Ozone Advance Program
Action Plan
Cumberland County, North Carolina

A joint effort by USEPA Region 4, North Carolina Department of Environment and Natural Resources, and the Cumberland County Board of Commissioners, Town of Falcon, City of Fayetteville, Fort Bragg Military Reservation, Town of Godwin, Town of Hope Mills, Town of Linden, Town of Spring Lake, Town of Stedman and Town of Wade and the Fayetteville Area Metropolitan Planning Organization

September 12, 2015

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1. Purpose of the Ozone Advance Program

1.0 Introduction

The Ozone Advance is a collaborative effort between the EPA, states, tribes, and local governments. The program encourages expedition emission reductions in ozone attainment areas to help these areas continue to meet the National Ambient Air Quality Standards (NAAQS) for ground-level ozone. Specifically, the Ozone Advance Program will:

- Help attainment areas reduce emissions in order to ensure continued health protection,
- Better position areas to remain in attainment, and
- Efficiently direct available resources towards actions to address ozone problems quickly.

Ozone Advance promotes local actions to reduce ozone precursors in attainment areas to help these areas continue to maintain the ozone NAAQS. The program encourages states, tribes, and local governments to take proactive steps to keep their air clean.

Ozone Advance is distinct from the former Early Action Compact (EAC) program in that it focuses on attainment areas, and it does not provide regulatory flexibility in the form of deferred designations or otherwise. The programs are similar, however, in terms of their encouragement of early actions to reduce ozone precursors, and the development of stakeholder groups.

1.1 Background and Stakeholders Involvement

The Clean Air Act (CAA), as amended in 1990, is the most recent version of a law first passed in 1970. The 1990 Amendment made some major changes in the Act, by empowering the US Environmental Protection Agency (EPA) to set up permitting and enforcing programs for larger sources that release pollutants into the air.

On July 17, 1997, the EPA promulgated revised National Ambient and Air Quality Standards, addressing changes in the Ozone and moving from 1 hour standard to an 8 hours standard, as longer exposure to ozone have been proven to have a significant impact on people and the environment. The new primary and secondary standard was set to 0.08 parts per million (ppm) for ground-level ozone.

In 2002, the EPA proposed a new program: the Early Action Compact (EAC), to areas in the country that would meet certain criteria. Each participating area was to have an Early Action Compact Memorandum of Agreement signed by December 31, 2002. The Chairman of the Cumberland County Board of Commissioners originally signed the EAC Memorandum of Agreement on December 13, 2002. The Early Action Plan, a document outlining local, state, and federal strategies to reduce ozone precursors, followed. Milestones set by EPA were met

by Cumberland County resulting in designation as an Ozone Attainment Area in April 2008. Ground level ozone standards were changed once more in 2009 and set at 0.07 ppm. Cumberland County elected to continue with the air quality regional efforts in the hope that uninterrupted work would further the ozone precursors reduction. The Cumberland County Air Quality Stakeholders Committee, which was formed as a part of the EAC, now meets every other month ten years after first assembling to review and promote air quality improvement strategies.

As a former Early Action Compact Region this area decided it was advantageous to participate in this program and the Cumberland County Board of Commissioners approved participation in the Ozone Advance (OA) Program to continue the efforts initiated in 2002. Chairman W. Marshall Faircloth signed the letter of interest on September 4, 2012. Every municipality within Cumberland County signed a resolution of support and commitment to participate in the OA program in 2013. Cumberland County and the City of Fayetteville have proclaimed May as Air Quality Awareness month annually in 2014 and 2015. The towns of Eastover and Spring Lake have signed new resolutions in 2015 and Sustainable Sandhills is working to renew resolutions with the other Stakeholder municipalities in 2015-2016.

Table 1. Air Quality Stakeholders of Cumberland County 2015

Name	**Affiliation**
Gary Slater, Chair	Mayor Industry
Carolyn Justice-Hinson, Vice-Chair	Public Works Commission of Fayetteville
Daniel Rodriguez	Citizen
Councilwoman Kathy Jensen	City of Fayetteville
Commissioner Larry Lancaster	Cumberland County Representative
Elizabeth Small	Town of Linden
Kim Nazarchyk	Town of Eastover
Commissioner Johnny Lanthorn	Town of Wade
Timothy Garner	Town of Spring Lake
Commissioner Ms. Pat Edwards	Town of Hope Mills
Johnny Lanthorn	Town of Wade
Janice Lucas	Town of Falcon
Commissioner Peggy Raymes	Town of Stedman
Natalee Ezzell	Town of Godwin
Gregory Bean	Fort Bragg
Gary Cullen	Fort Bragg
Glen Prillman	Fort Bragg
Timothy Shea	Fort Bragg

Celestine Raineri-Smith	Cumberland County Board of Health
Eloise Sahlstrom	City of Fayetteville
Jerry Dietzen	City of Fayetteville
Lee Jernigan	City of Fayetteville
Russell Rogerson	NC Business Alliance & Fayetteville Regional Chamber
Shanelle B. Harris	Fayetteville Area System of Transit (FAST)
Dr. Ana MacDowell	Medical Representative
Lee Worsley	Triangle J Council of Governments
Kirby Bowers	Triangle J Council of Governments
John Gillis	Homebuilders Association
Jon Parsons	Fayetteville State University
Jeff Brooks	Fayetteville State University
Rudolph Cardenas	Fayetteville State University
Joe Levister	Fayetteville Technical Community College
Ernesto Rivas	Citizen, Fayetteville Technical Community College
James Bush	Cumberland County School District
Al Miller	Cumberland County Schools
Cecil Combs	Cumberland County
Hanah Ehrenreich	Sustainable Sandhills
Jennifer McHone Sides	NC DENR
Eddie Dancausse	NC DOT
Joel Strickland	Fayetteville Area Metropolitan Planning Organization
Deloma West	Fayetteville Area Metropolitan Planning Organization

The Stakeholders revised by-laws in 2015 to mandate a minimum bi-monthly meeting schedule in conjunction with the CombAT team members.

The Stakeholders' committee is supported by the Combined Air Team (CombAT) that includes members of Cumberland County, City of Fayetteville, Fayetteville State University, Public Works Commission, Fayetteville Area System of Transit (FAST), the Fort Bragg Air Team, and is coordinated by the community environmental nonprofit, Sustainable Sandhills. CombAT is on call to provide the Stakeholders with technical information and administrative assistance. The Public Involvement does not end with the Stakeholders. An aggressive process of education and outreach into the community has been documented since the beginning of this endeavor, to include involvement of the Public School Systems (Cumberland County and Fort Bragg), utility providers, the Plant Managers Association, and any Organization requesting

presentations. The Air Quality web page, maintained by FAMPO staff, provides information on the local effort and related links (http://www.fampo.org/airquality.htm). FAMPO contracts with Sustainable Sandhills to plan and implement air quality related programs throughout their region. Minutes of the Stakeholders' meetings and list of outreach and presentations are on file and open to the public.

1.2 Cumberland County Characteristics

Cumberland County is a mixture of urban and rural areas. The 2014 are census population updated for Cumberland County was 326,328. The 2010 census population for Cumberland County was 319,431 of which 42,702 rural population and 276,729 located within the Urbanized Area.

Population density is varied, as shown in **Table 2A.** Because of the difference in land use and densities, care was exercised when proposing and selecting strategies to be implemented by several jurisdiction.

Table 2A. Census 2010 Demographic Information

JURISDICTION	POPULATION	LAND AREA/Sq.Mi.	DENSITY/Sq.Mi.
Eastover	3,628	11.33	320.3/sq.mi
Falcon(Part)	258	1.21	213.2/sq.mi
Fayetteville	200,564	145.84	1375.2/sq.mi
Godwin	139	0.52	269/sq.mi
Hope Mills	15,176	6.94	2186/sq.mi
Linden	130	0.51	257.2/sq.mi
Spring Lake	11,964	23.06	518.8/sq.mi
Stedman	1,028	2.08	493.9/sq.mi
Wade	556	1.79	311.4/sq.mi
Cumberland County	**319,431**	**652.31**	**489.7/sq.mi**

1.3 Local Efforts

In April 2001, Fort Bragg Military Reservation began planning and implementing strategies to become a sustainable installation. As part of this effort, several individuals within the surrounding Counties began working with the Military Installation to aid in the process, including the planning and implementation schedule of air quality initiatives for the metropolitan statistical area. At that point, building partnerships in support of a sustainable region was the next logical and necessary step. In partnership with the North Carolina Department of Environment and Natural Resources and stakeholders from the surrounding counties and communities, this partnership evolved into an independent community-based environmental nonprofit called Sustainable Sandhills in February 2003, with the mission to provide education, demonstration, and collaboration to preserve the environment of the Sandhills within a six county region.

The local and regional efforts to attain sustainability began prior to the development of the EPA's Early Action Compact, demonstrating the commitment of this area in attaining and maintaining healthy environment now, and for generations to come. The Cumberland County Air Quality Stakeholders/Technical Committee, Sustainable Fort Bragg, and Sustainable Sandhills participants are working together to ensure a united campaign and to avoid duplicated efforts.

2. Overview of Air Quality in Cumberland County

The NCDAQ monitors levels of all criteria pollutants in Cumberland County and reports these levels to the EPA. According to the most recent data, Cumberland County is meeting NAAQS for all of the pollutants. Federal enforcement of the ozone NAAQS is based on a 3-year monitor "design value". The design value for each monitor is obtained by averaging the annual fourth highest daily maximum 8-hour ozone values over three consecutive years. If a monitor's design value exceeds the NAAQS, that monitor is in violation of the standard. The EPA may designate part or all of the metropolitan statistical area (MSA) as nonattainment even if only one monitor in the MSA violates the NAAQS. There are two ozone monitors in Cumberland County. One of the monitors is located northeast of Fayetteville (**Wade**) and the other was formerly located in Golfview but switched to a new location southeast of Fayetteville (**Honeycutt**) in Spring 2015 (March/April).

Figure 1. Map of Ozone Monitor Locations

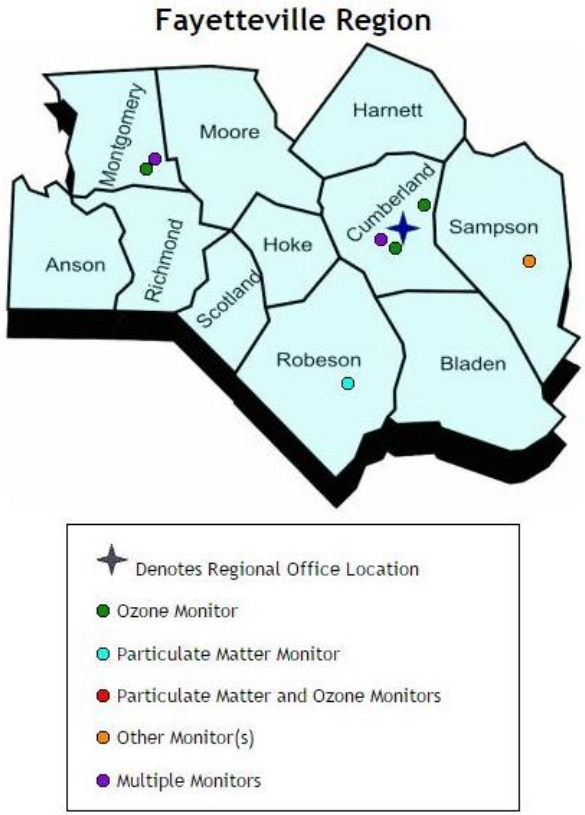


Table 3. Summary of 4th Highest 8-Hour Ozone Values (ppm)

Fayetteville	4th Highest Maximum Daily 8-Hour Average Ozone Concentration (parts per billion)														
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Wade	86	80	94	86	72	84	72	80	75	64	71	73	68	62	61
Golfview	83	84	95	82	77	91	74	82	75	65	73	76	69	62	66

Table 3A. Number of Exceedance Days (Maximum Daily 8-hr Average Ozone Concentration >75ppb)

	Number opf Exceedance Days (Maximum Daily 8-hr Avg Ozone Concentration > 75 ppb)														
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Wade	16	14	28	6	1	9	1	8	3	0	2	0	1	0	0
Golfview	17	27	33	6	5	17	1	7	4	1	2	4	2	0	0

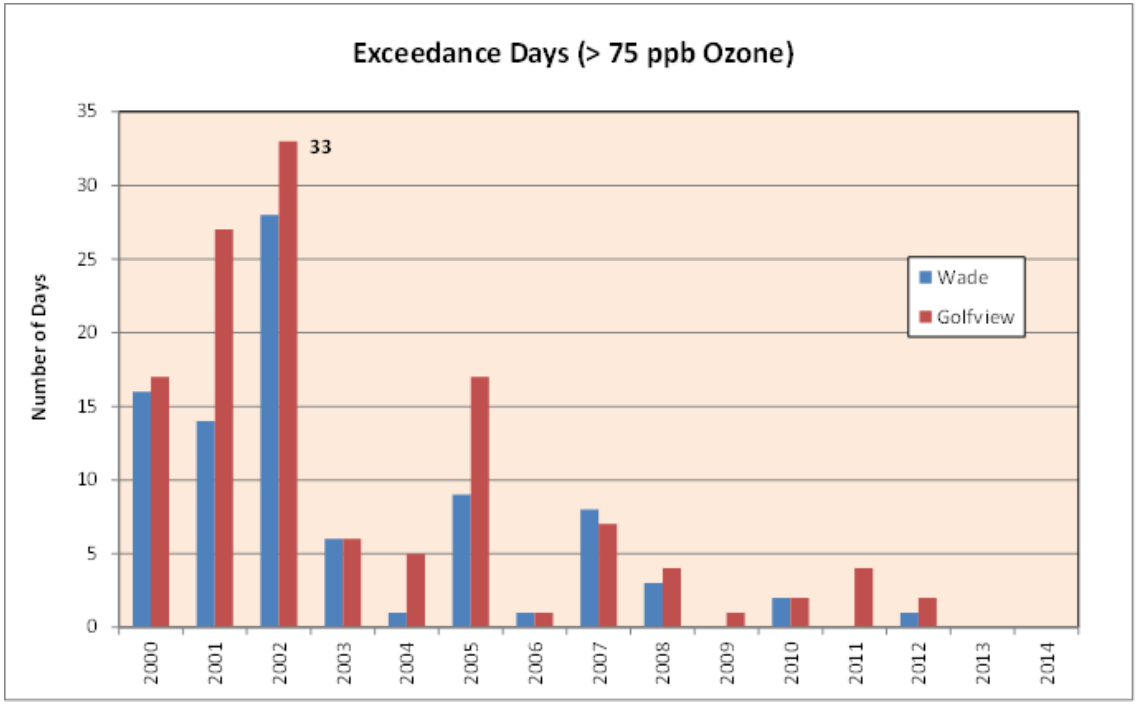
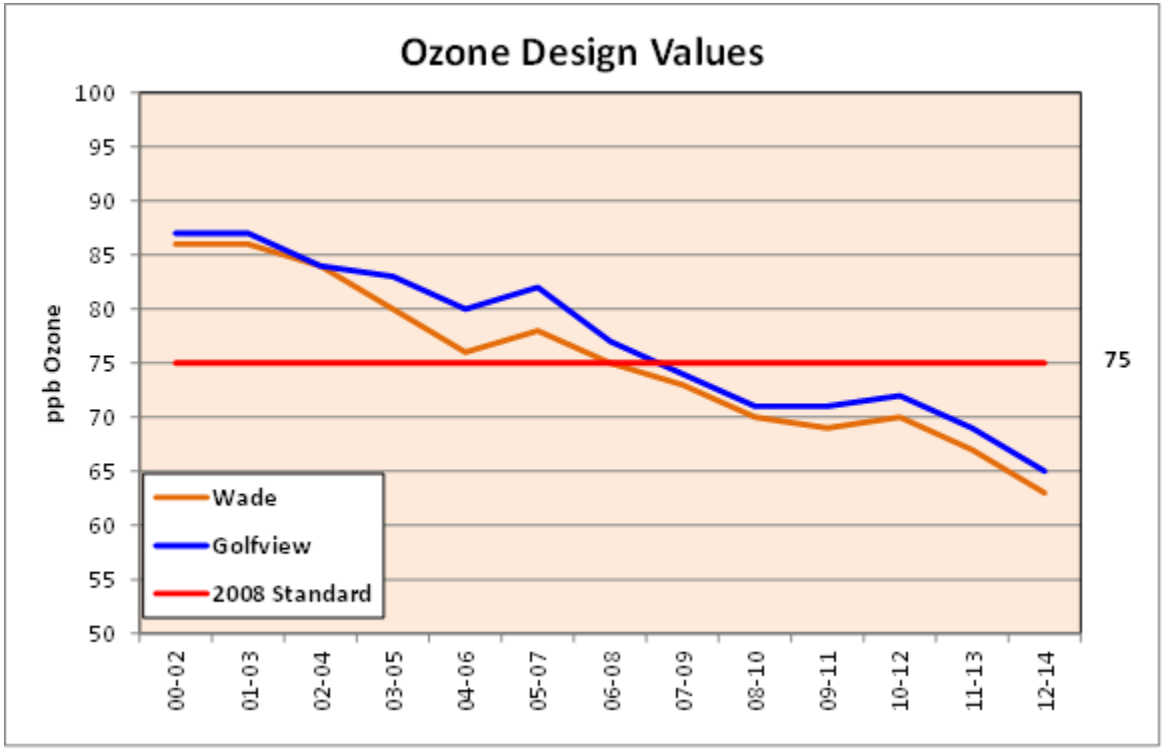


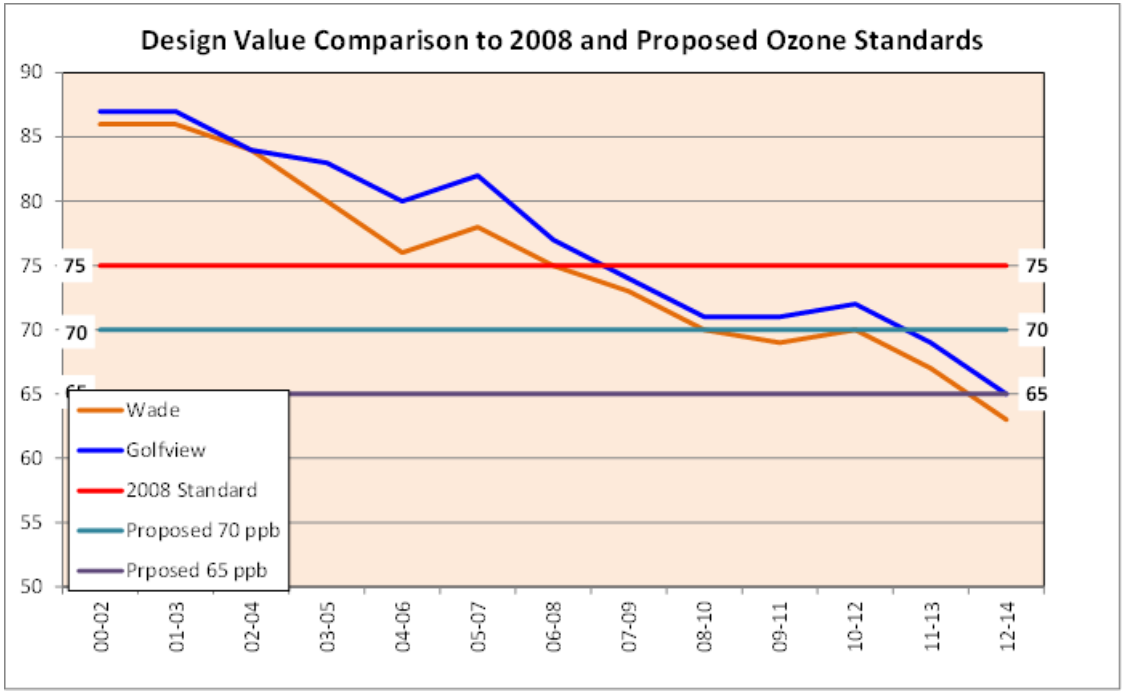
Table 4. Summary of Design Values (ppm) – Shaded areas exceeded 0.075 pm O_3 NAAQS Standard

Fayetteville	Ozone Design Values (parts per billion)												
	00-02	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11	10-12	11-13	12-14
Wade	86	86	84	80	76	78	75	73	70	69	70	67	63
Golfview	87	87	84	83	80	82	77	74	71	71	72	69	65

Graph 1. Fayetteville Monitoring Sites Design Values



Graph 1A. Design Value Comparison to 2008 and Proposed Ozone Standards



The North Carolina Department of the Environment and Natural Resources Division of Air Quality (NCDENR DAQ) provided Cumberland County with this assessment:

There are updated projections coming from EPA for a forthcoming ozone transport rule for the 2008 Ozone NAAQS, but this rule has not been finalized yet and it should be treated as such. EPA has released two versions of the modeling thus far: the first version had a projected year of 2018, and the most recent version had a projected year of 2017 to resolve a lawsuit.

EPA Cross State air pollution projections for the area in 2013 show both region monitors with ozone values below 70 parts per billion (ppb) as indicated in **Table 5.**

Additional published projections can be found shown on **Table 6** from the **Appendix B 8-Hour Ozone Design Values for Air Quality Modeling Scenarios** of the 2012 *Air Quality Modeling Technical Support Document: 2017-2025 Light-Duty Vehicle Greenhouse Gas Emission Standards Final Rule* (EPA-45/R-12-004)

Table 5. EPA Cross State air pollution rule projections in ppb

Table 5. EPA Cross State air pollution rule projections in ppb

Monitor Location	A	B	C	D		E	F	G	H
Wade	78.0	80.0	67.7	69.4		65.4	67.1	**65.0**	**66.7**
Golfview	81.7	83.0	70.7	71.8		68.4	69.5	**68.1**	**69.2**
A: 2003-2007 Average Ambient Values B: 2003-2007 Maximum Ambient Values C: 2012 Base Case Average Values D: 2012 Base Case Maximum Values					E: 2014 Base Case Average Values F: 2014 Base Case Maximum Values G: 2014 Remedy Average Values H: 2014 Remedy Maximum Values				
The Base cases are emissions that are "on the books". The Remedy case includes emissions reductions from the Cross State air pollution rule. The modeling indicates ozone design values should be below 70ppb by 2014.									

Table 6. Model Ozone Projections

Monitor Location	2009-2013 Average Design Value	2009-2013 Maximum Design Value	2017 Projected Average Design Value	2017 Projected Maximum Design Value
Cumberland (Wade)	68.7	70.0	59.3	60.4
Cumberland (Golfview)	70.7	72.0	60.2	61.3
According to the EPA Transport for the 2008 Ozone NAAQS: 2009-2013 base period and projected 2017 design values at individual monitoring sites based upon EPA's updated air quality modeling released in the July 2015 Notice of Data Availability. The 2009 - 2013 base period average and maximum design values. The projected 2017 average and maximum design values. http://www.epa.gov/airtransport/ozonetransportNAAQS.html				

Table 7. 8-Hour Ozone Design Values for 2017-2025 LD GHG Scenarios (units per ppb)

State	County	2005 Baseline DV	2030 Reference Case DV	2030 Control Case DV
North Carolina	Cumberland	81.7	**57.62**	**57.68**
Where Reference Case DV is with projections without new vehicle standards and Control Case DV is with projections that include new vehicle standards Source: http://www.epa.gov/otaq/climate/documents/454r12004.pdf				

Both observed data and projected data reinforce the downward trend that shows a reduction of NOx and VOCs, with ground level ozone values ranging from 0.094/95 ppm in 2002 to 0.068/69 ppm in 2012 and projected DVs of 0.062 ppm in 2018 and 0.57 ppm in 2030.

3. Ozone Health Effects and Sources

3.0 Overview of Ozone

Ozone (O_3) is a tri-atomic ion of oxygen. In the stratosphere or upper atmosphere, ozone occurs naturally and protects the Earth's surface from ultraviolet radiation. Ozone in the lower atmosphere is often called ground-level ozone, tropospheric ozone, or ozone pollution to distinguish from upper-atmospheric or stratospheric ozone. Ozone does occur naturally in the lower atmosphere (troposphere), but only in relatively low background concentrations of about 0.030 parts per million (ppm), well below the NAAQS. The term "smog" is also commonly used to refer to ozone pollution. Although ozone is a component of smog, smog is a combination of ozone and airborne particles having a brownish or dirty appearance. It is possible for ozone levels to be elevated even on clear days with no obvious "smog". In the lower atmosphere, ozone is formed when airborne chemicals, primarily nitrogen oxides (NOx) and volatile organic compounds (VOCs), combine in a chemical reaction driven by heat and sunlight. These ozone-forming chemicals are called precursors to ozone. Man-made NOx and VOC precursors contribute to ozone concentrations above natural background levels. Since ozone formation is greatest on hot, sunny days with little wind, elevated ozone concentrations tend to occur during the warm weather months, generally May through September. In agreement with EPA's guidance, North Carolina operates ozone monitors from April 1 through October 31 to capture high ozone events.

3.1 Ozone Health Effects

The form of oxygen humans need to breathe is O_2. When we breathe ozone, it acts as an irritant to our lungs. Short-term, infrequent exposure to ozone can result in throat and eye irritation, difficulty drawing a deep breath, and coughing. Long-term and repeated exposure to ozone concentrations above the NAAQS can result in reduction of lung function as the cells lining the lungs are damaged. Repeated cycles of damage and healing may result in scarring of lung tissue and permanently reduced lung function. Health studies have indicated that high ambient ozone concentrations may impair lung function growth in children, resulting in reduced lung function into adulthood. In adults, ozone exposure may accelerate the natural decline in lung function that occurs as a part of the normal aging process. Ozone may also

aggravate chronic lung diseases such as emphysema and bronchitis and reduce the immune system's ability to fight off bacterial infections in the respiratory system. Asthmatics and other individuals with respiratory disease are especially at risk from elevated ozone concentrations. Ozone can aggravate asthma, increasing the risk of asthma attacks that require a doctor's attention or the use of additional medication. According to the EPA, one reason for this increased risk is that ozone increases susceptibility to allergens, which are the most common triggers for asthma attack. In addition, asthmatics are more severely affected by the reduced lung function and irritation that ozone causes in the respiratory system. There is increasing evidence that ozone may trigger, not just exacerbate, asthma attacks in some individuals.

All children are at risk from ozone exposure because the often spend a large part of the summer playing outdoors, their lungs are still developing, they breathe more air per pound of body weight, and they are less likely to notice symptoms. Children and adults who frequently exercise outdoors are particularly vulnerable to ozone's negative health effects because they are repeatedly exposed to elevated ozone concentrations while breathing at an increased respiratory rate.

3.2 Ozone Sources

Ozone-forming pollutants or precursors are volatile organic compounds (VOCs) and nitrogen oxides (NOx).

3.2.1 Volatile Organic Compounds

Volatile organic compounds (VOCs) are sometimes referred to as hydrocarbons. In North Carolina, large portions of precursor VOCs are produced by natural, or biogenic, sources, which are primarily trees. Man-made or anthropogenic VOCs also contribute to ozone production, particularly in urban areas. Sources of anthropogenic VOCs include unburned gasoline fumes evaporating from gas stations and cars, industrial emissions, and consumer products such as paints, solvents, and the fragrances in personal care products.

3.2.2 Nitrogen Oxides

Nitrogen oxides (NOx) are produced when fuels are burned and result from the reaction atmospheric nitrogen at the high temperatures produced by burning fuels. Power plants and highway motor vehicles are the major contributors in urban areas, and off-road mobile source equipment (such as construction equipment, lawn care equipment, trains, boats, etc.) are the major sources of NOx. Other NOx sources include "area" sources (small,

widely-distributed sources) such as fires (forest fires, backyard burning, house fires, etc.), and natural gas hot water heaters. Generally, North Carolina, including the Fayetteville area, is considered "NOx-limited" because of the abundance of VOC emissions from biogenic sources. Therefore, current ozone strategies focus on reducing NOx. However, VOC reduction strategies, such as control of evaporative emissions from gas stations and vehicles, could reduce ozone in urban areas where biogenic VOC emissions are not as high.

3.2.3 NOx and VOCs

The following lists the sources, by category, that contribute to NOx and VOC emissions:

Biogenic: Trees and other natural sources
Mobile: Vehicles traveling on paved roads: cars, trucks, buses, motorcycles, etc.
Non-road: Vehicles not traveling on paved roads: construction, agricultural, and lawn care equipment, motorboats, locomotives, etc.
Point: "Smokestack" sources: industry and utilities
Area: Sources not falling into above categories. For VOCs, includes gas stations, dry cleaners, print shops, consumer products, etc. For NOx, includes forest and residential fires, natural gas hot water heaters, etc.

Table 8. Cumberland County Emissions Estimates (ton/year)

	Point		**Area**		**On-road**		**Non-road**	
Year	NOx	VOC	NOx	VOC	NOx	VOC	NOx	VOC
2007	669	1,078	231	3,925	9,222	4,618	1,575	1,246
2011	379	811	234	2,666	6,415	3,366	808	853
2018	370	808	234	2,666	3,008	1,603	485	620

ftp://ftp.epa.gov/EmisInventory/2011v6/v2platform/reports/2011ed_2018ed_2011eh_2017eh_county_annual_totals.xlsx
ftp://ftp.epa.gov/EmisInventory/2011v6/v2platform/reports/DetailsAboutEmissionsDataFiles07232015.pdf

4. Control Measures

Several control measures are already in place and being implemented as part of the original Early Action Compact Plan for Cumberland County, which continues to focus on reductions in point, highway mobile, and non-road mobile source emissions. Fort Bragg Military Reservation continues to implement strategies to meet its sustainability goals, to include zero waste, construction of US Green Building Council LEED certified buildings, transportation multi-modal choices, and reforestation. Retrofitted and new municipal buildings still include white/light roofing and are periodically inspected, through the energy saving guarantee program, to verify that they still meet energy efficiency goals.

4.0 Proposed Local Control Measures

The following list of Air Quality Action strategies indicate several new and ongoing techniques that will be used locally to reduce ozone precursors. Although some are not quantifiable, all of these strategies are directionally correct. Strategies marked as "Ongoing" continue to serve the objectives of reducing ozone levels. As part of the Ozone Advance Program Action Plan, Cumberland County will submit an annual report verifying activities and implementations. Additional strategies may be communicated as they develop.

Appendix A. Air Quality Proclamations

Appendix B. Local Resolutions of Participation

Prepared by Sustainable Sandhills staff Alexis Woschkolup, Clean Air Coordinator, and Hanah Ehrenreich, Executive Director, in cooperation with the Air Quality Stakeholders of Cumberland County, Gary Slater, Chair, and Carolyn Justice Hinson, Vice-Chair, the Combined Air Team (CombAT) including US Army Fort Bragg, the North Carolina Department of Environment and Natural Resources Division of Air Quality and the Fayetteville Area Metropolitan Planning Organization

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AIR QUALITY STAKEHOLDERS OF CUMBERLAND COUNTY

SELECTED OZONE CONTROL STRATEGIES AND IMPLEMNTATION SCHEDULE

AWARENESS

City of Fayetteville/Transit	**Strategy:** Promote Bus Ridership in	**Implementation Date**: 02/2012	**Updated/revised**: 06/2015
Strategy Description:	the Cumberland County High Schools		
Fayetteville Area System of Transit will implement a Transit Marketing/Outreach Campaign in the high schools. This strategy impacts 3,500 students within the FAST service area. Planned impact is reduced NOx emissions by increasing future mass transit use and reducing private vehicle miles travelled. Program began in April 2014			
Updated Description:			
Updated in 2015. FAST continues to offer transportation to Cumberland County School District students and offers transportation to sports events and jobs from 3:30pm to 11:00pm Monday through Friday.			

FAMPO/Sustainable Sandhills	**Strategy:** Air Quality Poster Contest	**Implementation Date**: 2002/2003	**Updated/revised**: 2015
Strategy Description:			
Promote art contest with Air Quality themes. 12 winners included in calendars distributed to Stakeholders and the community to promote conservation efforts and air quality education for grades K-5. Offered in Cumberland County and plans to expand to parts of Hoke, Robeson, and Harnett counties, which			
Updated Description:			
Ongoing. Contest participation was extended to Hoke, Harnett, and Robeson counties in 2014 for the 2015 calendar. Zero entries resulted in this expanded service area. In 2015 the Stakeholders agreed to continue holding the contest and begin introducing the contest earlier in the school year to allow more time for teachers to build air quality into common core curriculum.			

FAMPO/Sustainable Sandhills	**Strategy:** Direct Community Outreach	**Implementation Date**: 2011/2012	**Updated/revised**: 2015
Strategy Description:			
Display Air Quality information at community events and festivals, using educational collateral and games. Enhanced collaboration included info booths at FireAntz Hockey team Kids Nights, a "Green Football Fridays" program with Cumberland County Schools, and Clean Air Initiative booth at the NC Turkey Festival in Hoke County 2014/15.			
Updated Description:			
Information booths were at the 2015 May Asthma Awareness event, SwampDogs Baseball team "Green Night", participated in "Green Football Fridays" and will be participating at the 2015-2016 Cumberland County Schools for "Green Basketball" games. Air Green Initiative will be promoting clean air information at the 2015 NC Poultry Festival (aka NC Turkey Festival) and future events. Started Instagram/twitter hashtag #pawsforcleanair and introduced Sherlock the Clean Air Dog and interactive giant bubbles activity at booth to engage children in tactile and exploratory play on Air Quality topics.			

AWARENESS

Fayetteville Public Works Commission	**Strategy:** Tree Power	**Implementation Date**: 04/2005	**Updated/revised**: 2015
Strategy Description:			
Program implemented to commemorate their 100 year anniversary by planting 100 dogwood trees along the Fayetteville Dogwood Trail, as well as educate customers about benefits of trees to the environment and air quality while demonstrating the proper placement of trees near utilities. 1,000 free tree seedling will be provided during community education seminars and events.			
Updated Description:			
Program continues to reach out and educate customers on how trees reduce/absorb air pollution and help reduce energy consumption, proper planting and tree trimming, how trees provide shade and windbreaks to help reduce energy costs, and beautify the community.			

Fort Bragg	**Strategy:**	Train Building	**Implementation Date**: 2013	**Updated/revised**: 2015
Strategy Description:	Energy Monitors			
Fort Bragg trains Repair and Upgrade Soldiers to look for energy conservation possibilities at the facility level. This strategy will reduce the demand for electricity and the amount of fossil fuel required for power generation.				
Updated Description:				
Fort Bragg continues ongoing training for Repair and Upgrade Soldiers. Quarterly updates are added to Energy Profile and Energy Use index.				

Fort Bragg	**Strategy:** Utility Consumption	**Implementation Date**: 2013	**Updated/revised**: 2015
Strategy Description:	Reports		
Building Occupants receive a monthly utility consumption report to create awareness on energy use in facilities. This education and awareness initiative has developed to promote energy conservation inn assigned/rental housing.			
Updated Description:			
Fort Bragg continues to building occupants a monthly utility consumption report to create awareness on energy use.			

ENERGY REDUCTION

City of Fayetteville/Transit	**Strategy:** Public Transportation	**Implementation Date**: 06/2013	**Updated/revised**: 2015
Strategy Description:	construction of Multimodal Facility-Leadership in Energy & Environmental Design (LEED) certified		
The construction of a multi-modal transit facility provides opportunity to layer mass transit and low-emissions transit. This strategy ranges from improving air and water quality to reducing solid waste, benefitting owners, occupiers, and society as a whole.			
Updated Description:			
Plans to open facility were approved in August 2014. Construction has begun but finished deadline has been pushed to the Summer of 2016 due to weather and soil removal plans.			

City of Fayetteville/Transit	**Strategy:** Green Building/Business Certification	**Implementation Date**: 2012	**Updated/revised**: 2015
Strategy Description:			
Transit system received Sustainable Sandhills Green Business certification in 2012. This strategy reduces solid waste, water consumption, and reduces operating costs.			
Updated Description:			
Fayetteville Area System of Transit received a Sustainable Sandhills Green Business re-certification in 2015 and adopted the strategy for green infrastructure, including hybrid buses, fleet vehicles, carpooling, and the addition of more buses with bicycle transportation attachments.			

City of Fayetteville	**Strategy:** Develop alternative energy	**Implementation Date**: 2013	**Updated/revised**: 2015
Strategy Description:	production opportunities that are financially viable for the City		
Exploring options for photovoltaic solar farms, biomass-to-energy, low-flow hydro and Methane gas-to-energy production. Clean energy sources reduce volume of fossil fuel burning required for power generation.			
Updated Description:			
Cumberland County has a methane-reuse program that captures landfill gas and sells it under the name Fayetteville Gas to the Cargill Inc. processing plant across the Cape Fear River for use as a fuel source for the Combined Heat & Power system (CHP). Continuing strategy to explore and implement alternative and renewable energies in residential, commercial, and municipal use. City of Fayetteville is working with Cumberland County on pro-solar land use regulations. Sustainable Sandhills opened a Solarize Sandhills program in 2015 to develop small-scale commercial and residential solar energy production in			

City of Fayetteville	**Strategy:** Retrofit City buildings	**Implementation Date**: 2013	**Updated/revised**: 2015
Strategy Description:	expand existing smart building monitoring system		
Through moderate general fund appropriations, retrofit City buildings for more energy efficient lighting, HVAC units/motors, purchase energy star rated appliances & further reduce energy consumption. Strategy reduces the regional demand for electricity & fossil fuel used for power generation.			
Updated Description:			

13-15 buildings monitored by Parks and Recreation from a centered facility have received efficient lights, AC unit replacements, and the Rec Center received new reflective roofing.

ENERGY REDUCTION

City of Fayetteville	**Strategy:** Building Efficiency	**Implementation Date**: 2012	**Updated/revised**: 01/2015
Strategy Description:			
Through moderate general fund appropriations, retrofit City buildings for more energy efficient lighting, HVAC units/motors, purchase energy star rated appliances and further reduce energy consumption by expanding the City's existing smart building monitoring system.			
Updated Description:			
Better efficient lighting, AC unit replaced with upgraded equipment, building codes changed for better (30% residential and 15% commercial) energy efficiency increase.			

City of Fayetteville	**Strategy:** Upgrade lighting in facilities	**Implementation Date**: 2013	**Updated/revised**: 2015
Strategy Description:			
Inefficient lighting is replaced with energy efficient bulbs such as LED or compact fluorescent lighting. This strategy conserves energy.			
Updated Description:			
New transit building lighting will be upgraded to LEED Silver standards by December 2015 , City Hall will receive similar LEED Silver renovations starting Fall 2015. City replaced 85% of lighting in Amtrak Train Station building and City-owned AIT building with better energy efficient lighting and saved 50% on previous energy expenditures.			

Cumberland County/ Sustainable Sandhills	**Strategy:** Land Use		**Implementation Date**: 02/2012	**Updated/revised**:03/2015
Strategy Description:	Open Space Development			
Enforce the adopted and revised Unified Development Ordinance for developing properties requiring open space dedication, parkland dedication, tree-save areas, buffer zones, significant tree preservation and landscape requeirements all of which reduce the heat island effect and preven ground level ozone production.				
Updated Description:				
Unified Development Ordinance revised in 2015 to incentivize land developers to retain longleaf pine habitat.				

Sustainable Sandhills	**Strategy:** Local Food Access Program	**Implementation Date**: 2012	**Updated/revised**: 2015
Strategy Description:			
Educate community on benefits of sourcing food locally, reducing miles traveled by food and consumers. Liaison with Downtown Restaurant Association, Slow Food Fayetteville the Sandhills, Sandhills Farm to Table Cooperative.			
Updated Description:			
Sustainable Sandhills works with local farm cooperative to create a local food system, including the growth of local produce box subscriptions to Co-op members. Slow Food and PopUp Dinners aim to connect chefs with local food producers to reduce vehicle emissions and carbon emissions related to food sourcing in the Sandhills.			

Fayetteville Public Works	**Strategy:** Advanced Metering	**Implementation Date**: 06/2014	**Updated/revised**: 2015
Strategy Description:	Infrastructure		
Completion estimated for June 2017, installation of Advanced Metering Infrastructure to provide utility through computer based remote control, automation and two-way communications. System will provide 115,000+ PWC customers technology to better manage and reduce energy and water consumption. Benefits will also include reduction in service trips/vehicle usage. This strategy will lower NOx emissions by reduction of energy consumption and significant reduction of vehicle use/fuel consumption.			
Updated Description:			
Since beginning of installation, 40,000 of the 185,000 meters have been installed and annual service trips/vehicle usage has already been reduced by 68,800 miles.			

ENERGY REDUCTION

Fayetteville Public Works	**Strategy:** LEED Street Lighting	**Implementation Date**: 06/2014	**Updated/revised**: 2015
Strategy Description:			
Conversion of 15,000+ streetlights to LED because LEDs have a longer life span and use less energy than traditional street lights. Immediate benefits will include reduction in energy consumption and in service trips/vehicle usage. This strategy will lower NOx emissions by reduction of energy consumption and significant reduction of vehicle use/fuel consumption. Slated to be complete by June 2017.			
Updated Description:			
Since beginning of installation, 4,800 lights have been replaced in new, secure streetlight beams.			

Fayetteville Public Works	**Strategy:** Retro-Commissioning	**Implementation Date**: 2015	**Updated/revised**: 2015
Strategy Description:			

Retro-commissioning project on main operations facility/building (replacement lighting, energy improvements to heating/ventilation/AC units).	
Updated Description:	
Completed. Upgraded automation system to improve operating efficiency of chiller plant and reduce air handling unit run times. Electrical usage reduced by 17% before completion of project and usage continues to trend downwards.	

Fayetteville State University	**Strategy:** LEED Silver or Equivalent	**Implementation Date**: 2012	**Updated/revised**: 2015
Strategy Description:	Building Standard		
Saving goal related to projected new building space starting 2012. 20% electrical and natural gas savings, GHG reduction of 154 tons (CO_2 Equivalent) annually and total of 2,000 tons by 2025			
Updated Description:			
Two new buildings are in the process of certification to LEED Silver. One renovation project is also in process.			

Fayetteville State University	**Strategy:** FSU Energy-Savings	**Implementation Date**: 2015	**Updated/revised**: 2015
Strategy Description:	Performance Contract (ESPC) Program		
15% electrical and natural gas savings, GHG reduction of 183 tons (CO_2 Equivalent) annually and total 2,000 tons by 2025; Upgrade applied to 900,000 SF of FSU facilities (Savings to begin in 2015)			
Updated Description:			
Construction began in 2014 and will be complete on July 15, 2015. Saving targets will still be confirmed by Measurement and Verification (M&V) in the 2015/2016 school year.			

Fayetteville State University	**Strategy:** UNC-GA ESPC	**Implementation Date**: 2015	**Updated/revised**: 06/2015
Strategy Description:	(Lighting Only)		
Upgrades applied to 370,000 SF of FSU facilities with demonstrated energy savings to begin in 2015. 20% savings of lighting system electrical, GHG reduction of 23 tons (CO_2 Equivalent) annually and total 250 tons by 2025.			
Updated Description:			
Construction start delayed until July 2015. Completion expected by December 2015. Savings target still valid but will need to wait to be confirmed post construction by M&V in 2016.			

Fayetteville State University	**Strategy:** Continuous	**Implementation Date**: 2016	**Updated/revised**: 06/2015
Strategy Description:	Re-Commissioning Program		
Re-commission facilities to maintain efficiency as use and occupancy changes during the school semesters/year.			
Updated Description:			

Program will begin in 2016. Delayed while both Energy Savings Performance Contract projects are ongoing and incomplete.

ENERGY REDUCTION

Fayetteville State University	**Strategy:** Solar Photovoltaic (PV)	**Implementation Date**: 2014	**Updated/revised**: 06/2015
Strategy Description:	Systems		
1:1 Offset of utility-generated electric emissions, GHG reduction of 250 tons (CO_2 Equivalent) annually and total 2,500 tons by 2025; PV array area equal to 20% of campus GSF; PV arrays ramp from 10% (2015) to 20% (2017).			
Updated Description:			
Project on indefinite hold due to budget restrictions.			

Fayetteville State University	**Strategy:** Improved Space Utilization	**Implementation Date**: 2015	**Updated/revised**: 06/2015
Strategy Description:	and Building Scheduling		
5% electrical and natural gas savings, GHG reduction of 455 tons (CO_2 Equivalent) annually and total 5,000 tons by 2025; Savings applies to all building. Savings ramp from 2% (2017) to 5% (2020)			
Updated Description:			
Project delayed by ESPC timeline. Targets may need to be revised downward. A 5% ultimate savings is more realistic by 2020.			

Fayetteville State University	**Strategy:** Food Waste Composting	**Implementation Date**: 2014	**Updated/revised**: 06/2015
Strategy Description:			
Capture 100% of food waste, both pre- and post- consumer; GHG reduction of 50 tons (CO_2 Equivalent) annually and total 600 tons by 2025.			
Updated Description:			
FSU capturing 80% of food waste by 2015. Current challenges include a complete lack of hauling options to compost facilities. New process is industrial food waste dehydrator that removes all water from food waste. All de-watered food waste is then hauled to landfill. Exploration of other options to compost food waste is in process.			

Fort Bragg	**Strategy:** Retro-Commissioning	**Implementation Date**: 2011	**Updated/revised**: 07/2015
Strategy Description:			
Facilities surveyed to ensure systems are performing as they were designed. Improvements such as occupancy schedules and sensors, variable frequency drives, etc. are normally installed during this process. This strategy ensures equipment is functioning efficiently.			

Updated Description:	
Retro-commissioning of facilities is continuously ongoing.	

ENERGY REDUCTION

Fort Bragg	**Strategy:** Thermal Energy Storage	**Implementation Date**: 2011	**Updated/revised**: 07/2015
Strategy Description:			
Water is chilled in the evening when energy prices are lower. Chilled water is used in district system. This strategy is used to reduced energy cost.			
Updated Description:			
Thermal Energy Storage has been implemented and continues to run extra thermal energy storage tanks for chilled water, shifting energy use from peak hours to off-peak hours. Chilled water runs from six to eight hours a day and in circulating mode for four to six hours of the day.			

Fort Bragg	**Strategy:** Purchase Energy Star	**Implementation Date**: 2011	**Updated/revised**: 07/2015
Strategy Description:	Equipment		
Energy efficient products are procured and installed. This strategy reduces energy consumption.			
Updated Description:			
Continuously ongoing due to Fort Bragg's green procurement.			

Fort Bragg	**Strategy:** Implement "Low-cost/No-	**Implementation Date**: 2011	**Updated/revised**: 07/2015
Strategy Description:	cost" energy conservation measure		
Improve facility energy use intensity by installing weather stripping around windows and doors. This strategy improves the building envelope, thus reducing energy consumption.			
Updated Description:			
Fort Bragg continues to improve facilities with weather stripping and other measures to conserve energy consumption.			

Fort Bragg	**Strategy:** Load management in	**Implementation Date**: 2011	**Updated/revised**: 07/2015
Strategy Description:	cubicle/office space		

Received funding for "smart strips," a load sensing power strip. This strategy reduces energy consumption by 30% based on meter data.	
Updated Description:	
Energy Office continues to maintain data on reduced energy consumption by the "smart strips."	

ENERGY REDUCTION

Fort Bragg	**Strategy:** LEED certifiable facilities	**Implementation Date**: 2011	**Updated/revised**: 07/2015
Strategy Description:			
Improve federal facilities resource efficiency. This strategy ranges from improving air and water quality to reducing solid waste, benefiting owners, occupants, and society as a whole.			
Updated Description:			
Energy conservation and subsequent savings are achieved through several lighting strategies. The north/south orientation of the building and window placement enables LEED facilities to reduce consumption of bulb wattage and harvest natural light in 90% of all regularly occupied spaces.			

Fort Bragg	**Strategy:** Renewable Energy	**Implementation Date**: 2000's	**Updated/revised**: 07/2015
Strategy Description:			
Renewable energy is implemented where life-cycle cost is most effective.			
Updated Description:			
A large geothermal field (five well fields) is currently in development to supplement heating and cooling loads in four buildings with plans to integrate three additional facilities. Other renewable technologies include: solar thermal, solar photovoltaic, solar walls, and ground source heat pumps.			

Fort Bragg	**Strategy:** Lighting Upgrades	**Implementation Date**: 2000's	**Updated/revised**: 07/2015
Strategy Description:			
Eliminate inefficient lighting with more efficient lighting, such as LEDs, to reduce energy consumption.			
Updated Description:			
Fort Braggs continues to upgrade inefficient lighting to LED lighting and plans to upgrade five aircraft hangers with LED lighting. Area lighting levels are also lowered in the evenings when not needed.			

Fort Bragg	**Strategy:** Energy Audits	**Implementation Date**: 2000's	**Updated/revised**: 07/2015

Strategy Description:		
Audit facilities with high energy use indices to determine if high every use is due to mechanical failure or building occupant behavior.		
Updated Description:		
Develop work orders or projects depending on the nature of the mechanical issues and/or work with building occupants to use energy more efficiently.		

Fort Bragg	**Strategy:** Building level micro-grid	**Implementation Date**: 2000's	**Updated/revised**: 07/2015
Strategy Description:	demonstration		
A green and energy efficiency initiative for Fort Bragg facilities. Facility will be installing approximately 150 KW of PV, DC fans, DC lighting, and battery storage.			

Fort Bragg	**Strategy:** Building Controls and	**Implementation Date**: 2000's	**Updated/revised**: 07/2015
Strategy Description:	metering		
Lighting and mechanical controls integrated into building automation systems to operate and maintain facilities efficiently. Meter data collected to identify facilities that are utilizing excess energy when compared to similar facilities.			
Updated Description:			
Fort Bragg continues to implement this strategy across base in new and existing facilities.			

Environmental Farming Systems	**Strategy:** Local Food Supply Chain	**Implementation Date**: 2013	**Updated/revised**: 2015
Strategy Description:	Project		
The Center for Environmental Farming Systems (CEFS) received a five year grant to build and evaluate supply chains for local farmers and fishers to supply large-scale markets in North Carolina. They will be working with Fort Bragg and its food suppliers to increase local foods in the commissaries and dining facilities. This strategy will reduce NOx by reducing VMT.			
Updated Description:			
CEFS grant began in 2013 and is ongoing until 2017. Grant funds were used to recruit farmers to a self-organized Farmers Market on Fort Bragg beginning August 2014 connected to the popular 5k walk/run marathon and partnered with Fort Bragg MWR (Moral, Welfare, Recreation) office.			

Sustainable Sandhills	**Strategy:** Local Food Access Program	**Implementation Date**: 2012	**Updated/revised**: 2015
Strategy Description:			
Educate community on benefits of sourcing food locally, reducing miles traveled by food and consumers. Liaison with Downtown Restaurant Association, Slow Food Fayetteville the Sandhills, Sandhills Farm to Table Cooperative.			
Updated Description:			
Sustainable Sandhills works with local farm cooperative to create a local food system, including the growth of local produce box subscriptions to Co-op members. Slow Food and PopUp Dinners aim to connect chefs with local food producers to reduce vehicle emissions and carbon emissions related to food sourcing in the Sandhills.			

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Updated Description:			
Since beginning of installation, 40,000 of the 185,000 meters have been installed and annual service trips/vehicle usage has already been reduced by 68,800 miles.			

ENERGY REDUCTION

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Strategy Description:			

Retro-commissioning project on main operations facility/building (replacement lighting, energy improvements to heating/ventilation/AC units).	
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ENERGY REDUCTION

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ENERGY REDUCTION

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Strategy Description:	cubicle/office space		

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Updated Description:	
Energy Office continues to maintain data on reduced energy consumption by the "smart strips."	

ENERGY REDUCTION

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Renewable energy is implemented where life-cycle cost is most effective.			
Updated Description:			
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Strategy Description:		
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Strategy Description:	metering		
Lighting and mechanical controls integrated into building automation systems to operate and maintain facilities efficiently. Meter data collected to identify facilities that are utilizing excess energy when compared to similar facilities.			
Updated Description:			
Fort Bragg continues to implement this strategy across base in new and existing facilities.			

Environmental Farming Systems	**Strategy:** Local Food Supply Chain	**Implementation Date**: 2013	**Updated/revised**: 2015
Strategy Description:	Project		
The Center for Environmental Farming Systems (CEFS) received a five year grant to build and evaluate supply chains for local farmers and fishers to supply large-scale markets in North Carolina. They will be working with Fort Bragg and its food suppliers to increase local foods in the commissaries and dining facilities. This strategy will reduce NOx by reducing VMT.			
Updated Description:			
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TRANSPORTATION

City of Fayetteville/Transit	**Strategy:** Sidewalks	**Implementation Date**: --	**Updated/revised**: 2015
Strategy Description:			
Fayetteville Area System of Transit, in conjunction with the city of Fayetteville, acquired New Freedom funds that constructed over 2.1 miles of sidewalks from Murchison Road and Hogan Street to enhance connectivity, air quality, and safety. This strategy will enhance transportation options for ADA residents and creates a pedestrian friendly community which in turn reduces gasoline consumption.			
Updated Description:			
Continuous ongoing construction. Sidewalks will also be built connected to bus stops if "right of way" is available .			

City of Fayetteville/Transit	**Strategy:** Veterans' Call Center	**Implementation Date**: --	**Updated/revised**: 2015
Strategy Description:			
The City of Fayetteville, in partnership with Fort Bragg, the Veterans Affair Medical Center and surrounding counties, received a Veterans Transportation and Community Living Initiative (VTCLI) grant awarded through the Federal Transit Administration for $46,680 for the development of a joint agency website and call center, comprehensive directory of agency and provider contacts for users pertaining to their transportation needs. Fayetteville Area System of Transit will include its web-based transit trip planner on the site, which will allow all site visitors to plan trips using the FAST transit network.			
Updated Description:			
Website is not live and no ride sharing is available between agencies. Fayetteville Area System of Transit only operates within city limits but the County transit travels outside of city limits.			

City of Fayetteville/Transit	**Strategy:** New Transit Route -	**Implementation Date**: 2013	**Updated/revised**: 2015
Strategy Description:	Strickland Bridge Road		
The purpose of this service is to provide transportation options in a high growth area for commercial and institutional development. This strategy will assist with reduction of Vehicle Miles Travelled (VMTs)			
Updated Description:			
Construction of transit route for Strickland Bridge road is completed and use of route started January 2015			

TRANSPORTATION

City of Fayetteville/Transit	**Strategy:** Providing	**Implementation Date**: 2014	**Updated/revised**: 2015
Strategy Description:	Transportation service to FSU students.		
Fayetteville State University students will be provided free bus transit passes to by FAST. Transportation corridor service costs will be assisted by Fayetteville State University. This strategy will help reduce emission, promote bus-ridership, and asssit university access.			
Updated Description:			
Fayetteville Area System of Transit's partnership with Fayetteville State University is ongoing. Scheduled times for buses has expanded to run from 3:30PM to 11:00PM to assist working students may use transit services to get to places of employment.			

City of Fayetteville/Transit	**Strategy:** Providing free	**Implementation Date**: 10/2014	**Updated/revised**: 2015
Strategy Description:	transportation to sporting events		
High school students will be given a 30 day pass that will provide them with free transportation to sporting events or other school related activities between 3:00 and 11:00 pm. This strategy will help to reduce emissions by mass transiting students instead of multiple students driving to the same place on their own.			
Updated Description:			
FAST continues to offer transportation to high school students to sporting events and has charted a spike in student ridership 2014-2015.			

City of Fayetteville/Transit	**Strategy:** Rider Appreciation Day	**Implementation Date**: 2015	**Updated/revised: --**
Strategy Description:			
Fayetteville Area System of Transit newly began to promote their appreciation of customers by offering transit passes for $.25 on their website to increase and promote ridership.			
Updated Description:			
FAST was able to see a viable increase in ridership during rider appreciation days.			

City of Fayetteville	**Strategy:** Blue Toad Device use	**Implementation Date**: 2013	**Updated/revised**:03/2015
Strategy Description:			
Reduce idle time and travel times by monitoring vehicle timing and optimizing traffic signal timing, which will reduce gasoline consumption and emissions.			

Updated Description:	
City of Fayetteville continues to implement this strategy and monitors light signal timing at peak traffic and high use intersections.	

TRANSPORTATION

City of Fayetteville	**Strategy:** Perform financial analysis	**Implementation Date**: 2013	**Updated/revised**: 2015
Strategy Description:	of future vehicle replacements		
Analyze diesel-powered vehicles replacement with CNG-powered and/or hydraulic assist hybrid garbage trucks. This strategy reduces NOx emission.			
Updated Description:			
Seven trucks have been replaced over two years for those with engines that burn cleaner fuel, proficient routes for garbage/recycle trucks gives vehicles better fuel efficiency. City has yet to purchase any electric vehicles but look forward to adding as an NC vendor procurement policy allows.			

City of Fayetteville	**Strategy:** Idle Reduction Policy	**Implementation Date**: --	**Updated/revised**: 2015
Strategy Description:			
Enforce the City's Idle Reduction Policy currently in place for city-owned vehicle and equipment. This strategy results in a 14-17% fuel consumption reduction with a corresponding NOx reduction.			
Updated Description:			
City employees allowed to idle only 5 minutes of 30 minute sitting time. City vehicles not allowed to go through drive-thru lanes. Incentives are created to help promote bike-to-work weeks (such as free coffee) as part of an lowered idling emmisions strategy.			

Fayetteville Public Works	**Strategy:** Fleet Management	**Implementation Date**: 2012	**Updated/revised**: 2015
Strategy Description:			
Implement efforts to better manage the overall requirements of the PWC Fleet and lower fuel consumption and emissions. Automated Information Modules and GPS modules have been installed to provide information to aid in minimizing emissions and to generate information to identify and minimize unnecessary idling of vehicles. this strategy reduces NOx emissions.			
Updated Description:			
PWC joined the NC Smart Fleet program and was recognized at "Leader" level for reducing petroleum fuel use. During the first measured year, 279 metric tons of carbon dioxide was offset as PWC's petroleum fuel use was reduced by over 25,000 gallons.			

TRANSPORTATION

Fayetteville Public Works	**Strategy:** Alternate Fuel/Hybrid	**Implementation Date**: 2012	**Updated/revised**: 2015
Strategy Description:	Vehicles/Equipment		
Annually replacing existing fleet and equipment with vehicles that reduce emissions and lower fuel consumption. Replaced five heavy diesel trucks in 2014 with reduced emissions diesel engines, and have replaced eight bucket trucks with two hybrid bucket trucks and six lower emission diesel engines. Currently operating five other hybrid cars/SUVs. Also replaced spark ignited propane forklifts with zero emission all electric forklifts, a diesel directional board with zero emission solar powered message board, and converted construction equipment to Tier 4 emission standards (reduces NOx emissions)			
Updated Description:			
Existing fleet includes hybrid vehicles, electric vehicles, and lower emission vehicles (LEVs). Fleet received only four heavy diesel trucks in 2015.			

Fayetteville State University	**Strategy:** Student, Faculty, and Staff	**Implementation Date**: 2012	**Updated/revised**: 2015
Strategy Description:	Community Improvements		
3% reduction in transportation mileage, GHG reduction of 38 tons annually, and total of 500 tons by 2025; Savings applied to all students, faculty/staff; Low-emissions vehicles preferred parking campaign (started 11/2012 and ongoing) with all current and future new building projects; Bike rack campaign (started 2/2012 and ongoing) with all current and future new building projects; New covered FAST bus stop (started 2/2012, expected completion 2015). This strategy reduces NOx emissions.			
Updated Description:			
LEV parking and bike rack campaign ongoing. Covered bus stop for FSU students by FAST completed 2015.			

LAND USE

Town of Falcon	**Strategy:** Falcon Zoning Ordinance	**Implementation Date**: Fall 2013	**Updated/revised**: 2015
Strategy Description:	Amendment to include Density Development and Mixed Use Development		
Density Developments allow for the division of land while requiring development on only 60% of the overall acreage with open space designation for the other 40%. Mixed Use Development allows for the flexibility of development to included commercial, residential, and open space.			
Updated Description:			
Falcon zoning ordinance strategy still projected on a 2-5 year implementation.			

Town of Godwin	**Strategy:** Proposed Zoning Ordinance	**Implementation Date**: Fall 2013	**Updated/revised**: 2015
Strategy Description:	Amendment to include Density Development and Mixed Use Development		
Density Developments allow for the division of land while requiring development on only 60% of the overall acreage with open space designation for the other 40%; Mandate interconnectivity (lateral access) between developments, particularly commercial; Landscaping standards, encouraging retention of existing trees. Mixed Use Development allows for the flexibility of development to include commercial, residential, and open space.			
Updated Description:			
Strategy implementation still ongoing.			

Town of Wade	**Strategy:** Proposed Zoning Ordinance	**Implementation Date**: 02/2012	**Updated/revised**:03/2015
Strategy Description:	Amendment to include Density Development and Mixed Use Development		
Density developments allow for the division of land while requiring development on only 60% of the overall acreage with open space designation for the other 40%; Mandate interconnectivity (lateral access) between developments, particularly commercial; Landscaping standards, encouraging retention of existing trees. Mixed Use Development allows for the flexibility of development to include commercial, residential, and open space.			
Updated Description:			
Wade still building houses in subdivision. Green space (park) built into the subdivision. Wade also pushing for the use of LED lighting and Tier 4 emissions in new clean burning diesel tractors.			

Town of Eastover	**Strategy:** Commercial Core Overlay	**Implementation Date**: 2013	**Updated/revised**: 2015
Strategy Description:	District		
Preserve and enhance small-scale commercial character, while providing for low-impact business opportunities with requirements for pedestrian pathways/sidewalks and amenities to include rear vehicular access, landscaping, and tree planting. This strategy reduces emissions by creating accessible walkways and reforestation of commercial areas.			
Updated Description:			
More restricted zoning codes were given to the town, ongoing still. Eastover received an acre of land that will be left natural except for a small natural walking trail. Over 100 azaleas and 15 dogwood trees have been planted on 4.5 acres of Town property. Town received 26.5 acres of natural setting that will be used to expand the current ballpark. Town is currently working with Fayetteville-Cumberland County Parks and Rec to design a site plan which will include natural area and larger walking path.			

LAND USE

Town of Eastover	**Strategy:** Zero Lot Line Development	**Implementation Date**: Summer 2013	**Updated/revised**: 2015
Strategy Description:	Conditional Use Permit		
Zoning ordinance that requires a Conditional Use Permit for any Zero Lot Line development (residential and commercial). This strategy protects environmentally sensitive areas and provides green space which offsets emissions.			
Updated Description:			
A new Town Hall building is being designed to green building standards. Sustainable Sandhills and Eastover are discussing the potential addition of solar energy and other energy conservation aspects for the new building.			

Town of Linden	**Strategy:** Possible Density	**Implementation Date**: Winter 2014/2015	**Updated/revised**: 2015
Strategy Description:	Development-Conditional Zoning		
Landscaping standards encourage retention of existing trees; Mandatory 40% open space, development on remaining 60%; Mandate interconnectivity (lateral access) between developments, particularly commercial.			
Updated Description:			
Strategies are still ongoing			

Town of Spring Lake	**Strategy:** Land Use	**Implementation Date**: Jan-March 2014	**Updated/revised**: 2015
Strategy Description:	Open Space Development		
Riparian buffers, same as or similar to Cumberland County provisions, adopted August 2012; Tree preservation; Mandate double landscaping when clear cut, with extra credit given for retaining existing trees, similar to Hope Mills standards, adopted October 2008; Mandate interconnectivity (lateral access) between developments, particularly commercial.			
Updated Description:			
Strategy implementation dates have been delayed until 2016. Changes are being made to strategies that need them and Town Manager will have give a clearer date for implementation once changes are made and reviewed.			

LAND USE

Fort Bragg	**Strategy:** Creation of green space	**Implementation Date**: 2000's	**Updated/revised**: 2015
Strategy Description:	review board for construction projects		
Use of the required "Tree City USA" Arbor Board to review landscape designs and site demolition plans for construction projects. This strategy minimizes tree loss during construction and assures proper plant selection/placement for passive solar design and heat island mitigation			
Updated Description:			

Fort Bragg continues to plan and oversee safe burnings to continue protecting the Long Leaf Pine trees climate deforestation and development projects, has earned the Tree City USA Growth Award seven consecutive years for progress in the areas of community forestry programs, education and public relations, continuing education for tree managers, planning and management, municipal funding, and tree inventory and analysis.

Fort Bragg	**Strategy:** Creation of tree bank	**Implementation Date**: 2000's	**Updated/revised**: 2015
Strategy Description:	mitigation for construction projects		
Created a tree mitigation policy that requires onsite replanting for trees removed during construction or, if replanting is not possible on site, the funding for replanting is deposited into a mitigation tree fund that will fund replanting elsewhere on post. This strategy guarantees no deficit tree loss will result from construction projects.			
Updated Description:			
Fort Bragg continues to protect the Long Leaf Pine climate by continuously replanting when and where they can after planned burnings and on any land clearly owned by Fort Bragg that has the space.			

Fayetteville Public Works Commi	**Strategy:** Electric Vehicle Charging	**Implementation Date**: 2015	**Updated/revised**: --
Strategy Description:	Stations		
New strategy. PWC received $37,000 grant from NC Green Technology Center to purchase, install, and promote use of four Level 2 Dual Electric Vehicle Charging stations throughout PWC service areas.			
Updated Description:			
Stations will be placed strategically at public locations and the sites will be free of charge to the public for at least two years.			

LAND USE

City of Fayetteville	**Strategy:** Enforcement of adopted and	**Implementation Date**: 2011	**Updated/revised**: 2015
Strategy Description:	revised Unified Development Ordinance		
For developing properties, require open space dedication, parkland dedication, tree preservation ordinance and landscape requirements. This strategy reduces the heat island effect and prevents ground level ozone production			
Updated Description:			
Adjustments have been made to development zones and more area has been dedicated to green space. In May 2015, a new web-based copy of the UDO code was made available to the community.			

City of Fayetteville	**Strategy:** Open Space Development	**Implementation Date**: 2012	**Updated/revised**: 2015

Strategy Description:		
Enforce the adopted and revised Unified Development Ordinance for developing properties requiring open space dedication, parkland dedication, tree-save areas, buffer zones, significant tree preservations and landscape requirements all of which reduce the heat island effect and prevent ground level ozone production.		
Updated Description:		
Unified Development Ordinance revised 2015 to incentivize land developers to retain longleaf pine habitat. Development plans are required to include an area of open space with 24 trees per acre. Three new roundabouts are being added to the city to help with idling and add trees to new heat islands.		

City of Fayetteville	**Strategy:** Increase the permitted	**Implementation Date**: 2012	**Updated/revised**: 2015
Strategy Description:	number of residential units allowed in		
The UDO supports up to 24 dwelling units per acre (dua) in commercial areas and 32 dua in mixed use districts. Having residents in close proximity to commercial services reduces fuel consumption with a corresponding reduction in NOx. Recent amendments offer increased density in certain areas to encourage redevelopment in a more sustainable pattern.			
Updated Description:			
City of Fayetteville continues to plan and coordinate redevelopment of residential units with more sustainable methods.			

LAND USE

City of Fayetteville	**Strategy:** Protect and retain existing	**Implementation Date**: 2011	**Updated/revised**: 2015
Strategy Description:	tree canopy and specimen trees during and		
If a development plan has not been approved, a clear-cutting permit is required for the removal of trees on vacant land. Incentives are included in the UDO to encourage preservation of existing specimen trees and tree canopy during development. Trees and landscaping reduce NOx and uptake carbon dioxide.			
Updated Description:			
The UDO has clear concise requirements of tree protection that the City of Fayetteville continuously adheres to such as public protection of trees, public maintenance of trees by walkways and streets, and replanting.			

City of Fayetteville	**Strategy:** New trees installed to	**Implementation Date**: 2011	**Updated/revised**: 2015
Strategy Description:	moderate development by providing shade and reducing the effect of urban heat islands		
New development is required to include trees. Special attention is given to vehicular use areas (large expanses of pavement) and the area between streets and parking lots, resulting in carbon dioxide uptake and reduced NOx.			

Updated Description:	
Tree census was conducted Spring/Summer 2014. City of Fayetteville continues to work hard at replanting and maintaining healthy tree climates by partnering with surrounding municipalities, Fort Bragg, and Sustainable Sandhills	

City of Fayetteville	**Strategy:** Redevelopment Toolbox	**Implementation Date**: 2011	**Updated/revised:** 2015
Strategy Description:			
Incentives have been adopted to encourage redevelopment of existing sites and development of infill sites, thereby reducing sprawl with a corresponding reduction in fuel consumption and NOx.			
Updated Description:			
City of Fayetteville continues to use the "redevelopment toolbox" incentive as an ongoing strategy. It leverages private investment using City funding, capital improvement programming, federal and state grants, and promotes development of investment in priority areas and projects, such as Cottage Developments, Regional Activity Centers, Small Subdivision Alternative Standards, and Residential Density in Commercial Districts, etc.			

LAND USE

City of Fayetteville	**Strategy:** Increase use of sustainable	**Implementation Date**: 2011	**Updated/revised**: 2015
Strategy Description:	development practices		
Incentives have been adopted to encourage greater use of sustainable development practices and to support urban agriculture			
Updated Description:			
City of Fayetteville continues to implement this strategy by working with Sustainable Sandhills and the local community to bring about practices such as the use of solar energy, support for local produce/farmers, and community events to bring awareness to sustainable practices.			

City of Fayetteville/Cumberland	**Strategy:** Extension of Cape Fear River	**Implementation Date**: 2012	**Updated/revised**:03/2015
Strategy Description:	Trail		
Once the Grove Street bridge is completed, the Cape River Trail will be extended; going south from Clark Park to Hoffer Road near Public Works Commission (PWC) water treatment plant. Asphalt sidewalks and bike paths will also be added. Parks and Recreation is partnered with the Linear Park Committee on this project for assistance with fundraising.			
Updated Description:			
Cape Fear River Trail extension received the funding it needed and was completed in late 2014/early 2015			

City of Fayetteville
North Carolina

PROCLAMATION

WHEREAS, the City of Fayetteville has acknowledged the importance of clean air in promoting quality of life, economic development and future healthy development; and

WHEREAS, we need clean air to protect and improve the quality of our forests, streams and lakes for public recreation and wildlife; and

WHEREAS, Cumberland County is working to maintain attainment of the new 2015 US EPA ground-level ozone standard of 0.070 parts per million (ppm); and

WHEREAS, in 2003 the City of Fayetteville partnered with fellow municipalities in Cumberland County to participate in the EPA's Early Action Compact and joined the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

WHEREAS, for ten years the Air Quality Stakeholders have continued efforts to educate our citizens and find strategies to improve air quality on behalf of the City of Fayetteville, Cumberland County and all the Municipal Governments; and

WHEREAS, the City of Fayetteville has elected to continue efforts to improve the air quality in the region through the EPA's Ozone Advance Program, and by engaging students enrolled in the Fayetteville Area Metropolitan Planning Organization service area with an artistic Clean Air Poster competition; and

WHEREAS, the ozone forecast season is from April 1 to October 31, and April 29 to May 5, has been designated as National Air Quality Awareness Week but in recent years the City of Fayetteville has been celebrating this event throughout the month of May.

NOW, THEREFORE, I, Nat Robertson, Mayor of the City of Fayetteville, North Carolina, on behalf of City Council and our over 208,000 citizens, do hereby honorably proclaim proclaims the month of May 2015, as

AIR QUALITY AWARENESS MONTH

I call upon our citizens to observe the month by enjoying the natural beauty of the City, taking walks through Veterans Park and downtown Fayetteville, biking the Cape Fear River Trail, planting trees and shade gardens, using FAST transit for daily commuting, and take part in other healthy, clean air initiatives.

Nat Robertson
Mayor

COUNTY OF CUMBERLAND NORTH CAROLINA

Proclamation

WHEREAS, Cumberland County has acknowledged the importance of clean air in promoting quality of life, economic development and future healthy development; and

WHEREAS, we need clean air to protect and improve the quality of our forests, streams and lakes for public recreation and wildlife; and

WHEREAS, Cumberland County is working to maintain attainment of the new 2015 US EPA ground-level ozone stand of 0.070 parts per million (ppm); and

WHEREAS, in 2003 the Cumberland County Board of Commissioners partnered with all of its municipalities to participate in the EPA's Early Action Compact and created the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

WHEREAS, for ten years the Air Quality Stakeholders have continued efforts to educate our citizens and find strategies to improve air quality on behalf of the Cumberland County Board of Commissioners and all the municipal governments; and

WHEREAS, the Cumberland County Board of Commissioners, in partnership with all of the local municipal governments, has elected to continue efforts to improve the air quality in the region through the EPA's Ozone Advance Program and by engaging students enrolled in the Fayetteville Area Metropolitan Planning Organization service area in an artistic Clean Air Poster competition; and

WHEREAS, the ozone forecast season is from April 1 to October 31, and April 29 to May 5, has been designated as National Air Quality Awareness Week but in recent years Cumberland County has been celebrating this event through the month of May.

NOW, THEREFORE, BE IT RESOLVED, that the County of Cumberland Board of Commissioners proclaims the month of May 2015 as "AIR QUALITY AWARENESS MONTH" and encourages all government employees, citizens and businesses in Cumberland County to observe the month with activities that promote clean air, and take part in making our community "a healthful environment for all current and future citizens of Cumberland County".

Adopted this 4th day of May, 2015.

COUNTY OF CUMBERLAND FOUNDED 1754 OUT OF MANY, ONE NORTH CAROLINA

Kenneth S. Edge

KENNETH S. EDGE, Chairman
Cumberland County Board of Commissioners

TOWN *of* EASTOVER

3863 Dunn Road
Eastover, North Carolina, 28312
910-323-0707 www.eastovernc.com 910-323-2640 Fax

RESOLUTION SUPPORTING THE OZONE ADVANCE PROGRAM

RESOLUTION No. 2013-1

WHEREAS, the federal Clean Air Act, through the Environmental Protection Agency (EPA), establishes air quality standards to protect public health and welfare; and

WHEREAS, Cumberland County has acknowledged the importance of these standards in promoting quality of life, economic development, and future healthy development; and

WHEREAS, Cumberland County is currently attaining the 2008 federal ozone standard of 0.075 parts per million (ppm); and

WHEREAS, EPA is in the process of reviewing a more stringent eight hour ozone standard that could range from 0.06 to 0.07ppm, which could put this area in a non-attainment status; and

WHEREAS, in 2003 the Cumberland County Board of Commissioners partnered with all of its municipalities to participate in the EPA's Early Action Compact and created the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

WHEREAS, EPA, in conjunction with state governments, business, industry, and environmental interest, has developed an option known as an "Ozone Advance Program", through which an area, in partnership with the North Carolina Department of Environmental and Natural Resources and EPA, can voluntarily improve conditions through strategies developed through an Action Plan to help avoid a designation of non-attainment; and

WHEREAS, the benefits of participating in an Ozone Advance Program include: clean air sooner, potentially avoiding non-attainment designation; preference during EPA federal grant allocations; flexibility to achieve standards in cost effective ways; development of local standards in partnership with stakeholders and the state, and other benefits;

NOW, THEREFORE, BE IT RESOLVED BY THE EASTOVER TOWN COUNCIL, that the Eastover Town Council fully supports the Ozone Advance Program as approved by the Cumberland County Board of Commissioners and will participate in the development and implementation of an Action Plan, which will reduce ground-level ozone concentrations in preparation for the upcoming 2016 8-hour ozone standard.

Approved and adopted this 5th day of February, 2013.

Charles G. McLaurin, Mayor

Jane F. Faircloth, Town Clerk

Resolution Passed by
The Board of Commissioners of the
Town of Falcon, North Carolina

The following resolution was offered by Commissioner Nick Randall and seconded by Commissioner Gerald Lucas and upon being put to a vote was carried unanimously on the 7th day of January, 2013;

Whereas, the federal Clean Air Act, through the environmental Protection Agency (EPA), establishes air quality standards to protect public health and welfare; and

Whereas, Cumberland County has acknowledged the importance of these standards in promoting quality of life, economic development and future healthy development; and

Whereas, Cumberland County is currently attaining the 2008 federal ozone standard of 0.075 parts per million (ppm); and

Whereas, EPA is in the process of reviewing a more stringent eight hour ozone standard that could range from 0.06 to 0.07 parts per million (ppm), which could put this area in a non-attainment status; and

Whereas, in 2003 the Cumberland County Board of Commissioners partnered with all of its municipalities to participate in the EPA's Early Action Compact and created the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

Whereas, EPA, in conjunction with state governments, business, industry and environmental interests has developed an option know as an "Ozone Advance Program," through which an area, in partnership with the North Carolina Department of the Environment and Natural Resources and EPA, can voluntarily improve conditions through strategies developed through an Action plan to help avoid a designation of non-attainment; and

Whereas, the benefits of participating in an Ozone Advance Program include: clean air sooner, potentially avoiding non-attainment designation; preference during EPA federal grants allocations; flexibility to achieve standards in cost effective ways; development of local standards in partnership with stakeholders and the state, and other benefits;

NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TOWN OF FALCON, NORTH CAROLINA:

That the Town of Falcon Board of Commissioners fully supports the Ozone Advance Program as approved by the Cumberland County Board of Commissioners and will participate in the development and implementation of an Action Plan, which will reduce ground-level ozone concentrations in preparation for the upcoming 2016 8-hour ozone standard. And upon being put to a vote, this resolution is unanimously approved this the 7th day of January, 2013.

Clifton L. Turpin, Jr., Mayor

(Town Seal)

TOWN OF FALCON SEAL

Attest: Belinda D. White

Belinda D. White, Town Clerk

City of Fayetteville

Office of the Mayor and City Council

EPA Ozone Advance Program Resolution

WHEREAS, **the City of Fayetteville** would like to enter into the EPA's Ozone Advance Program so the community will have flexibility in developing a plan to reduce our Ozone and other toxins in order to comply with EPA's proposed Ozone levels; **AND**

WHEREAS, the EPA is set to lower the ground level Ozone limit in 2014, while the Clean Air Scientific Advisory Council is looking at implementing a new limit amount in 2016; **AND**

WHEREAS, the Ozone Advance Program is voluntary and would allow our community flexibility to select and implement strategies that could help in lowering Ozone precursors, and Ozone Advance participants will also receive preferred status under several emission reduction grants; **AND**

WHEREAS, the Ozone Advance Program is similar in nature to the Early Action Compact, which the City of Fayetteville participated in from 2003 to 2008, implementing strategies and policies that improved the air quality in the area and brought it into compliance with 1997 ozone standards; **AND**

WHEREAS, a preliminary list of possible strategies for the City of Fayetteville to utilize as part of the Ozone Advance Program may include: increasing efforts in urban reforestation, promoting/supporting local food efforts, promoting alternative energy production and exploring use of alternative clean-burning fuels for vehicles and equipment.

THEREFORE BE IT RESOLVED: the Fayetteville City Council and Mayor support City staff in their efforts to enter into the EPA's Ozone Advance Program, so that the City of Fayetteville can promote a higher quality of life, an improved environment, a cleaner city and an even greater place to live for its residents.

Anthony G. Chavonne
Mayor

Resolution Passed by
The Board of Commissioners of the
Town of Godwin North Carolina

The following resolution was offered by MACK ROYAL and seconded by WILLIE BURNETT and upon being put to a vote was carried unanimously on the 18th day of February 2013:

Whereas, the federal Clean Air Act, through the Environmental Protection Agency (EPA), establishes air quality standards to protect public health and welfare; and

Whereas, Cumberland County has acknowledged the importance of these standards in promoting quality of life, economic development and future healthy development; and

Whereas, Cumberland County is currently attaining the 2008 federal ozone standard of 0.075 parts per million (ppm); and

Whereas, EPA is in the process of reviewing a more stringent eight hour ozone standard that could range from 0.06 to 0.07 ppm, which could put this area in a non-attainment status; and

Whereas, in 2003 the Cumberland County Board of Commissioners partnered with all of its municipalities to participate in the EPA's Early Action Compact and created the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

Whereas, EPA, in conjunction with state governments, business, industry and environmental interests has developed an option known as an "Ozone Advance Program," through which an area, in partnership with the North Carolina Department of the Environment and Natural Resources and EPA, can voluntarily improve conditions through strategies developed through an Action Plan to help avoid a designation of non-attainment; and

Whereas, the benefits of participating in an Ozone Advance Program include: clean air sooner, potentially avoiding non-attainment designation; preference during EPA federal grants allocations; flexibility to achieve standards in cost effective ways; development of local standards in partnership with stakeholders and the state, and other benefits;

NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TOWN OF GODWIN, NORTH CAROLINA:

That the Town of Godwin Board of Commissioners fully supports the Ozone Advance Program as approved by the Cumberland County Board of Commissioners and will participate in the development and implementation of an Action Plan, which will reduce ground-level ozone concentrations in preparation for the upcoming 2016 8-hour ozone standard. And upon being put to a vote, this resolution is unanimously approved this the 18th day of February, 2013.

Deborah Godwin
Deborah Godwin
Mayor

ATTEST: Ronald [illegible] (Seal)
Town Commissioner

TOWN OF GODWIN
CORPORATE SEAL
CUMBERLAND COUNTY N.C.

Resolution Passed by
The Board of Commissioners of the
Town of Hope Mills North Carolina

The following resolution was offered by Comm. Collins and seconded by Comm. Edwards and upon being put to a vote was carried unanimously on the 7rd day of January, 2013:

Whereas, the federal Clean Air Act, through the Environmental Protection Agency (EPA), establishes air quality standards to protect public health and welfare; and

Whereas, Cumberland County has acknowledged the importance of these standards in promoting quality of life, economic development and future healthy development; and

Whereas, Cumberland County is currently attaining the 2008 federal ozone standard of 0.075 parts per million (ppm); and

Whereas, EPA is in the process of reviewing a more stringent eight hour ozone standard that could range from 0.06 to 0.07 ppm, which could put this area in a non-attainment status; and

Whereas, in 2003 the Cumberland County Board of Commissioners partnered with all of its municipalities to participate in the EPA's Early Action Compact and created the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

Whereas, EPA, in conjunction with state governments, business, industry and environmental interests has developed an option known as an "Ozone Advance Program," through which an area, in partnership with the North Carolina Department of the Environment and Natural Resources and EPA, can voluntarily improve conditions through strategies developed through an Action Plan to help avoid a designation of non-attainment; and

Whereas, the benefits of participating in an Ozone Advance Program include: clean air sooner, potentially avoiding non-attainment designation; preference during EPA federal grants allocations; flexibility to achieve standards in cost effective ways; development of local standards in partnership with stakeholders and the state, and other benefits;

NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TOWN OF HOPE MILLS, NORTH CAROLINA:

That the Town of Hope Mills Board of Commissioners fully supports the Ozone Advance Program as approved by the Cumberland County Board of Commissioners and will participate in the development and implementation of an Action Plan, which will reduce ground-level ozone concentrations in preparation for the upcoming 2016 8-hour ozone standard. And upon being put to a vote, this resolution is unanimously approved this the 7th day of January, 2013.

Jackie Warner
Mayor

ATTEST: (Seal)

Melissa Addams
Town Clerk

RESOLUTION (2013) 2

A RESOLUTION OF THE BOARD OF ALDERMEN OF THE TOWN OF SPRING LAKE, NORTH CAROLINA SUPPORTING THE OZONE ADVANCE PROGRAM.

WHEREAS, the federal Clean Air Act, through the Environmental Protection Agency (EPA), establishes air quality standards to protect public health and welfare; and

WHEREAS, Cumberland County has acknowledged the importance of these standards in promoting quality of life, economic development and future healthy development; and

WHEREAS, Cumberland County is currently attaining the 2008 federal ozone standard of 0.075 parts per million (ppm); and

WHEREAS, EPA is in the process of reviewing a more stringent eight hour ozone standard that could range from 0.006 to 0.007 ppm, which could put this area in a non-attainment status; and

WHEREAS, in 2003 the Cumberland County Board of Commissioners partnered with all of its municipalities to participate in the EPA's Early Action Compact and created the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

WHEREAS, EPA, in conjunction with stat governments, business, industry and environmental interests has developed an option known as an "Ozone Advance Program," through which an area, in partnership with the North Carolina Department of the Environment and Natural Resources and EPA, can voluntarily improve conditions through strategies developed through an Action Plan to help avoid a designation of non-attainment; and

WHEREAS, the benefits of participating in an Ozone Advance Program include: clean air sooner, potentially avoiding non-attainment designation; preference duting EPA federal grants allocations; flexibility to achieve standards in cost effective ways; development of local standards in partnership with stakeholders and the state, and other benefits.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE TOWN OF SPRING LAKE, THAT:

The Town of Spring Lake Board of Aldermen fully supports the Ozone Advance Program as approved by the Cumberland County Board of Commissioners and will participate in the development and implementation of an Action Plan, which will reduce ground-level ozone concentrations in preparation for the upcoming 2016 8-hour ozone standard.

Adopted this 14th day of January, 2013.

AYE	NO
Mayor Pro Tem Napoleon Hogans	
Alderman James Christian	
Alderman Richard Higgins	
Alderman James O'Garra	
Alderwoman Fredricka Sutherland	

Chris V. Rey
Mayor

Attest:

Rhonda D. Webb
Rhonda D. Webb, MMC
Town Clerk

Resolution Passed by
The Board of Commissioners of the
Town of Stedman North Carolina

The following resolution was offered by Commissioner Belva Maxwell and seconded by Commissioner Gregory Wrench upon being put to a vote was carried unanimously on the 7th day of February, 2013;

Whereas, the federal Clean Air Act, through the Environmental Protection Agency (EPA), establishes air quality standards to protect public health and welfare; and

Whereas, Cumberland County has acknowledged the importance of these standards in promoting quality of life, economic development and future healthy development; and

Whereas, Cumberland County is currently attaining the 2008 federal ozone standard of 0.075 parts per million (ppm); and

Whereas, EPA is in the process of reviewing a more stringent eight hour ozone standard that could range from 0.06 to 0.07 ppm, which could put this area in a non-attainment status; and

Whereas, in 2003 the Cumberland County Board of Commissioners partnered with all of its municipalities to participate in the EPA's Early Action Compact and created the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

Whereas, EPA, in conjunction with state governments, business, industry and environmental interests has developed an option known as an "Ozone Advance Program," through which an area, in partnership with the North Carolina Department of the Environment and Natural Resources and EPA, can voluntarily improve conditions through strategies developed through an Action Plan to help avoid a designation of non-attainment; and

Whereas, the benefits of participating in an Ozone Advance Program include: clean air sooner, potentially avoiding non-attainment designation; preference during EPA federal grants allocations; flexibility to achieve standards in cost effective ways; development of local standards in partnership with stakeholders and the state, and other benefits;

NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TOWN OF STEDMAN, NORTH CAROLINA:

That the Town of Stedman Board of Commissioners fully supports the Ozone Advance Program as approved by the Cumberland County Board of Commissioners and will participate in the development and implementation of an Action Plan, which will reduce ground-level ozone concentrations in preparation for the upcoming 2016 8-hour ozone standard. And upon being put to a vote, this resolution is unanimously approved this the 7th day February, 2013.

ATTEST:

TOWN OF STEDMAN NORTH CAROLINA SEAL (seal)

Billy D. Horne
Mayor

Jennifer Wilson-Kersh
Town Clerk

Resolution Passed by
The Board of Commissioners of the
Town of Wade North Carolina

The following resolution was offered by Commissioner Joe Dixon and seconded by Commissioner Nelle Kendrick and upon being put to a vote was carried unanimously on the 8th day of January, 2013:

Whereas, the federal Clean Air Act, through the Environmental Protection Agency (EPA), establishes air quality standards to protect public health and welfare; and

Whereas, Cumberland County has acknowledged the importance of these standards in promoting quality of life, economic development and future healthy development; and

Whereas, Cumberland County is currently attaining the 2008 federal ozone standard of 0.075 parts per million (ppm); and

Whereas, EPA is in the process of reviewing a more stringent eight hour ozone standard that could range from 0.06 to 0.07 ppm, which could put this area in a non-attainment status; and

Whereas, in 2003 the Cumberland County Board of Commissioners partnered with all of its municipalities to participate in the EPA's Early Action Compact and created the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

Whereas, EPA, in conjunction with state governments, business, industry and environmental interests has developed an option known as an "Ozone Advance Program," through which an area, in partnership with the North Carolina Department of the Environment and Natural Resources and EPA, can voluntarily improve conditions through strategies developed through an Action Plan to help avoid a designation of non-attainment; and

Whereas, the benefits of participating in an Ozone Advance Program include: clean air sooner, potentially avoiding non-attainment designation; preference during EPA federal grants allocations; flexibility to achieve standards in cost effective ways; development of local standards in partnership with stakeholders and the state, and other benefits;

NOW, THEREFORE BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TOWN OF WADE, NORTH CAROLINA:

That the Town of Wade Board of Commissioners fully supports the Ozone Advance Program as approved by the Cumberland County Board of Commissioners and will participate in the development and implementation of an Action Plan, which will reduce ground-level ozone concentrations in preparation for the upcoming 2016 8-hour ozone standard. And upon being put to a vote, this resolution is unanimously approved this the 8th day of January, 2013.

Huell Aekins
Mayor

ATTEST:

Cindy Burchette (Seal)
Cindy Burchette
Town Clerk

TOWN *of* EASTOVER

3863 Dunn Road
Eastover, North Carolina, 28312
910-323-0707 www.eastovernc.com 910-323-2640 Fax

RESOLUTION SUPPORTING THE OZONE ADVANCE PROGRAM

RESOLUTION 2015-07

WHEREAS, the federal Clean Air Act, through the Environmental Protection Agency (EPA), establishes air quality standards to protect public health and welfare; and

WHEREAS, Cumberland County has acknowledged the importance of these standards in promoting quality of life, economic development, and future healthy development; and

WHEREAS, Cumberland County is currently attaining the 2015 federal ozone standard of 0.070 parts per million (ppm); and

WHEREAS, EPA is in the process of reviewing a more stringent eight hour ozone standard that could range from 0.065 to 0.070 ppm, which could put this area in a non-attainment status; and

WHEREAS, in 2003 the Cumberland County Board of Commissioners partnered with all of its municipalities to participate in the EPA's Early Action Compact and created the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

WHEREAS, EPA, in conjunction with state governments, business, industry, and environmental interest, has developed an option known as an "Ozone Advance Program", through which an area, in partnership with the North Carolina Department of Environmental and Natural Resources and EPA, can voluntarily improve conditions through strategies developed through an Action Plan to help avoid a designation of non-attainment; and

WHEREAS, the benefits of participating in an Ozone Advance Program include: clean air sooner, potentially avoiding non-attainment designation; preference during EPA federal grant allocations; flexibility to achieve standards in cost effective ways; development of local standards in partnership with stakeholders and the state, and other benefits;

NOW, THEREFORE, BE IT RESOLVED, that the Eastover Town Council fully supports the Ozone Advance Program as approved by the Cumberland County Board of Commissioners, and will participate in the development and implementation of an Action Plan which will reduce ground-level ozone concentrations in preparation for the upcoming 2016 8-hour ozone standard.

Adopted this 8the day of September, 2015

TOWN OF EASTOVER

Charles G. McLaurin, Mayor

ATTEST:

Jane F. Faircloth, Town Clerk