

**Appendix B**

**Hearing Report,**

**Comments Received and Responses**

# Hearing Officer's Report

Public Hearings on January 21<sup>st</sup> & 22<sup>nd</sup>, 2004  
for

One-Hour Ozone Maintenance Plan  
Updates for the Raleigh/Durham and  
Greensboro/Winston-Salem/High Point  
One-Hour Ozone Maintenance Areas

March 19, 2004

Roy Patrick Butler - Hearing Officer  
Compliance Supervisor  
Raleigh Regional Office  
Raleigh, North Carolina

Patrick Butler 3/19/04  
Patrick Butler Date

and

Margaret Love – Hearing Officer  
Compliance Supervisor  
Winston-Salem Regional Office  
Winston-Salem, North Carolina

Margaret Love 3/22/04  
Margaret Love Date

## EXECUTIVE SUMMARY

On January 21<sup>st</sup> & 22<sup>nd</sup>, 2004 Public Hearings for the One-Hour Ozone Maintenance Plan Updates for the Raleigh/Durham and Greensboro/Winston-Salem/High Point One-Hour Ozone Maintenance Areas were held. On January 21<sup>st</sup>, a hearing was held at the North Carolina Division of Air Quality's (NCDAQ) Central Office (A.K.A. the Parker Lincoln Building) room # AQ-526 located at 2728 Capital Boulevard, Raleigh, N.C. On January 22<sup>nd</sup>, a second hearing was held at the Forsyth County Main Library Auditorium located at 660 West Fifth Street Winston-Salem, N.C. The purpose of these hearings was to inform interested parties on the one-hour maintenance plan updates and to solicit comments from the public. The public comment period closed on February 9<sup>th</sup>, 2004. Note that the comment period was extended beyond the original deadline of January 31<sup>st</sup>, 2004 at the EPA's request.

According to the Public Hearing Registration Forms, a total of three (3) non-DAQ people attended the Public Hearing on January 21<sup>st</sup> in Raleigh and no one registered to speak. A total of five (5) non-DAQ people attended the Public Hearing on January 22<sup>nd</sup> in Winston-Salem and no one registered to speak. Written comments from the United States Environmental Protection Agency (USEPA) and the Federal Highway Administration (FHWA) were received. It is my opinion that the concerns raised by the interested parties are adequately addressed within the body of this report.

Based on the information contained in this report, I recommend the following:

I recommend that the "One-Hour Ozone Maintenance Plan Updates for the Raleigh/Durham and Greensboro/Winston-Salem/High Point One-Hour Ozone Maintenance Areas" be approved after the verbiage revisions are made as suggested in the body of this report.

Hearing Officer's Report  
for  
One-Hour Ozone Maintenance Plan  
Updates for the Raleigh/Durham and  
Greensboro/Winston-Salem/High Point  
One-Hour Ozone Maintenance Areas

February 27, 2004

Patrick Butler & Margaret Love

On January 21<sup>st</sup> & 22<sup>nd</sup>, 2004 two Public Hearings for the One-Hour Ozone Maintenance Plan Updates for the Raleigh/Durham and Greensboro/Winston-Salem/High Point One-Hour Ozone Maintenance Areas were held. On January 21<sup>st</sup>, a hearing was held at the North Carolina Division of Air Quality's Central Office (A.K.A. the Parker Lincoln Building) room AQ-526 located at 2728 Capital Boulevard, Raleigh, N.C. On January 22<sup>nd</sup>, a second hearing was held at the Forsyth County Main Library Auditorium located at 660 West Fifth Street Winston-Salem, N.C. The purpose of these hearings was to inform interested parties on the one-hour maintenance plan and to solicit comments from the public. The public comment period closed on February 9<sup>th</sup>, 2004 at 5:00 p.m. Because of data unavailability, the comment period was extended beyond the original deadline of January 31<sup>st</sup>, 2004 at the EPA's request.

Background Information (borrowed from the draft plan)

During the three year period from 1987 through 1989, both the Raleigh/Durham and the Greensboro/Winston-Salem/High Point areas violated the 1-hour ozone NAAQS. The USEPA subsequently designated them as nonattainment for 1-hour ozone with a moderate classification. This triggered certain mandatory requirements that were to be accomplished by November 15, 1992 and November 15, 1993.

The Raleigh/Durham area (Durham and Wake Counties and part of Granville County) and the Greensboro/Winston-Salem/High Point area (Davidson, Forsyth, and Guildford Counties and part of Davie County) were designated nonattainment for 1-hour ozone in 1992 and classified as moderate. In November 1992, the State of North Carolina submitted a request to redesignate these two areas to maintenance status, based upon three years of clean air quality data (1990 through 1992). The State submitted supplemental information to the USEPA in June 1993 for the Greensboro/Winston-Salem/High Point area, which was redesignated to maintenance status on November 8, 1993. The State submitted supplemental information in June 1993 and January 1994 for the Raleigh/Durham area, which was redesignated to maintenance status on June 17, 1994.

The USEPA requires that the maintenance plan be updated, projecting out an additional ten years beyond the original maintenance period, to ensure that the areas will continue to maintain the NAAQS for the 1-hour ozone standard. This year marks ten years since the original redesignation to maintenance status and subsequently it is time for the NCDAQ to update the one-hour ozone maintenance plan.

## Summary of Public Hearing and Comment Period

According to the Public Hearing Registration Forms, a total of three (3) non-DAQ people attended the Public Hearing on January 21<sup>st</sup> in Raleigh and no one registered to speak. A total of five (5) non-DAQ people attended the Public Hearing on January 22<sup>nd</sup> in Winston-Salem and no one registered to speak. Written comments from the USEPA and the FWHA were received.

The public hearing comment period was open until 5 p.m. on February 9<sup>th</sup>, 2004. During the public comment period, no phone calls were received. Three written comments were received (attached). The USEPA responded in letters dated January 20<sup>th</sup> and February 12<sup>th</sup>, 2004 and the FWHA responded via e-mail on February 9<sup>th</sup>, 2004.

### **The following is a summary of the pertinent comments, with regards DAQ's jurisdiction, raised by all parties involved in the public hearing process prior to February 9<sup>th</sup>, 2004 along with the Hearing Officer's opinions and recommendations:**

**FWHA:** Having to demonstrate transportation conformity for 5 different Motor Vehicle Emission Budget (MVEB) years is a bit excessive and exceeds the regulatory requirements resulting in an additional workload burden for all partners involved in the transportation conformity process without any significant added benefits to the environment. The NCDENR should consider using 2 or 3 MVEB years instead of 5.

**Hearing Officer's Response:** The NCDAQ is regulatorily required to be at least as stringent as the Federal Regulations, but in no way does this limit the agency from being more prescriptive if it deems necessary. I support the Division's requirement to demonstrate transportation conformity for the 5 MVEB as outlined in the plan. These years will be used as milestones by the Division to keep track of obtaining the overall goal. It is not the Division's intent or desire to require information that will not be used.

**USEPA:** Some of the supporting documentation for the submittal was not available on the NCDAQ's website for reference and review. The USEPA requests that the public comment period be extended 30 days beyond the availability of the supporting data.

**Hearing Officer's Response:** Agreed, the Division has already extended the public comment period from the original January 31<sup>st</sup> deadline. The public comment period was extended until February 9<sup>th</sup>, 2004 at 5:00 p.m. Additionally, Ms. Laura Boothe explained this during an overview presentation at each of the public hearings. The Division has also allowed comments from the USEPA received on February 12<sup>th</sup>, 2004 to be included in the hearing record because of when the supporting data was made available.

**USEPA:** Suggested verbiage prior to tables found in section 4.3.1 "*Tables 4.3.1-1, 4.3.1-2, 4.3.1-3, and 4.3.1-4 explicitly provide county-by-county sub-area MVEB for counties (or portion thereof) that comprise the 1-hour ozone maintenance area for the Greensboro/Winston-Salem/Highpoint for the years 2004, 2007, 2010, 2012, and 2015 for both volatile organic compounds and nitrogen oxides. Upon EPA's affirmative adequacy finding for these sub area MVEB, these MVEB will become the applicable MVEB for each county. Thus, for the purposes of demonstrating transportation conformity, the emissions for transportation activities in each*

*sub area must be found to conform with the individual county sub area MVEB for the specified budget years.” [Please include similar language just before the tables in section 4.3.2 as well.]*

**Hearing Officer’s Response:** Agreed, this suggestion does not change the substance of the report and may help clarify issues further.

**USEPA:** For Davie and Granville Counties, in Section 4.3, it is not clear how the on-road mobile emissions were apportioned for these partial counties to provide for the specified county sub area MVEBs. The heading on the tables for these areas should also be revised to accurately reflect partial county MVEBs versus whole county MVEBs.

**Hearing Officer’s Response:** Agreed, a brief paragraph explaining the agency’s methodology in apportioning these on-road emissions to the partial counties of Granville and Davie should be included. Also, the heading for Table 4.3.1-2 should say “Davie County MVEB (partial county)” and likewise for Table 4.3.2-2 “Granville County MVEB (partial county)”.

**USEPA:** For clarity for the transportation community and the general public, please add a table in section 4.3, similar to Table 3.3.4-2 (i.e. entitled, “Safety Margins for Maintenance Areas”), to indicate the remaining safety margin for the two maintenance areas after the partial allocation of the existing safety margin to the MVEBs.

**Hearing Officer’s Response:** Agreed, this suggestion does not change the substance of the report and may help clarify issues further.

**The following is a summary of comments received from the USEPA on February 12<sup>h</sup>, 2004. These comments are allowed since some of the data was not available until January 12<sup>th</sup>, 2004:**

**USEPA:** On page 3-10, the documentation indicates that the population of the non-attainment portion of Davie County was 248 people according to the 1990 Census and 250 people according to the 2000 Census. Please confirm those numbers.

**Hearing Officer’s Response:** Agreed, the Division should confirm these statistics.

**USEPA:** A list of possible contingency measures has not been included in Section 3.4, page 3-20. The final submittal should either reaffirm the original list of contingency measures or include a revised list.

**Hearing Officer’s Response:** Agreed, this suggestion does not change the substance of the report and may help clarify issues further.

**USEPA:** The abbreviation “MVT” in appendix C.3, Section 2.2, page 2-1 needs to be corrected to “VMT”.

**Hearing Officer’s Response:** Agreed, clerical revision.

**USEPA:** In Appendix C.3, Section 4.1.3, page 4-2, it is unclear whether Wake County speeds were used because Wake County has a TDM while Davie County does not, or if Wake County is an example of a non-TDM county. Please clarify.

**Hearing Officer's Response:** Agreed, further explanation should be provided.

*Appendix C.3 Part 1*

**USEPA:** Page 4-7, the temperatures for Davie County were taken from statewide averages, while the temperatures for Forsyth, Guilford and Davidson Counties were taken from NOAA. Please provide an explanation of how temperatures were chosen and why there is a different approach for subareas within the same airshed.

**Hearing Officer's Response:** Agreed, further explanation should be provided.

**USEPA:** Page 4-11 through 13, Wake County rural interstate VMT, Freeway and Expressway VMT and Rural Other Principal Arterial VMT as well as the Granville County Minor Collector VMT all experience a decrease from 2000 to 2004 and then an increase through 2015. Please explain the reason for the decrease.

**Hearing Officer's Response:** Agreed, the Division should explain the decrease.

**USEPA:** Page 4-32, suggested revision to the first sentence of the fourth paragraph, "NONROAD2002 is an updated version of the USEPA NONROAD model that was first released in June 2000, ..."

**Hearing Officer's Response:** Agreed, clerical revision.

**USEPA:** Page 4-34, on page 4-44 it is stated that there are no airports in Durham County, yet in Table 4.2.1-4 on page 4-34 there are emissions associated with airport ground support equipment in Durham County. Please explain.

**Hearing Officer's Response:** Agreed, the Division should explain its' rationale.

*Appendix C.3 Part 2 – MOBILE6 Input Files*

**USEPA:** In the MOBILE6 input runs, the freeway driving cycle was used to model rural principal arterials. In addition, the arterial/collector driving cycle was used to model local roads. Justification for the assignment of driving cycles to functional classification should be provided and documented.

**Hearing Officer's Response:** Agreed, the Division should explain its' rationale.

**USEPA:** The VMT mix is not provided for modeling of ramp emissions, thereby assuming the default mix on ramps while the VMT mix on freeways and interstates is based on local values. There is potentially a discrepancy between the VMT mix on interstates/freeways and the ramps associated with those roads. In addition, ramp VMT from four different classifications were combined into one scenario when it may have been better to run four different scenarios using the same VMT mix on the ramp as on the corresponding road classification. The justification for using ramp VMT associated with rural principals arterials should also be provided.

**Hearing Officer's Response:** Agreed, the Division should explain its' rationale.

**USEPA:** Please clarify if the freeway speeds used in the MOBILE modeling represent mainline speeds only, or if they represent an appropriately weighted average of mainline and ramp speeds. If the later is true then the freeway mainline speeds used in the modeling should be adjusted to remove the ramp component.

**Hearing Officer's Response:** Agreed, the Division should explain its' rationale.

Based on the information contained in this report, I recommend the following:

I recommend that the "One-Hour Ozone Maintenance Plan Updates for the Raleigh/Durham and Greensboro/Winston-Salem/High Point One-Hour Ozone Maintenance Areas" be approved after the verbiage revisions are made as suggested in the body of this report.

Attachments to Report:

- (1) Written comments from Kay T. Prince, Chief of the Air Planning Branch of the USEPA dated January 20, 2004.
- (2) Written comments via e-mail from Edward J. Dancausse, Air Quality Specialist of the Federal Highway Administration received February 9, 2004.
- (3) Written comments from Kay T. Prince, Chief of the Air Planning Branch of the USEPA dated February 12, 2004.

\rpb

cc: Central Files (with original letters and registration information)  
Laura Boothe, RCO



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

JAN 20 2004

4APT-APB

Laura Boothe  
Division of Air Quality  
North Carolina Department of  
Environment and Natural Resources  
1641 Mail Service Center  
Raleigh, North Carolina 27699-1641

Dear Ms. Boothe:

Thank you for the opportunity to review the prehearing submittal containing the proposed 1-hour ozone maintenance plan updates for two North Carolina areas (i.e., Raleigh/Durham and Greensboro/Winston-Salem/High Point). The Raleigh Durham 1-hour ozone maintenance area consists of Durham, Granville (partial) and Wake counties; the Greensboro/Winston-Salem/High Point 1-hour ozone maintenance area consists of Davidson, Davie (partial), Forsyth and Guilford counties. These regulations will be the subject of public hearings held on January 21, and January 22, 2004. We appreciate your letter, dated December 12, 2003, indicating the availability of this prehearing submittal on your website for our review. Our comments are as follows:

- Some of the supporting documentation for this submittal was not available on the website for our reference and review. We made previous requests for this documentation and will need to review it to conduct a complete evaluation of the submittal. Per our phone conversation on January 7, 2004, we understand that this information will be made available to our Agency via CD-Rom, and that the website will be updated to include this information for the public. Further, we understand that the public comment period will be extended to allow a review period that is 30 days from the availability of this supporting documentation. Please note that this comment letter primarily reflects comments for the narrative portion of the submittal that is currently provided on the website. After receipt and review of the requested supporting documentation, we will send additional comments, if necessary.
- Section 4.3, entitled "Motor Vehicle Emission Budgets," briefly discusses the North Carolina Department of Transportation's request for county-by-county motor vehicle emission budgets (MVEB), but is not explicit about the intent of this submittal to establish these subarea MVEB for future use to determine transportation conformity for these individual counties. For clarity for the transportation community and the general public, please provide more explicit language in the final submittal regarding the implications of the county-by-county (i.e. subarea) MVEB for the two maintenance areas. The following is suggested additional language: *[Suggested place of insertion of this text is just before tables*

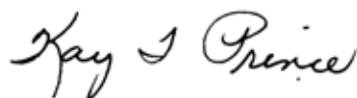
*in section 4.3.1]* "Tables 4.3.1-1, 4.3.1-2, 4.3.1-3, and 4.3.1-4 explicitly provide county-by-county sub-area MVEB for counties (or portion thereof) that comprise the 1-hour ozone maintenance area for Greensboro/Winston-Salem/Highpoint for the years 2004, 2007, 2010, 2012, and 2015 for both volatile organic compounds and nitrogen oxides. Upon EPA's affirmative adequacy finding for these subarea MVEB, these MVEB will become the applicable MVEB for each county. Thus, for the purposes of demonstrating transportation conformity, the emissions for transportation activities in each subarea must be found to conform with the individual county subarea MVEB for the specified budget years." *[Please include similar language just before tables in section 4.3.2 as well.]*

- For Davie and Granville counties, in Section 4.3, it is not clear how the on-road mobile emissions were apportioned for these partial counties to provide for the specified county subarea MVEBs. The heading on the tables for these areas should also be revised to accurately reflect partial county MVEBs versus whole county MVEBs. This will be especially important to distinguish if whole counties are used for 8-hour ozone designations. Please provide this clarification in the final submittal as it will be necessary for the transportation community to use consistent methodology to determine conformity for these partial counties.
- For clarity for the transportation community and the general public, please add a table in section 4.3, similar to Table 3.3.4-2 (i.e. entitled, "Safety Margins for Maintenance Areas"), to indicate the remaining safety margin for the two maintenance areas after the partial allocation of the existing safety margin to the MVEBs. This will avoid confusion for potential future revisions that may allocate additional safety margin to the MVEBs.

In addition to our request for additional clarifying language for the final submittal, we are requesting that your Agency provide the public with this clarification at the public hearings scheduled January 21, and January 22, 2004.

Thank you again for the opportunity to review this prehearing submittal. Our review will be completed upon our receipt of the requested additional/supporting material. We look forward to receipt and review of the supporting documentation. If you have questions regarding this letter, please contact Kelly Sheckler or Lynorae Benjamin of the Region 4 staff at (404) 562-9042, or (404) 562-9040, respectively.

Sincerely,



Kay T. Prince  
Chief  
Air Planning Branch



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

FEB 12 2004

Patrick  
Butler

FEB 26 2004

4APT-APB

Laura Boothe  
Division of Air Quality  
North Carolina Department of  
Environment and Natural Resources  
1641 Mail Service Center  
Raleigh, NC 27699-1641

Dear Ms. Boothe,

Thank you for the opportunity to review the supporting documentation of the prehearing submittal containing the proposed 1-hour ozone maintenance plan updates for two North Carolina areas (i.e., Raleigh/Durham and Greensboro/Winston-Salem/High Point). We are sending these comments to supplement the comments submitted in the letter from Kay Prince, Chief, Air Planning Branch, to you dated January 20, 2004. Our additional comments are as follows:

**1. Area Source Emissions, Page 3-10**

The documentation indicates that the population of the non-attainment portion of Davie County was 248 people according to the 1990 Census and 250 people according to the 2000 Census. Please confirm those numbers.

**2. Section 3.4 Contingency Plan, Page 3-20**

A list of possible contingency measures has not been included in this section. The final submittal should either reaffirm the original list of contingency measures or include a revised list.

**3. Appendix C.3, Section 2.2 Emission Estimation Approach, Page 2-1**

The abbreviation "MVT" needs to be corrected to "VMT."

**4. Appendix C.3, Section 4.1.3 MOBILE6.2 Assumptions, Page 4-2**

The last sentence in the third paragraph under Speed Assumption is confusing in the use of TDM counties. It is unclear whether Wake County speeds were used because Wake County has a TDM while Davie County does not, or if Wake County is an example of a non-TDM county. Please clarify.

**5. Appendix C.3 Part 1, Page 4-7**

The temperatures for Davie County were taken from statewide averages, while the temperatures for Forsyth, Guilford, and Davidson Counties were taken from the NOAA. Please provide an explanation of how temperatures were chosen and why there is a different approach for subareas within this same airshed.

**6. Appendix C.3 Part 1, Pages 4-11 through 13**

Wake County Rural Interstate VMT, Freeway and Expressway VMT and Rural Other Principal Arterial VMT as well as the Granville County Minor Collector VMT all experience a decrease from 2000 to 2004 and then an increase through 2015. Please explain the reason for the decrease.

**7. Appendix C.3 Part 1, Section 4.2.1 Non-Road Mobile Sources, page 4-32**

It is suggested that the first sentence of the fourth paragraph be rewritten to read: "NONROAD2002 is an updated version of the USEPA NONROAD model that was first released in June 2000, ..."

**8. Appendix C.3 Part 1, Page 4-34**

On page 4-44 it is stated that there are no airports in Durham County, yet in Table 4.2.1-4 on page 4-34 there are emissions associated with airport ground support equipment in Durham County. Please explain.

**9. Appendix C.3 Part 2 - MOBILE6 Input Files**

A. In the MOBILE6 runs, the freeway driving cycle was used to model rural principal arterials. In addition, the arterial/collector driving cycle was used to model local roads. Justification for the assignment of driving cycles to functional classifications should be provided and documented. (Note that Table 4.2.1 of the *Technical Guidance on the Use of MOBILE6 for Emission Inventory Preparation* is just provided as an example and does not necessarily portray the actual preferred driving cycles.)

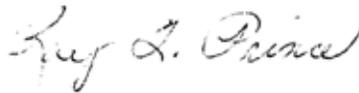
B. The VMT mix is not provided for modeling of ramp emissions, thereby assuming the default mix on ramps while the VMT mix on freeways and interstates is based on local values. There is potentially a discrepancy between the VMT mix on interstates/freeways and the ramps associated with those roads. In addition, ramp VMT from four different classifications were combined into one scenario when it may have been better to run four different scenarios using the

same VMT mix on the ramp as on the corresponding road classification. The justification for using ramp VMT associated with rural principal arterials should also be provided.

C. Please clarify if the freeway speeds used in the MOBILE modeling represent mainline speeds only, or if they represent an appropriately weighted average of mainline and ramp speeds. If the latter is true then the freeway mainline speeds used in the modeling should be adjusted to remove the ramp component.

Thank you again for the opportunity to review the supporting documentation of the prehearing submittal. Please consider these comments in addition to those already received. If you have any questions regarding this letter please contact Matt Laurita or Dale Aspy of the Region 4 staff at (404) 562-9044, or (404) 562-9041, respectively.

Sincerely,



Kay T. Prince  
Chief  
Air Planning Branch

**Subject:** [Fwd: 1-Hour Ozone Maintenance Plan Update Comment]

**From:** Laura Boothe <Laura.Boothe@ncmail.net>

**Date:** Mon, 09 Feb 2004 14:15:24 -0500

**To:** Jill Vitas <Jill.Vitas@ncmail.net>, Sheila Holman <Sheila.Holman@ncmail.net>, Margaret Love <Margaret.Love@ncmail.net>, Patrick Butler <Patrick.Butler@ncmail.net>

fYI - comments on 1-hour maintenance plan

----- Original Message -----

Subject: 1-Hour Ozone Maintenance Plan Update Comment

Date: Mon, 9 Feb 2004 13:24:02 -0500

From: "Dancausse, Edward"

<Edward.Dancausse@fhwa.dot.gov>

To: <daq.publiccomments@ncmail.net>

CC: "Laura Boothe (E-mail)"

<laura.boothe@ncmail.net>, "Wilner, Marcus"

<Marcus.Wilner@fhwa.dot.gov>, "Barren, Loretta"

<Loretta.Barren@fhwa.dot.gov>

Laura,

Please see the attached file for a comment/recommendation on the 1-hour ozone maintenance plan update.

If you have any questions, please let me know.

Thanks

Eddie

<<triad\_triangleSIPcomment22004.doc>>

Edward J. Dancausse  
Air Quality Specialist  
FHWA NC Division  
919-856-4330 x112  
919-856-4353(fax)  
[edward.dancausse@fhwa.dot.gov](mailto:edward.dancausse@fhwa.dot.gov)  
[www.fhwa.dot.gov/ncdiv/](http://www.fhwa.dot.gov/ncdiv/)

**Comment:**

1-Hour Ozone Maintenance Plan Update for Raleigh/Durham and the Greensboro/Winston-Salem/High Point 1-Hour Ozone Maintenance Areas, December 19, 2003

**Section 4.0 Motor Vehicle Emissions Budget for Conformity, pages 4-1 through 4-5**

This section shows the motor vehicle emissions budgets (MVEB) that will be used in transportation conformity determinations to ensure that Federal transportation actions do not hinder the area from maintaining the 1-hour ozone standard. This section provides motor vehicle emissions budgets for 5 years (2004, 2007, 2010, 2012, and 2015).

Having to demonstrate transportation conformity for 5 different MVEB years is a bit excessive and exceeds the regulatory requirements resulting in an additional workload burden for all partners involved in the transportation conformity process without any significant added benefits to the environment.

*40 CFR 93.118(b) (2) (i) states that "Emissions must be less than or equal to the MVEB's established for the last year of the maintenance plan, and for any other years for which the maintenance plan establishes MVEB's."*

**The only year that is required in the maintenance plan is the last year of the maintenance plan.**

**Recommendation:**

The NCDENR should consider using 2 or 3 MVEB years instead of 5 for transportation conformity determination purposes. This can be accomplished by adding a paragraph to Section 4 of the maintenance plan that will indicate which MVEB years (out of the 5 MVEB years provided in the maintenance plan) will be used for transportation conformity determinations.

Dancausse 2/9/03



North Carolina Department of Environment and Natural Resources  
Division of Air Quality

Michael F. Easley, Governor

William G. Ross, Jr., Secretary  
B. Keith Overcash, P.E., Director

April 14, 2004

Kay T. Prince  
Chief, Air Planning Branch  
USEPA Region 4  
Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, GA 30303-3104

Dear Ms. Prince,

Thank you for your February 12, 2004 comments on the proposed 1-hour ozone maintenance plan updates for the Raleigh/Durham and Greensboro/Winston-Salem/High Point areas. Below are the responses to your comments.

1. Area Source Emissions, Page 3-10. The documentation indicates that the population of the non-attainment portion of Davie County was 248 people according to the 1990 Census and 250 people according to the 2000 Census. Please Confirm.

*This information was confirmed. A map of the non-attainment portion of Davie County with the census block/track numbers labeled is attached. The census population data associated with the tracks within the non-attainment area is also attached.*

2. Section 3.4 Contingency Plan, Page 3-20. A list of potential contingency measures has not been included in this section. The final submittal should either reaffirm the original list of contingency measures or include a revised list.

*This has been addressed in the final submittal.*

3. Appendix C.3, Section 2.2 Emission Estimation Approach, Page 2-1. The abbreviation "MVT" needs to be corrected to "VMT".

*This has been corrected in the final submittal.*

4. Appendix C.3, Section 4.1.3 MOBILE 6.2 Assumptions, Page 4-2. The last sentence in the third paragraph under Speed Assumptions is confusing in the use of TDM counties. It is unclear whether Wake County speeds were used because Wake County has a TDM while Davie County does not, or if Wake County is an example of a non-TDM county. Please clarify.

*This has been addressed in the final submittal.*

Planning Section

1641 Mail Service Center, Raleigh, North Carolina 27699-1641  
2728 Capital Blvd., Raleigh, North Carolina 27604  
Phone: 919-715-7670 / FAX 919-715-7476 / Internet: [www.ncair.org](http://www.ncair.org)

One  
North Carolina  
*Naturally*

5. Appendix C.3 Part 1, Page 4-7. The temperatures for Davie County were taken from statewide averages, while the temperatures for Forsyth, Guilford, and Davidson Counties were taken from the NOAA. Please provide an explanation of how temperatures were chosen and why there is a different approach for subareas within this same airshed.

*The temperatures used for Davie County have been corrected to be the same as the other counties in the Greensboro/Winston-Salem/High Point maintenance area.*

6. Appendix C.3 Part 1, Pages 4-11 through 13. Wake County Rural Interstate VMT, Freeway and Expressway VMT and Rural Other Principal Arterial VMT as well as the Granville County Minor Collector VMT all experience a decrease from 2000 to 2004 and then an increase through 2015. Please explain the reason for the decrease.

*The VMT data is provided to NCDAQ from the NCDOT. It is believed that the decrease in rural VMT between 2000 and 2004 is due to the reclassification of some rural roads to urban after the 2000 census. This is further supported by the fact that the urban VMT increased significantly during this same period.*

7. Appendix C.3 Part 1, Section 4.2.1 Non-Road Mobile Sources, page 4-32. It is suggested that the first sentence of the fourth paragraph be rewritten to read: "NONROAD2002 is an updated version of the USEPA NONROAD model that was first released in June 2000,..."

*This has been changed in the final submittal.*

8. Appendix C.3 Part 1, Page 4-34. On page 4-44 it is stated that there are no airports in Durham County, yet in Table 4.2.1-4 on page 4-34 there are emissions associated with airport ground equipment in Durham County. Please explain.

*This was an artifact of EPA's NONROAD2002 mobile model and its allocation method for airport support equipment. The allocation method used county employment data to allocate the emissions and since the Raleigh Durham International Airport is located near the Durham County line there are businesses located in Durham County. This has been corrected in the final submittal by changing the allocation method to air carrier operations. With the revised allocation files all of the airport support equipment for the Raleigh/Durham maintenance area now occur in Wake County.*

9. Appendix C.3 Part 2-MOBILE6 Input Files.

A. In the MOBILE6 runs, the freeway driving cycle was used on model rural principal arterials. In addition, the arterial/collector driving cycle was used to model local roads. Justification for the assignment of driving cycles to functional classifications should be provided and documented. (Noted that Table 4.2.1 of the *Technical Guidance on the Use of MOBILE6 for Emission Inventory Preparation* is just provided as an example and does not necessarily portray the actual preferred driving cycles.)

*NCDAQ does not have any information relating to assignment of driving cycles to functional classifications and therefore used EPA's example. NCDAQ believes that these examples are the best representation of the driving cycles in North Carolina.*

B. The VMT mix is not provided for modeling of ramp emissions, thereby assuming the default mix on ramps while the VMT mix on freeways and interstates is based on local values.

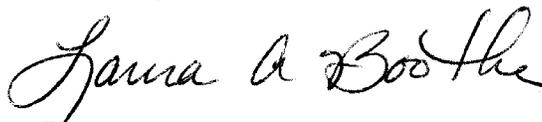
There is potentially a discrepancy between the VMT mix on interstates/freeways and the ramps associated with those roads. In addition, ramp VMT from four different classifications were combined into one scenario when it may have been better to run four different scenarios using the same VMT mix on the ramp as on the corresponding road classification. The justification for using ramp VMT associated with rural principal arterials should also be provided.

*The ramp emission calculations have been removed in the final submittal since the speeds obtained from the travel demand model is a weighted average of mainline and ramp speeds. Since separate mainline and ramp speeds are not available, the ramp VMT has been added back into the appropriate road type.*

C. Please clarify if the freeway speeds used in the MOBILE modeling represent mainline speeds only, or if they represent an appropriately weighted average of mainline and ramp speeds. If the latter is true then the freeway mainline speeds used in the modeling should be adjusted to remove the ramp component.

*As stated above, the speeds obtained from the travel demand models are weighted average of mainline and ramp speeds. Separate mainline and ramp speeds are not available, therefore the ramp VMT has been added back into the appropriate road type and the ramp emissions have been removed in the final submittal.*

Sincerely,

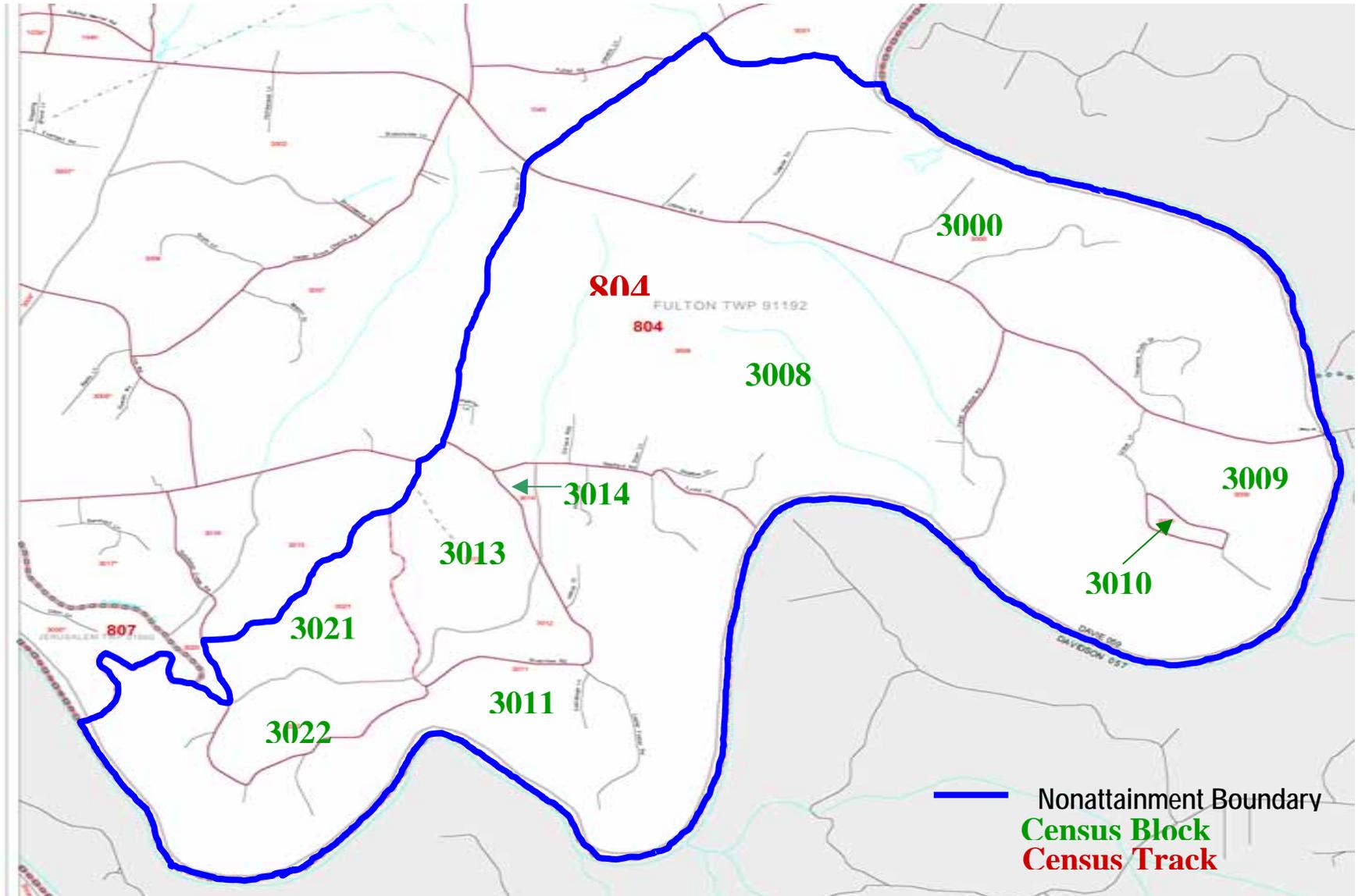


Laura Boothe  
Attainment Planning Branch Chief

Attachment: Davie County maintenance area census data

cc: Keith Overcash  
Brock Nicholson  
Sheila Holman  
Donnie Redmond  
Thom Allen  
Patrick Butler  
Margaret Love

# Attachment – Davie County Maintenance Area Census Data



Population Based on 2000 Census

Block	Population
3000	32
3008	120
3009	0
3010	0
3011	87
3012	0
3013	0
3014	11
3021	0
3022	0
Total	250



North Carolina Department of Environment and Natural Resources  
Division of Air Quality

Michael F. Easley, Governor

William G. Ross, Jr., Secretary  
B. Keith Overcash, P.E., Director

April 14, 2004

Edward J. Dancausse  
FHWA, North Carolina Division  
310 New Bern Avenue, Suite 410  
Raleigh, NC 27601-1418

Dear Mr. Dancausse,

Thank you for your February 9, 2004 comments on the proposed 1-hour ozone maintenance plan updates for the Raleigh/Durham and Greensboro/Winston-Salem/High Point areas. Below is the responses to your comment.

***Submitted Comment:***

**Section 4.0 Motor Vehicle Emissions Budget for Conformity, pages 4-1 through 4-5**

This section shows the motor vehicle emissions budgets (MVEB) that will be used in transportation conformity determinations to ensure that Federal transportation actions do not hinder the area from maintaining the 1-hour ozone standard. This section provides motor vehicle emissions budgets for 5 years (2004, 2007, 2010, 2012, and 2015).

Having to demonstrate transportation conformity for 5 different MVEB years is a bit excessive and exceeds the regulatory requirements resulting in an additional workload burden for all partners involved in the transportation conformity process without any significant added benefits to the environment.

40 CFR 93.118(b) (2) (i) states that "Emissions must be less than or equal to the MVEB's established for the last year of the maintenance plan, and for any other years for which the maintenance plan establishes MVEB's.

**The only year that is required in the maintenance plan is the last year of the maintenance plan.**

**Recommendation:**

The NCDENR should consider using 2 or 3 MVEB years instead of 5 for transportation conformity determination purposes. This can be accomplished by adding a paragraph to Section 4 of the maintenance plan that will indicate which MVEB years (out of the 5 MVEB years provided in the maintenance plan) will be used for transportation conformity determinations.

**Planning Section**

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One  
North Carolina  
*Naturally*

Mr. Edward Dancausse

April 14, 2004

Page 2

*NCDAQ's Response:*

The years for which motor vehicle emission budgets were established have significance to the areas for which the maintenance plans were developed. These years represent significant milestones for attainment and maintenance of the 8-hour ozone standard. NCDAQ feels that it is important that these interim milestones be met as well as the future year that is furthest out. Therefore, NCDAQ has decided to leave the mobile source emission budgets as they were proposed.

Sincerely,



Laura Boothe

Attainment Planning Branch Chief

cc: Keith Overcash  
Brock Nicholson  
Sheila Holman  
Donnie Redmond  
Thom Allen  
Patrick Butler  
Margaret Love