table 1 B).

Based on the 2002 population data for the entire Nashville MSA, Wilson County represents approximately 7.3% of the total MSA population (see Table 1 C).

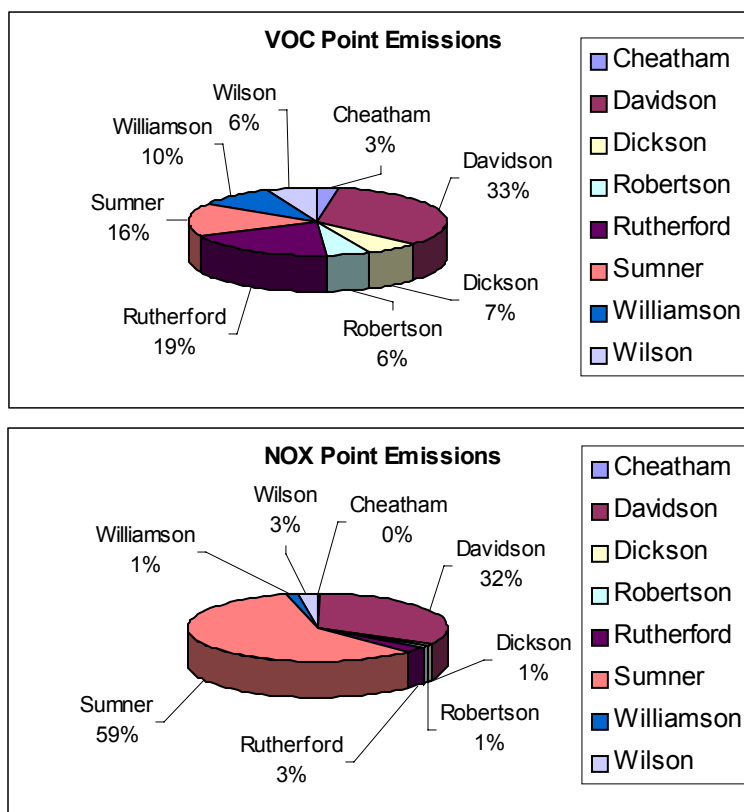
Air Emissions

All air emission estimates were derived from EPA's 1999 National Emission Inventory (NEI) database.

Point source NOX emissions from Wilson County were estimated at 2.57 ton/day in 1999 which represents approximately 3% of the 101 ton/day of overall NOX point source emissions from the Nashville MSA (see Table 1 D).

Point source VOC emissions from Wilson County were estimated at 9.38 ton/day in 1999 which represents approximately 6% of the 145 ton/day of overall VOC point source emissions from the Nashville MSA (see Table 1 D).

1999 NEI Point Source Emissions (ton/day)

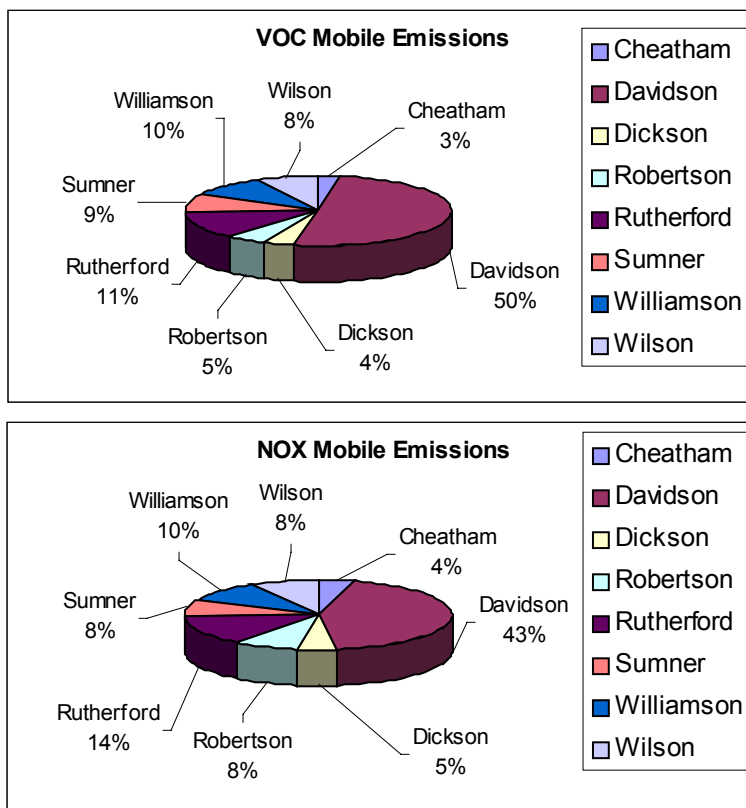


For NOX and VOC control, point sources located within Wilson County are subject to Prevention of Significant Deterioration (PSD) requirements, Control Technology Guideline Reasonable Available Control Technology (CTG RACT) requirements, Maximum Achievable Control Technology (MACT) requirements for Hazardous Air Pollutants (HAP), and New Source Performance Standards (NSPS).

Mobile source NOX emissions from Wilson County were estimated at 20.76 ton/day in 1999 which represents approximately 8% of the 252 ton/day of overall NOX mobile source emissions from the Nashville MSA (see Table 1 D).

Mobile source VOC emissions from Wilson County were estimated at 8.0 ton/day in 1999 which represents approximately 8% of the 106 ton/day of overall VOC mobile source emissions from the Nashville MSA (see Table 1 D).

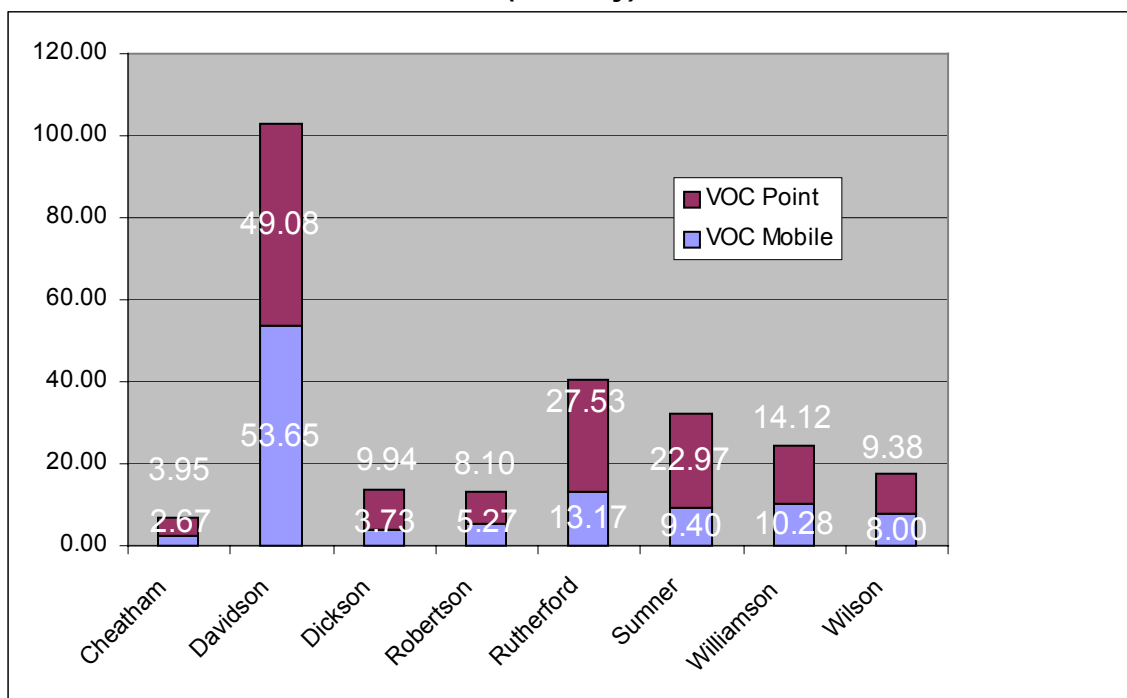
1999 NEI Mobile Source Emissions (ton/day)



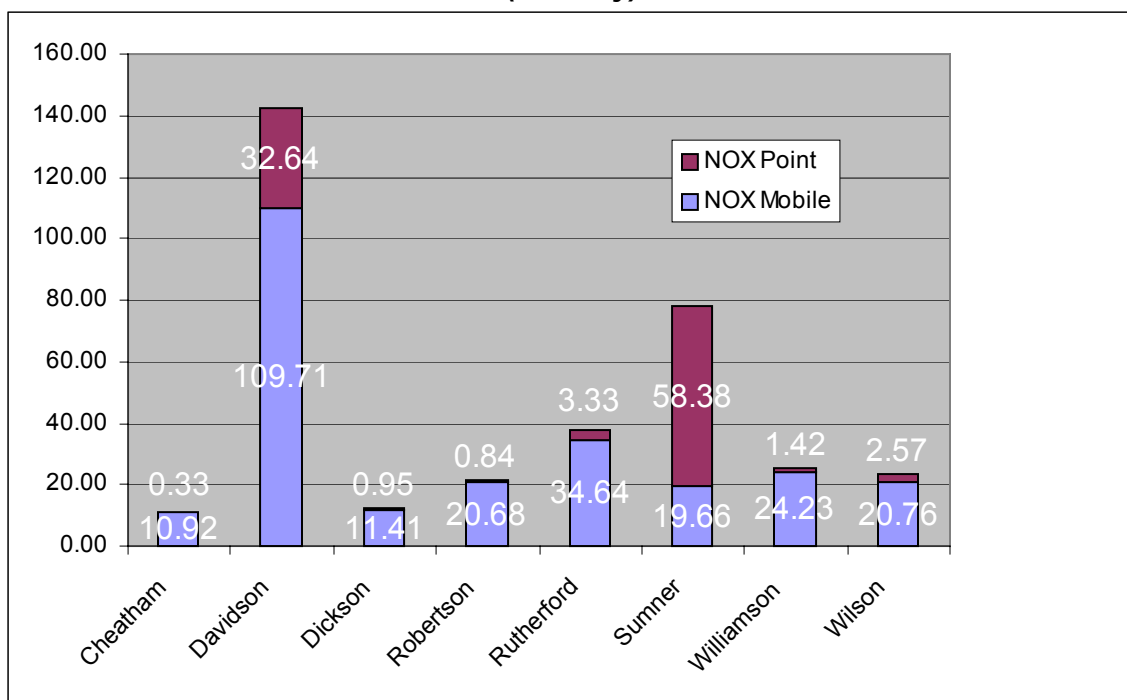
Commuting traffic from surrounding counties into Wilson County is high.
Commuting traffic from Wilson County into surrounding counties is significant.

Commuting Classifications	
Not Significant	0-10%
Minimal	11-30%
High	31-50%
Significant	51% or more

1999 NEI VOC Contribution (ton/day)



1999 NEI NOX Contribution (ton/day)



Summary

Local air pollution emission reductions for Wilson County are listed in the Quantification of Control Measures Table. The local measures listed are to be implemented by the local government of Wilson County. All local measures are to be implemented by ozone season of 2007, at the latest. The most desirable implementation is the soonest time possible (ideally ozone season of 2005). Local jurisdictions understand that measures are to be implemented on a schedule that concurs with the schedule in the attainment demonstration modeling.

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Some voluntary measures were not included in the modeling demonstration. These measures will, it is expected, create even further reductions in the ozone level of the EAC. Effectiveness of these measures may not necessarily be quantifiable, however, given the concern for air quality in the region, any reduction is viewed as positive.

Please review the detailed attainment demonstration contained in the Modeling Analysis Technical Support Documentation, which includes specific information on the EAC's control measures and subsequent ozone design value. County level endorsement of their local control measures can be found in Attachment 1 at the end of this section.

US EPA ARCHIVE DOCUMENT

Figure 1 A
Nashville MSA
Wind Rose

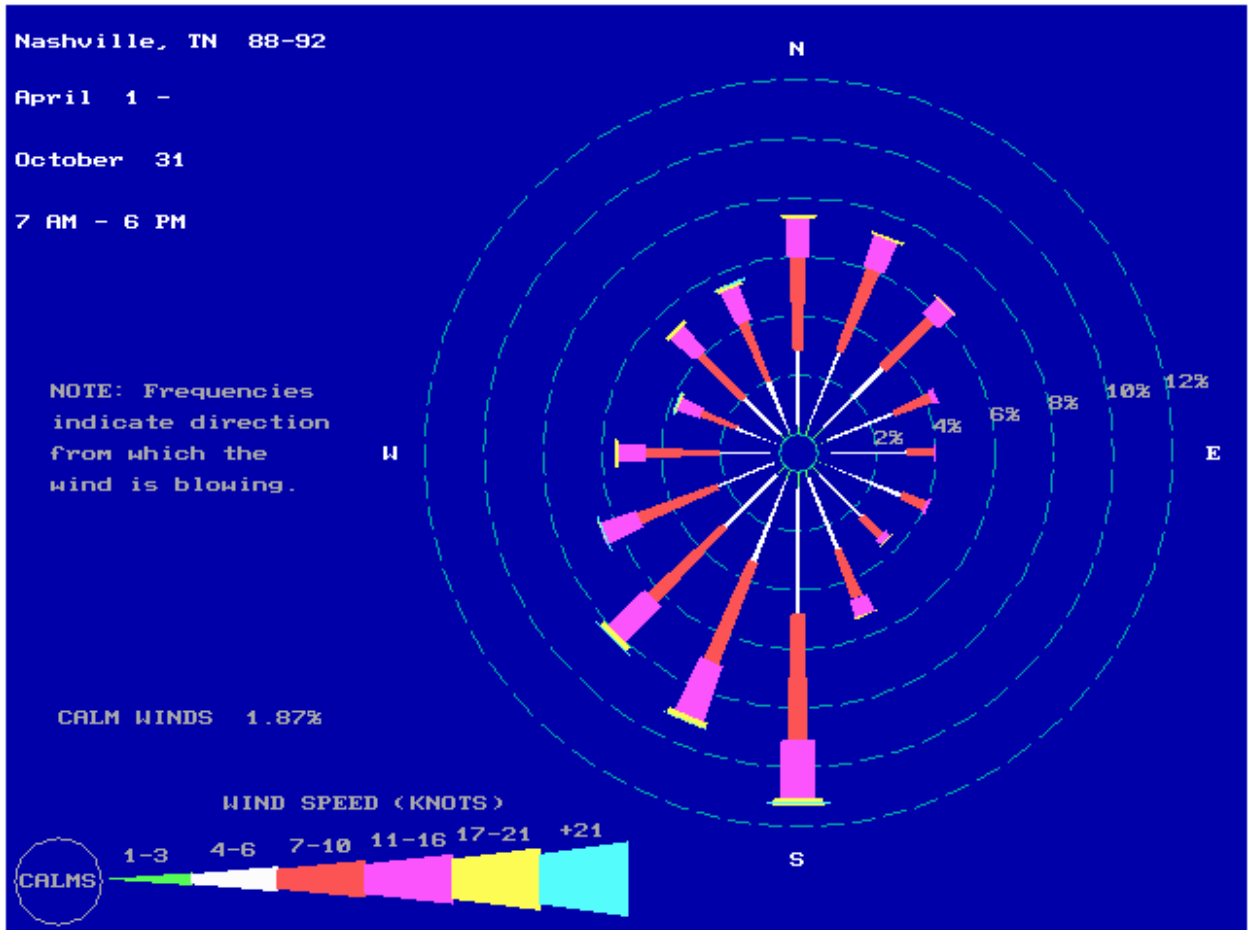


Figure 1 B
Nashville MSA
1999 NEI VOC and NOX Emissions
(ton/day)

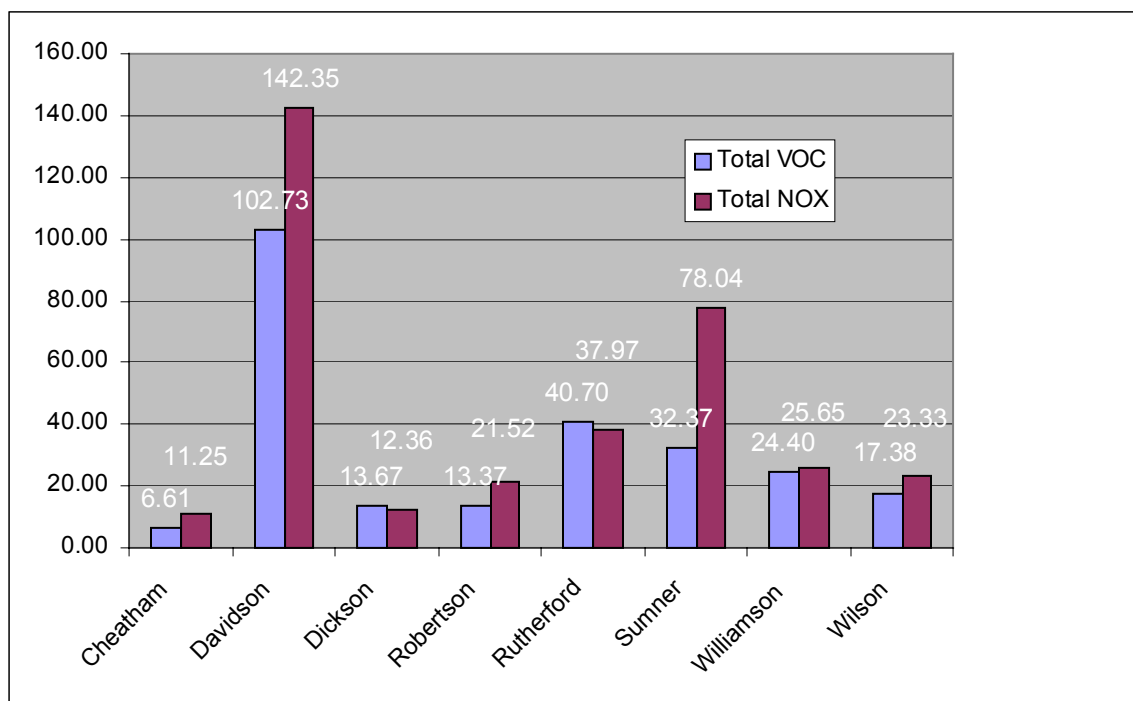


Table 1 A
Nashville MSA
Ozone Design Values
(ppm)

County	Site Name	MONITOR ID	1999 2001 Design Value PPM	2000 2002 Design Value PPM	2001 2003 Design Value PPM
Davidson	1015 Trinity Lane	470370011 - 1	0.076	0.071	0.071
Davidson	Percy Priest	470370026 - 1	0.087	0.080	0.077
Rutherford	Eagleville Puckett's Farm	471490101 - 1	0.086	0.084	0.080
Sumner	Rockland Recreation Area-Old Hickory Dam	471650007 - 1	0.093	0.088	0.086
Sumner	Cottontown Wright's Farm	471650101 - 1	0.090	0.087	0.082
Williamson	Fairview Middle School Crow Cut Road	471870106 - 1	0.088	0.087	0.084
Wilson	Cedars Of Lebanon State Park	471890103 - 1	0.087	0.085	0.082

Table 1 B
Nashville MSA
Population Growth Data

County	Population 1990	Population 2000	PERCENT CHANGE 1990 - 2000	Population 2002	Area in Square Miles	2002 Pop. Density (Sq. Mile)	Projection 2010	% Growth 2000 - 2010
Cheatham	27,327	35,912	31.4	36,986	302.66	122.2	49,721	38.5
Davidson	511,194	569,891	11.5	570,785	502.26	1136.4	574,279	0.8
Dickson	35,266	43,156	22.4	44,231	489.87	90.3	53,594	24.2
Robertson	41,690	54,433	30.6	57,446	476.47	120.6	63,121	16.0
Rutherford	119,722	182,023	52.0	194,934	618.91	315.0	215,417	18.3
Sumner	103,702	130,449	25.8	136,170	529.3	257.3	158,227	21.3
Williamson	81,797	126,638	54.8	136,889	582.68	234.9	153,589	21.3
Wilson	67,999	88,809	30.6	93,079	570.57	163.1	107,792	21.4
TOTALS	988,697	1,231,311		1,270,520			1,375,740	

Table 1 C
Nashville MSA
2002 Population Estimates

County	Population
Cheatham	36,986
*Ashland City	(3,641)
*Pleasant View	(2,934)
Davidson	570,785
*Nashville	(396,683)
Dickson	44,231
*Dickson	(12,244)
Robertson	57,446
*Springfield	(14,329)
Rutherford	194,934
*Murfreesboro	(68,816)
*Smyrna	(25,569)
Sumner	136,170
*Gallatin	(23,230)
*Hendersonville	(40,620)
Williamson	136,889
*Franklin	(41,842)
*Brentwood	(23,445)
Wilson	93,079
*Lebanon	(20,235)
*Mt. Juliet	(12,366)
TOTALS	1,270,520

Table 1 D
Nashville MSA
1999 NEI VOC and NOX Emissions
(ton/day)

County	Mobile	VOC Point	Total	Mobile	NOX Point	Total
Cheatham	2.67	3.95	6.61	10.92	0.33	11.25
Davidson	53.65	49.08	102.73	109.71	32.64	142.35
Dickson	3.73	9.94	13.67	11.41	0.95	12.36
Robertson	5.27	8.10	13.37	20.68	0.84	21.52
Rutherford	13.17	27.53	40.70	34.64	3.33	37.97
Sumner	9.40	22.97	32.37	19.66	58.38	78.04
Williamson	10.28	14.12	24.40	24.23	1.42	25.65
Wilson	8.00	9.38	17.38	20.76	2.57	23.33
TOTAL	106.17	145.06	251.23	252.01	100.46	352.47

Summary Attainment Demonstration For The Nashville Area

The attainment and screening tests and additional corroborative analyses indicate that the Nashville EAC area will be in attainment of the 8-hour ozone standard by 2007. Good modeling results and good representation of typical 8-hour ozone conducive meteorological conditions by the simulation periods provide a sound basis for the application of the model-based tests. Variations in the selection of days or the radius of influence assumptions employed in the application of the attainment test do not alter the outcome of the modeled attainment test. There are no locations within a subdomain encompassing the Nashville EAC area for which high ozone concentrations (greater than any near a monitor) are consistently simulated. The values of the simulated ozone exposure metrics indicate a significant reduction in 8-hour ozone for the 2007 AS-4 control measures simulation - approximately 60 percent for each of the exposure-type metrics. Estimates of modeling system noise also suggest that, relative to the 2007 baseline simulation, the simulated ozone reductions associated with the AS-4 control measures are meaningful within the context of the simulation – that is, the measures are expected to result in meaningful further ozone reductions by 2007, compared to the baseline values.

All of the monitoring sites in the Nashville area have future-year estimated design values for 8-hour ozone that are less than 84 ppb. The areawide 2007 EDV for this site is 82 ppb if the 2000-2002 design value is used, 80 ppb if the 2001-2003 design value is used, and 84 ppb if a meteorologically adjusted design value is used. Use of a meteorologically adjusted DV that is higher than observed supports a finding of modeled attainment.

Please see the complete Weight Of Evidence discussion presented in Chapter 8 of the Modeling Analysis Technical Support Document (TSD) for details.

Letters of Support and Resolutions

RESOLUTION: 8

RESOLUTION TITLE: Resolution for Clean Air Quality

DATE: March 15, 2004

MOTION BY: Mr. Donnie Jordan

SECONDED BY: Ms. Brenda Montgomery

COMPLETED RESOLUTION:

BE IT THEREFORE RESOLVED, THAT the Cheatham County Legislative Body meeting in Regular Session this the 15th day of March in the General Sessions Courtroom at the Courthouse in Ashland City, Tennessee; WHEREAS, AIR pollution is nationally a cause for concern and because Cheatham county is committed to improving the quality of life for its citizens.

WHEREAS, CHEATHAM County is a member of the Nashville Early Action compact, eight middle Tennessee counties working together to improve air quality in the mid-State area.

WHEREAS, THE Tennessee Air Pollution Control Board represents local government at a state and national level on critical air quality issues, Cheatham County supports the efforts of the Board to improve air quality.

RESOLVE FURTHER:

Work in partnership with Davidson, Dickson, Robertson, Rutherford, Sumner, Williamson, and Wilson counties to implement measures which reduce directly and indirectly, air pollutant levels.

Work to improve the efficient flow of traffic in Cheatham County so that emissions on county roads are reduced. In areas where traffic signals are present, transportation funds will be expended in a manner to improve traffic signal synchronization.

Work with other mid-State counties and the Regional Transportation Authority to increase the number of persons using rideshare programs, including carpools, vanpools, and inter-county express bus routes.

The County will participate with our Early Action Compact partners to establish an Air Quality Outreach and Action Day Program.

The County and its municipalities will encourage and support the construction of new pedestrian facilities and bikeways.

We support an integrated planning approach, which emphasizes the relationship between land use and transportation.

Cheatham County supports the Tennessee Air Board as they recommend state legislation on expanded vehicle inspection and maintenance programs, as long as that burden does not fall solely on counties which contribute little to nonattainment.

Cheatham County supports the Tennessee Air Board as they determine the need for lower speed limits, and improved fuels such as cetane additives to diesel fuels.

The County will encourage the reduced idling of vehicles especially school buses, in the understanding that those reductions will improve the overall air quality and especially those individuals in the vicinity of those vehicle

RECORD: Approved by roll call vote, 11 Yes, 1 Absent

Ron Davidson	Yes	Ricky Burton	Yes
Donnie Jordan	Yes	Brenda Montgomery	Yes
Ann Jarreau	Yes	David Davidson	Absent
Jack McCanless, Jr.	Yes	Gary Jackson	Yes
Bill Anderson	Yes	Karl Francis	Yes
Carmel Maddox	Yes	David McCullough	Yes

COUNTY EXECUTIVE'S REMARKS:


William R. Orange, County Mayor

CHEATHAM COUNTY COMMISSION CHAIRMAN ACKNOWLEDGMENT:

I, W.J. Hall, do hereby certify that I am the duly authorized and acting County Clerk of Cheatham County, Tennessee. And as such official, I further certify that this resolution was duly passed in open court and offered for signature to the Honorable William R. Orange, County Mayor; that this resolution was promptly and fully recorded and is open to public inspection.

Witness, My official signature and seal of said county, this the 19th day of March 2004.


W. J. Hall, County Clerk

RECEIVED

MAR 22 2004

CHEATHAM COUNTY
EXECUTIVE OFFICE



Bill Purcell Mayor

March 17, 2004

Mr. Barry Stephens, P.E.
Director, Air Pollution Control Division
Tennessee Dept. of Environment & Conservation
9th floor, L&C Annex
401 Church Street
Nashville, Tennessee 37219

Dear Mr. Stephens:

Please accept this letter as confirmation that Metropolitan Nashville/Davidson County is a continuing participant in the Early Action Compact for air quality in the Nashville MSA, and that we commit to the control measures described below and in the enclosed materials.

In December, the Executive Board of the Nashville Area Metropolitan Planning Organization (MPO) adopted a list of local control measures to reduce air pollution from mobile sources such as automobiles and truck traffic. That list is attached, along with documentation to show funding committed to the various projects/programs and who will implement them.

Please take the appropriate steps to include this information in the March 31, 2004 submittal to the U.S. Environmental Protection Agency for our region's continuing participation in an Early Action Compact.

Sincerely,

Bill Purcell
Mayor

BP/js

Office of the Mayor
Metro City Hall
225 Polk Avenue
Nashville, Tennessee 37203
Phone: 615.862.6000
Fax: 615.862.6040
mayor@nashville.gov

**AIR QUALITY CONTROL MEASURES ADOPTED BY
DAVIDSON, RUTHERFORD, SUMNER, WILSON, WILLIAMSON COUNTIES
THROUGH THE NASHVILLE AREA MPO**

March 17, 2004

Note: For Davidson County, this list serves as a supplement to the document prepared by the Metropolitan Nashville/Davidson County Health Department. Many of the regionwide programs mentioned here are partially funded by Davidson County and will have air quality benefits there.

ADOPTED LOCAL CONTROL MEASURES (TO BE IMPLEMENTED 2004-2006)

Below is a short description of each control measure adopted by the MPO Board. With the exception of land use planning, which is solely a local responsibility, each of these measures has been added to the MPO's current Transportation Improvement Program (TIP) for funding and implementation during the next three years. Relevant project pages from the TIP have been attached to this submittal as documentation that the projects/programs are funded.

For calculations of the emissions reduced from each control measure, please refer to *Estimates of Potential Emission Reductions for the Nashville Ozone Early Action Compact Area*. This report was prepared by the University of Tennessee's Civil and Environmental Engineering Department, and is attached as part of this submittal.

1. Traffic Signal Synchronization and Related Improvements

The five counties in the Nashville Area MPO have committed transportation funds for the following traffic signal improvements to reduce emissions on urban arterial corridors throughout the region:

\$5.9 million in Davidson County; \$1.2 million in Rutherford County; \$1.4 million in Sumner County; \$1.5 million in Williamson County.

2. Funding and new infrastructure for rideshare/trip reduction programs

By 2007, the Regional Transportation Authority and the TMA Group in Williamson County will generate a 10% increase in the number of persons using their rideshare programs, including carpools, vanpools, and intercounty express bus routes.

Local governments in the MPO have programmed the following funds to support this effort:

- \$2.6 million in the five-county area for RTA rideshare programs, plus an additional \$1 million for Williamson County/TMA Group rideshare programs
- \$800,000 for new vans and upgraded intercounty buses
- \$3.25 million for new park & ride lots
- \$1.9 million for two intermodal stations in Rutherford County (Smyrna)
- \$2.7 million to implement "transit priority" infrastructure between downtown Nashville and the West End area

3. Air Quality Outreach and Action Day Program

This program will include public education about the causes of ozone and particulate pollution, and personal solutions that citizens can implement. The program will work with regional media to broadcast daily "air quality alerts" so citizens know when it is particularly important to change daily behaviors. The program will also work with major employers to develop company-specific plans for "Air Quality Action Days."

The local governments of the MPO have programmed \$761,500 in funding for the program in 2004-2006. This will include benchmarking and evaluation to measure the program's effect.

4. New Rail Service (Nashville-Lebanon corridor)

The region is establishing a commuter rail line between Nashville and Lebanon, much of which is being funded through Congressional earmarks. However, significant portions will also be funded by local governments in Davidson and Wilson counties. The following local governments are contributing local matching funds for the project's capital costs: Metro Nashville/Davidson County, City of Mt. Juliet, City of Lebanon; and Wilson County.

In addition, all the local governments of the five-county MPO have jointly programmed \$1.2 million to help operate the commuter rail line for its first three years.

5. Build New Pedestrian Facilities and Bikeways

The five counties have programmed nearly \$8 million through the MPO for new pedestrian facilities and bikeways, and to increase use of the existing system by improving its safety and

functionality. This does not include federal transportation enhancement funds awarded by TDOT, nor does it include projects that will be entirely funded by cities and counties.

Federal and related state and local matching funds for sidewalks, bikeways and greenways: \$4.7 million in Davidson County; \$715,000 in Rutherford County; \$1.3 million in Sumner County; \$150,000 in Williamson County; \$1.1 million in Wilson County. In addition, the MPO has programmed more than \$1 million to build sidewalks in downtown Springfield and in the City of White House. This investment will provide air quality benefits to Robertson County, another member of the Nashville Area Early Action Compact.

6. HOV Lane Expansion

The MPO and the Tennessee Department of Transportation will continue to implement the system of interstate High Occupancy Vehicle (HOV) lanes throughout the Nashville region. Funding has been programmed for HOV lanes in three new areas during the next 3 years: (1) along Interstate 40 in Davidson County, from Interstate 24 to Donelson Pike; (2) along Interstate 24 in Rutherford County from U.S. 231 to State Highway 96; and (3) along Interstate 24 in Rutherford County from State Highway 96 to State Route 840. These three projects will add more than 11 miles to the region's total HOV laneage.

7. Land Use Planning that Reduces Driving

The five MPO counties as well as Robertson County will benefit from an integrated planning approach that emphasizes the relationship between land use and transportation. Local governments in all of these counties have received training in the past two years through regionally-sponsored workshops on creating "walkable communities," as well as other workshops held across Middle Tennessee. New mixed-use projects are beginning to appear which will help reduce the number of auto trips made by area citizens. Several cities have adopted changes to design standards and zoning that promote pedestrian activity, and others are currently considering such changes.

Changing travel habits through land use planning is a cumulative effort that typically takes years to show full results. It is also understood that the other investments on this list, such as rideshare, transit, and improved ped/bike facilities, will also account for some change in vehicle-miles traveled. The counties have thus set a modest goal for the effects of land use planning, of a one percent reduction in vehicle-miles traveled by 2007.

- 1 -

RESOLUTION NO. 3-2004-3

**RESOLUTION TO SUPPORT EFFORTS TO IMPROVE
AIR QUALITY FOR DICKSON COUNTY AND
THE STATE OF TENNESSEE**

WHEREAS, air pollution is nationally a cause for concern and because Dickson County is committed to improving the quality of life for its citizens; and

WHEREAS, Dickson County is a member of the Nashville Early Action Compact, eight middle Tennessee counties working together to improve air quality in the mid-state area; and

WHEREAS, the Tennessee Air Pollution Control Board represents local government at a state and national level on critical air quality issues, Dickson County supports the efforts of the Board to improve air quality.

NOW, THEREFORE, BE IT RESOLVED by the Dickson County Commission the following:

1. Work in partnership with Cheatham, Davidson, Robertson, Rutherford, Sumner, Williamson and Wilson counties to implement measures that reduce directly and indirectly, air pollutant levels.
2. Work to improve the efficient flow of traffic in Dickson County so that emissions on county roads are reduced. In areas where traffic signals are present, transportation funds will be expended in a manner to improve traffic signal synchronization.
3. Work with other mid-state counties and the Regional Transportation Authority to increase the number of persons using rideshare programs, including carpools, vanpools, and intercounty express bus routes.
4. The County will participate with our Early Action Compact partners to establish an Air Quality Outreach and Action Day Program.
5. The County and its municipalities will encourage and support the construction of new pedestrian facilities and bikeways.
6. We support an integrated planning approach which emphasizes the relationship between land use and transportation.
7. Dickson County supports the Tennessee Air Pollution Control Board as they recommend state legislation on expanded vehicle inspection and maintenance programs, as long as that burden does not fall solely on counties that contribute little to non-attainment.

8. Dickson County supports the Tennessee Air Pollution Control Board as they determine the need for lower speed limits and improved fuels such as cetate additives to diesel fuels.
9. The County will encourage the reduced idling of vehicles especially school buses, in the understanding that those reductions will improve the overall air quality and especially those individuals in the vicinity of those vehicles.

This the 15th day of March, 2004.

Votes: Aye 7
 Nay 4
 Pass 0
 Absent 1

Approved:

Linda J. Frazier
Linda J. Frazier, County Mayor

Attest:

Phil Simons
Phil Simons, County Clerk

RESOLUTION NO. 0223404

10.4-6

APPROVING COUNTY COMPLIANCE OF EPA ATTAINMENT GOALS

WHEREAS, air pollution is nationally a cause for concern and because Robertson County is committed to improving the quality of life for its citizens; and

WHEREAS, Robertson County is a member of the Nashville Early Action Compact, eight middle Tennessee counties working together to improve air quality in the mid-State area; and

WHEREAS, the Tennessee Air Pollution Control Board represents local government at a state and national level on critical air quality issues, Robertson County supports the efforts of the Board to improve air quality.

NOW, THEREFORE BE IT RESOLVED, that Robertson County agrees to:

1. Work in partnership with Cheatham, Davidson, Dickson, Rutherford, Sumner, Williamson and Wilson counties to implement measures which reduce, directly and indirectly, air pollutant levels.
2. Work to improve the efficient flow of traffic in Robertson County so that emissions on county roads are reduced. In areas where traffic signals are present, transportation funds will be expended in a manner to improve traffic signal synchronization.
3. Work with other mid-State counties and the Regional Transportation Authority to increase the number of persons using rideshare programs, including carpools, vanpools and inter-county express bus routes.
4. The County will participate with our Early Action Compact partners to establish an Air Quality Outreach and Action Day Program.
5. The County and its municipalities will encourage and support the construction of new pedestrian facilities and bikeways. The Cities of White House and Springfield are working to build more than \$1 million in new sidewalks; this investment will provide air quality benefits to Robertson County.
6. Support an integrated planning approach which emphasizes the relationship between land use and transportation.
7. Support the Tennessee Air Board as they recommend state legislation on expanded vehicle inspection and maintenance programs, as long as that burden does not fall solely on counties which contribute little to non-attainment.
8. Support the Tennessee Air Board as they determine the need for lower speed limits and improved fuels such as cetane additives to diesel fuels.
9. Encourage the reduced idling of vehicles, especially school buses, in the understanding that those reductions will improve the overall air quality; and especially those individuals in the vicinity of those vehicles.

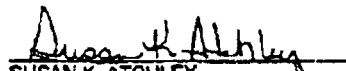
BE IT FURTHER RESOLVED that this Resolution shall take effect from and after its passage, the public welfare requiring it.

Passed this 23rd day of February, 2004.


COUNTY COMMISSIONER


COUNTY EXECUTIVE

ATTEST:


SUSAN K. ATCHLEY
County Clerk

NANCY R. ALLEN
COUNTY MAYOR



RUTHERFORD COUNTY
TENNESSEE

2004 MAR 24 PM 4:01

March 22, 2004

Mr. Barry Stephens, P.E.
Director, Air Pollution Control Division
Tennessee Dept. of Environment & Conservation
9th floor, L&C Annex
401 Church Street
Nashville, TN 37219

Dear Mr. Stephens:

Please accept this letter as confirmation that Rutherford County is a continuing participant in the Early Action Compact for air quality in the Nashville MSA, and that we commit to the control measures described below and in the enclosed materials.

In December, the Executive Board of the Nashville Area Metropolitan Planning Organization (MPO) adopted a list of local control measures to reduce air pollution from mobile sources such as automobiles and truck traffic. That list is attached, along with documentation to show funding committed to the various projects/programs and who will implement them.

Please take the appropriate steps to include this information in the March 31, 2004 submittal to the U.S. Environmental Protection Agency for our region's continuing participation in an Early Action Compact.

Sincerely,

Nancy R. Allen
Nancy R. Allen
County Mayor





R.J. "HANK" THOMPSON

SUMNER COUNTY EXECUTIVE

March 30, 2004

Mr. Barry Stephens, P.E.
Director, Air Pollution Control Division
Tennessee Department of Environment & Conservation
9th Floor, L&C Annex
401 Church Street
Nashville, TN 37219

Dear Mr. Stephens:

Please accept this letter as confirmation that Sumner County is a continuing participant in the Early Action Compact for air quality in the Nashville MSA, and that we commit to the control measures described below and in the enclosed materials.

In December, the Executive Board of the Nashville Area Metropolitan Planning Organization (MPO) adopted a list of local control measures to reduce air pollution from mobile sources such as automobiles and truck traffic. That list is attached, along with documentation to show funding committed to the various projects/programs and who will implement them.

Please take the appropriate steps to include this information in the March 31, 2004 submittal to the U.S. Environmental Protection Agency for our region's continuing participation in an Early Action Compact.

Sincerely,

A handwritten signature in black ink, appearing to read "R.J. 'Hank' Thompson". The signature is written in a cursive, flowing style.

R.J. "Hank" Thompson
Sumner County Executive

IIT/sp



WILLIAMSON COUNTY

Rogers C. Anderson, County Mayor
1320 West Main Street, Suite 125
Franklin, Tennessee 37064
(615) 790-5700, Fax (615) 790-5818

March 26, 2004

Mr. Barry Stephens, P.E.
Director, Air Pollution Control Division
Tennessee Dept. of Environment & Conservation
9th floor, L&C Annex
401 Church Street
Nashville, TN 37219

RE: Early Action Compact (EAC)

Dear Mr. Stephens:

Please accept this letter as confirmation that Williamson County is a continuing participant in the Early Action Compact for air quality in the Nashville MSA, and that we commit to the control measures described below and in the enclosed materials.

In December, the Executive Board of the Nashville Area Metropolitan Planning Organization (MPO) adopted a list of local control measures to reduce air pollution from mobile sources such as automobiles and truck traffic. That list is attached, along with documentation to show funding committed to the various projects/programs and who will implement them.

Please take the appropriate steps to include this information in the March 31, 2004 submittal to the U.S. Environmental Protection Agency for our region's continued participation in an Early Action Compact.

Sincerely,

Rogers Anderson
County Mayor

WILSON COUNTY PLANNING OFFICE

TN. DIV. OF
AIR POLLUTION CONTROL
2004 MAR 18 PM 1:57



ROOM 5, WILSON COUNTY COURTHOUSE * LEBANON, TENNESSEE 37087
(615) 449-2836 * FAX (615) 443-6190

March 16, 2004

Barry Stephens, P.E.
Director
Air Pollution Control Division
9th Floor, L&C Annex
401 Church St.
Nashville, TN 37219

Re: Early Action Compact List of Final Measures

To Whom it may concern:

Wilson County Tennessee is hereby submitting a list of final measures to the State of Tennessee Department of Environment and Conservation and the Environmental Protection Agency. The list is attached for your convenience and encompasses all those measures that were previously adopted by the Nashville area Metropolitan Planning Organization (MPO). It is intended that Wilson County will undertake these measures, as deemed viable and necessary, through and by the Regional MPO. As Wilson County is one of several local jurisdictions that are a part of the MPO; we routinely commit local jurisdiction funding to air quality improvement related projects through the MPO. Therefore, please accept the attached list of proposed final measures as a symbol of Wilson County's commitment to the Early Action Compact at this time. We in Wilson County will participate in these and similar air quality improvement measures through the work of the Nashville Regional MPO.

Additionally, we held a locally funded luncheon and seminar to discuss our local and regional air quality with the leaders of our local community. This air quality seminar was held at the James E. Ward Agricultural Center in Lebanon, Tennessee on January 22, 2004. We invited all elected officials, planning officials, public works officials, local chamber members, local media outlets, and members of the general public from across Wilson County. The seminar was well attended, hosting approximately 100 people, and focused not only on the environmental and economic impacts of our local air quality; but also on the tremendous health effects that we may be experiencing as a community because of poor air in our region. It is hoped that these types of outreaches

Early Action Compact Final Measures
Page 2

will continue periodically into the future. Furthermore, we hope that the Tennessee Department of Environment and Conservation and the Environmental Protection Agency see this additional measure as further evidence of our commitment to better air in our community and region.

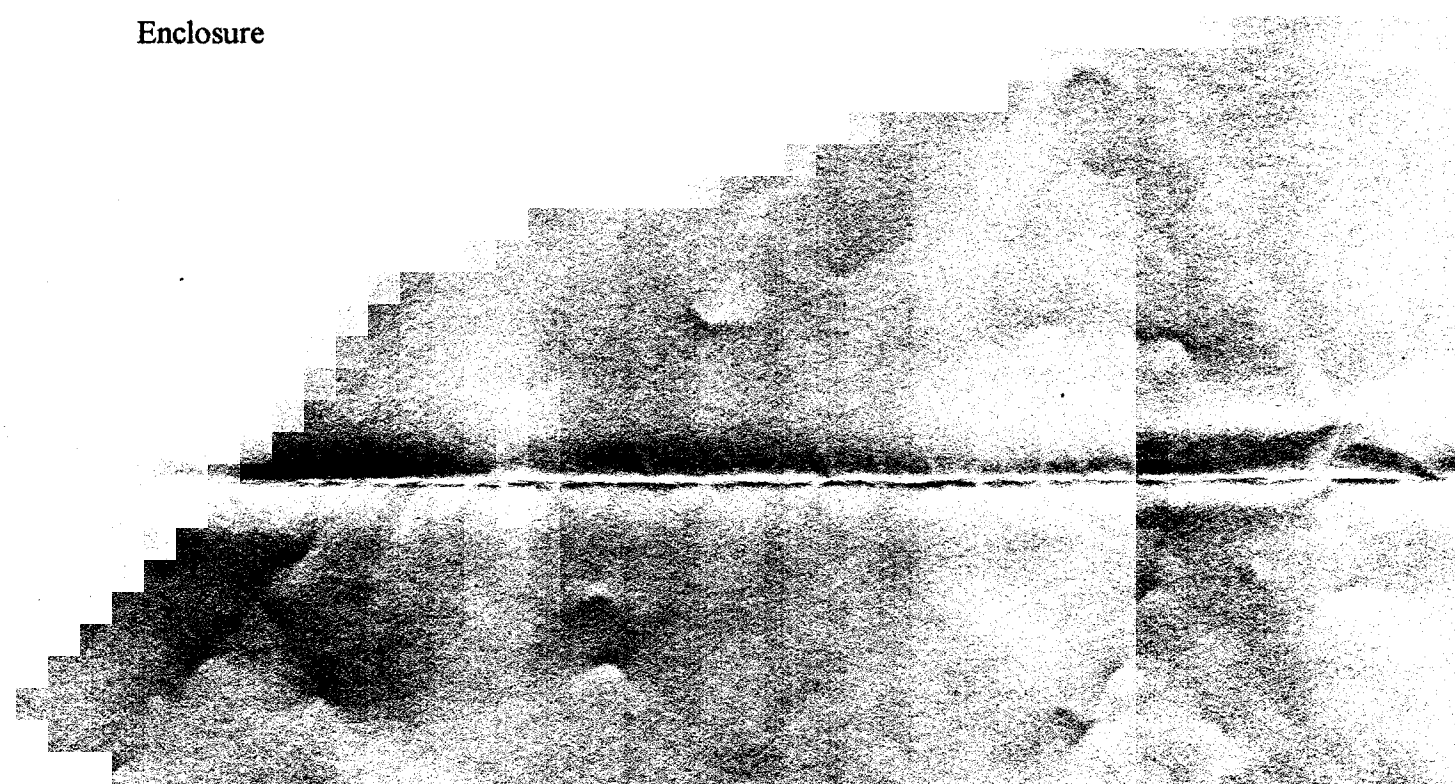
Sincere Regards,

A handwritten signature in cursive script, appearing to read "Robert Dedman".

Robert Dedman
County Mayor
Wilson County, Tennessee

tb

Enclosure

A large, dark, and heavily textured area occupies the bottom half of the page, possibly representing a large stamp, a scan artifact, or a redacted section. It has a grainy, almost abstract appearance with varying shades of gray and black.

**AIR QUALITY CONTROL MEASURES ADOPTED BY
DAVIDSON, RUTHERFORD, SUMNER, WILSON, WILLIAMSON COUNTIES
THROUGH THE NASHVILLE AREA MPO**

Dec. 17, 2003

Note: For Davidson County, this list serves as a supplement to the document prepared by the Metropolitan Nashville/Davidson County Health Department. Many of the regionwide programs mentioned here are partially funded by Davidson County and will have air quality benefits there.

PLANNED LOCAL CONTROL MEASURES (TO BE IMPLEMENTED 2004-2006)

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The five counties in the Nashville Area MPO have committed transportation funds for the following traffic signal improvements to reduce emissions on urban arterial corridors throughout the region:

\$5.9 million in Davidson County; \$1.2 million in Rutherford County; \$1.4 million in Sumner County; \$1.5 million in Williamson County.

2. Funding and new infrastructure for rideshare

By 2007, the Regional Transportation Authority and the TMA Group in Williamson County will generate a 10% increase in the number of persons using their rideshare programs, including carpools, vanpools, and intercounty express bus routes.

Local governments in the MPO have programmed the following funds to support this effort:

\$2.6 million in the five-county area for RTA rideshare programs, plus an additional \$1 million for Williamson County/TMA Group rideshare programs
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\$2.7 million to implement "transit priority" infrastructure between downtown Nashville and the West End area

3. Air Quality Outreach and Action Day Program

This program will include public education about the causes of ozone and particulate pollution, and personal solutions that citizens can implement. The program will work with regional media to broadcast daily "air quality alerts" so citizens know when it is particularly important to change daily behaviors. The program will also work with major employers to develop company-specific plans for "Air Quality Action Days."

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In addition, all the local governments of the five-county MPO have jointly programmed \$1.2 million to help operate the commuter rail line for its first three years.

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Federal and related state and local matching funds for sidewalks, bikeways and greenways: \$4.7 million in Davidson County; \$715,000 in Rutherford County; \$1.3 million in Sumner County; \$150,000 in Williamson County; \$1.1 million in Wilson County. In addition, the MPO has programmed more than \$1 million to build sidewalks in downtown Springfield and in the City of White House. This investment will provide air quality benefits to Robertson County, another member of the Nashville Area Early Action Compact.

6. Land Use Planning that Reduces Driving

The five MPO counties as well as Robertson County will benefit from an integrated planning approach that emphasizes the relationship between land use and transportation. Local governments in all of these counties have received training in the past two years through regionally-sponsored workshops on creating "walkable communities," as well as other workshops held across Middle Tennessee. New mixed-use projects are beginning to appear which will help reduce the number of auto trips made by area citizens. Several cities have

adopted changes to design standards and zoning that promote pedestrian activity, and others are currently considering such changes.

Changing travel habits through land use planning is a cumulative effort that typically takes years to show full results. It is also understood that the other investments on this list, such as rideshare, transit, and improved ped/bike facilities, will also account for some change in vehicle-miles traveled. The counties have thus set a modest goal for the effects of land use planning, of a one percent reduction in vehicle-miles traveled by 2007.

RECOMMENDED STATE CONTROL MEASURES (TO BE IMPLEMENTED 2004-2006)

The local governments of the Nashville Area MPO recognize that many of the most effective solutions to air pollution from mobile sources fall under the State of Tennessee's responsibilities. While not empowered to enact these measures, the local governments have reviewed various options and wish to express their support for these three:

1. Expanded Vehicle Inspection & Maintenance Program

This measure involves two components: first, to include a new weight class of personal vehicle in the current testing program for the five MPO counties. This would extend testing to vehicles with a gross weight of 8,500 to 10,000 pounds.

Second, the testing program -- including the new heavier weight class -- would be expanded to include Cheatham, Dickson and Robertson counties. (The existing five counties would not consider an additional weight class unless joined by these three counties.) Although there is no monitor in these counties to document that they are experiencing similar levels of ozone pollution, 2000 Census commuting patterns show that automobile traffic from these counties is certainly part of the mobile source pollution generated within the five-county area.

2. Lower Speed Limits on Area Interstates

As calculated by the UT Department of Civil & Environmental Engineering, this is by far the most effective mobile source-related measure available to the state for action.

As proposed, the lower speed limit would apply only on days predicted as high-ozone days by TDEC. Notice would be provided on interstates via portable variable message signs, in addition to the permanent overhead signs installed in the Nashville area.

3. Cetane Additives to Diesel Fuel

Adding cetane to diesel fuel lowers the level of NOX pollution caused when the fuel is burned. A similar program is already operating successfully in East Tennessee. It is proposed that Tennessee work with fuel suppliers and high-volume users to implement a statewide program. This measure would be needed only for a few years, until low-sulfur diesel becomes mandatory across the Southeast.