

Ozone Advance Program
Action Plan
Cumberland County, North Carolina



A joint effort by US EPA Region 4, North Carolina Department of Environmental Quality, Sustainable Sandhills and the Fayetteville Area Metropolitan Planning Organization, including: 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 Parkton, Town of Spring Lake, Town of Stedman and Town of Wade

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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 emission reductions in ozone attainment areas to help these areas prioritize the National Ambient Air Quality Standards (NAAQS) for ground-level ozone. Specifically, the Ozone Advance Program will:

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

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

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-hour 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 met 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 2008 and set at 0.075 ppm and updated again in 2015 to .070 ppm. Cumberland County elected to continue with the air quality regional efforts in the hope that uninterrupted work would further the ozone precursor reduction. The Cumberland County Air Quality Stakeholders Committee was formed as a part of the EAC and met monthly to discuss and implement 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. All municipalities, including Cumberland County, were approached in early 2017 to commit to supporting Ozone Advance again, this time with the updated NAAQS standards. The City of Fayetteville, Town of Hope Mills, Town of Spring Lake, Town of Eastover, and Town of Wade each passed resolutions of commitment. Town of Godwin, Town of Stedman and Cumberland County are pending for spring 2018.

The Stakeholders underwent major organizational changes beginning in 2016. These changes began with revising the bylaws in early 2016 to mandate a quarterly meeting schedule in conjunction with the Combined Air Team (CombAT). CombAT members are listed as AQ Stakeholders. In a year-long process, the AQ Stakeholders committee was shifted from the jurisdiction of Cumberland County to a committee under the auspices of the Fayetteville Area Metropolitan Planning Organization (FAMPO). The jurisdictional change resulted in an expanded service area for the Stakeholder group, consistent with the Air Quality initiatives outside of Cumberland County borders, and led to an extension in the term limits of the Air Quality Stakeholder members during the transition. The stakeholder group now includes all areas of the FAMPO services area and all communities in Cumberland County. Under FAMPO there are no term limits for members. The Stakeholders adopted a new name, *The Fayetteville Planning Area Air Quality Stakeholders* and bylaws in 2017.

The new areas represented in the Fayetteville Planning Area Air Quality Stakeholders will be approached in early 2018 to sign a commitment to Ozone Advance. These areas include the Town of Raeford, Hoke County, and the Town of Parkton. Demographic information about the FAMPO region is included in this report along with updates from the Town of Parkton.

The Stakeholders' committee was previously supported by 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. These members are listed as AQ Stakeholders as they meet regularly with the AQ Stakeholders. Some previous members of CombAT are 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.

Table 1. Fayetteville Planning Area Air Quality Stakeholders

NAME	STAKEHOLDER
Carolyn Justice Hinson	PWC
Gary Slater	DAQ Americas
Tracy Jackson	Cumberland County Representative
Councilwoman Kathy Jensen	City of Fayetteville
Daniel Rodriguez	Citizen/Soldier
Robert Van Geons	Fayetteville Cumberland County Economic Development Chamber
Hanah Ehrenreich	Sustainable Sandhills
Open	Town of Falcon
Johnny Lanthorn	Town of Wade
John Gillis (?)	Homebuilders Association
Jon Parsons	Environmental Rep/Energy Manager @ FSU
Celestine Raineri-Smith	Board of Health
Christopher Frank	Citizen
Gabriel Marshall	Hoke County Citizen
Gregory Bean	Citizen
Erik Mitchell	Ft. Bragg DPW
Lee Worsley	Triangle J Council of Government Executive Director
Eloise M. Sahlstrom	Planning Dept./Development Services City of Fayetteville
Jennifer McHone Sides	Senior Environmental Technician at NC DENR, Division of Air Quality
Open	Environmental Services Director at City of Fayetteville
Kim Nazarchyk	Town of Eastover Town Manager
Tim Garner	Stormwater Administrator @ Spring Lake
Al McMillan	Town of Parkton Mayor
Commissioner Bryan A. Marley	Hope Mills
Open Position	City of Raeford

Open Position	Robeson County
Glenn Prillaman	RLUAC
David McRae	Harnett County Planning
Janet Robertson	Lumber River Council of Governments
Eric Lindstrom	Architect

1.2 Regional Characteristics

The new AQ Stakeholder region includes all the FAMPO area and all of Cumberland County (**Figure 1**). FAMPO was established in 1975 by the Federal Surface Transportation Assistance Act of 1973. Any urbanized area with a population greater than 50,000 was designated as a Metropolitan Planning Organization (MPO). Until 2010 the MPO boundaries included Fayetteville, Hope Mills, Spring Lake, Fort Bragg, Pope Army Field, and portions of Harnett and Cumberland Counties. Following the 2010 Census, the boundaries were expanded to include portions of Robeson County, including the town of Parkton and portions of Hoke County including the town of Raeford. The total population of the planning area in 2010 was 372,000.

Cumberland County is a mixture of urban and rural areas. The 2014 census population was 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 2**. Because of the difference in land use and densities, care was exercised when proposing and selecting strategies to be implemented by several jurisdictions.

Figure1. Map of FAMPO Region and Cumberland County

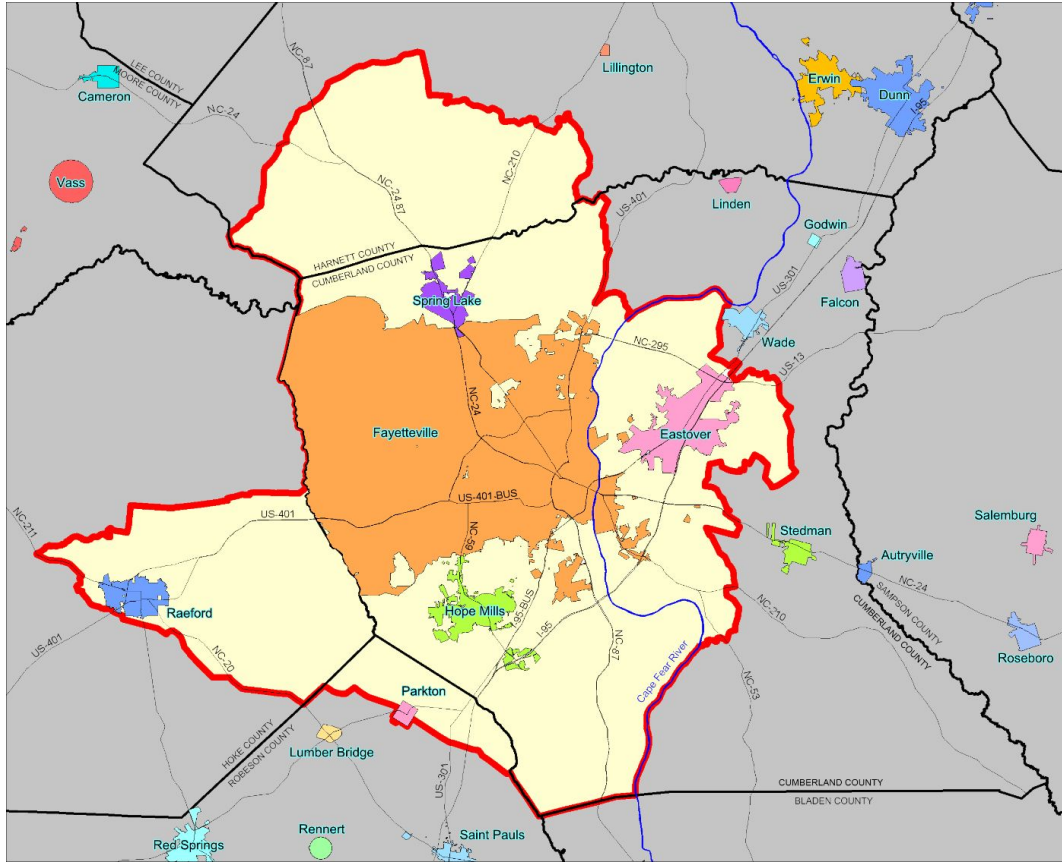


Table 2. Census 2010 Demographic Information

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
Parkton	436	.62	703.23/sq.mi
Raeford	4,611	3.8	1213/sq.mi
FAMPO	372,000		

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 eight-county region. In 2016, Sustainable Sandhills expanded its mission to include Robeson County, bringing a total regional reach of nine counties.

The local and regional sustainability efforts began prior to the development of the EPA’s Early Action Compact, demonstrating a commitment to attaining and maintaining a healthy environment for present and future generations.

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 in attainment of NAAQS for all 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). For the 2017 update there is no design values for Honeycutt. The tables below will show Golfview for historical context.

Figure 2. Map of Ozone Monitor Locations

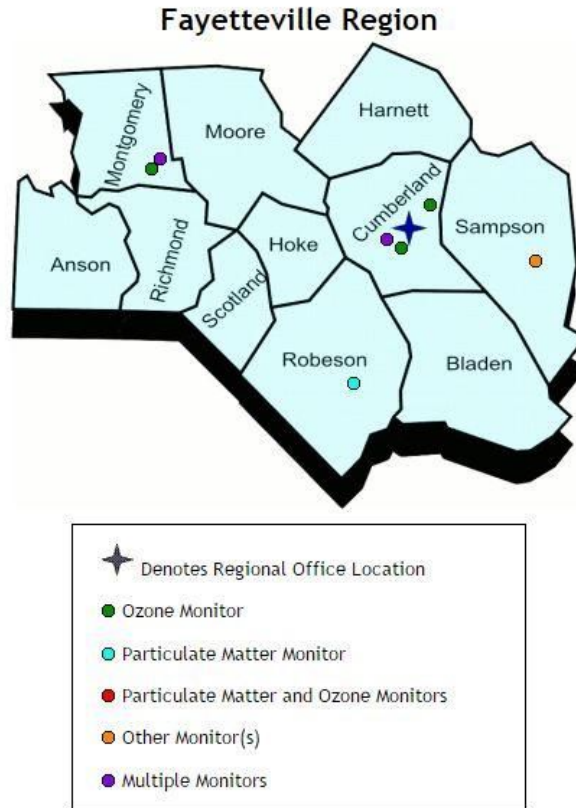


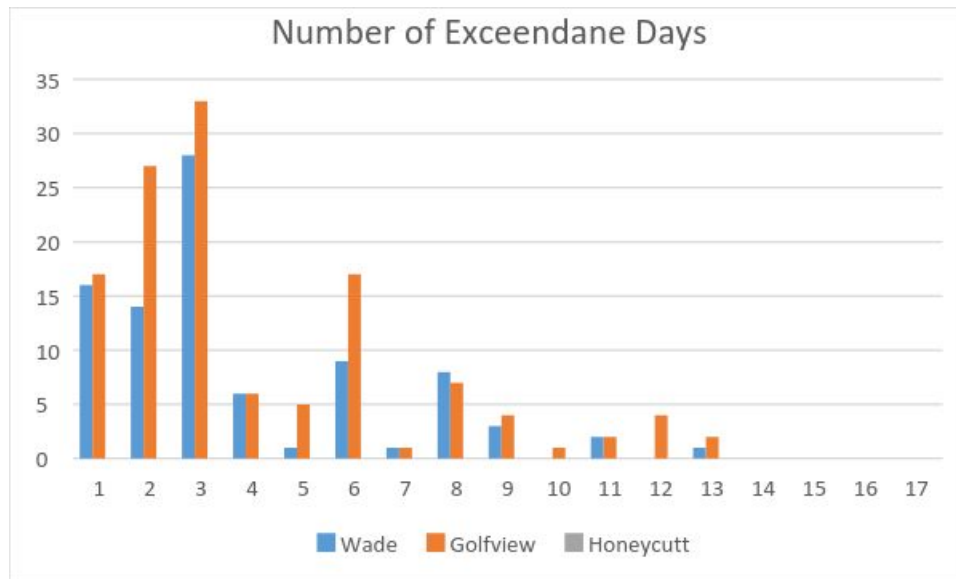
Table 3. Summary of 4th Highest 8-Hour Ozone Values (ppm)

	4 th Highest Maximum Daily 8-Hour Average Ozone Concentration (ppm)																
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Wade	86	80	94	86	72	84	72	80	75	64	71	73	68	62	61	60	64
Golfview*	83	84	95	82	77	91	74	82	75	65	73	76	69	62	66	--	--
Honeycutt*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	62	64

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

	Number of Exceedance Days																
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Wade	16	14	28	6	1	9	1	8	3	0	2	0	1	0	0	0	0
Golfview*	17	27	33	6	5	17	1	7	4	1	2	4	2	0	0	--	--
Honeycutt*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0

Graph 1. Number of Exceedance Days

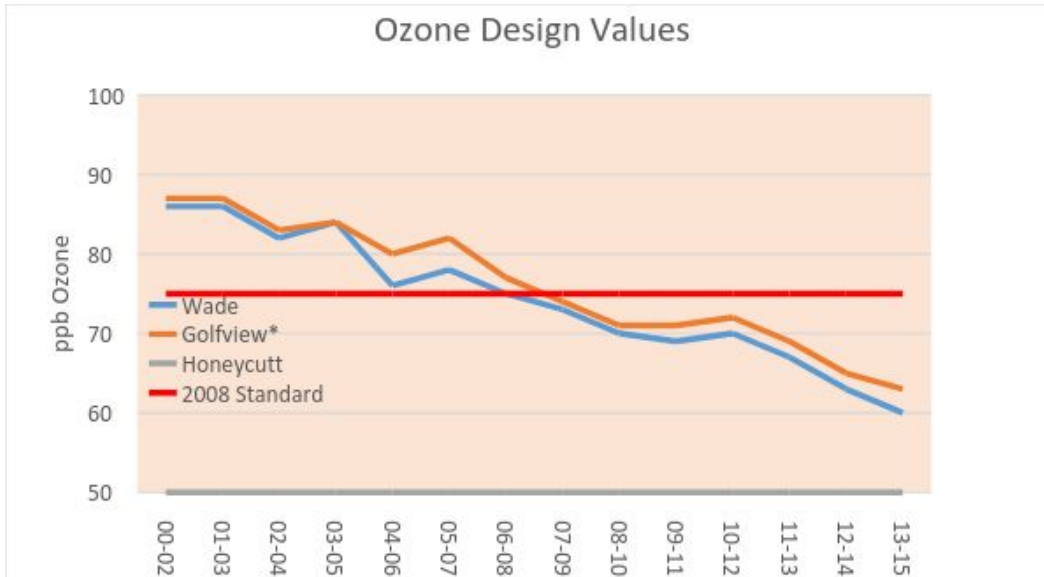


*2000 -2014 exceedance days based on maximum Ozone Concentration of >75 ppb. 2015-2016 exceedance days based on maximum Ozone Concentration of >70 ppb

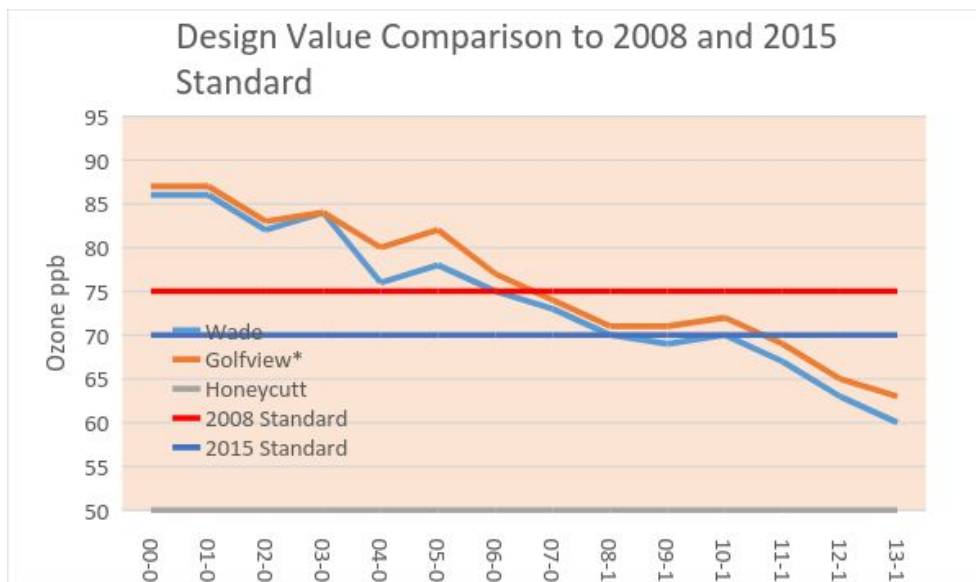
Table 4. Summary of Design Values (ppm) – Shaded areas exceeded 0.075 pm O₃ NAAQS Standard

	Ozone Design Values (ppb)														
	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	13-15	
Wade	86	86	82	84	76	78	75	73	70	69	70	67	63	60	
Golfview*	87	87	83	84	80	82	77	74	71	71	72	69	65	63	
Honeycutt	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

Graph 2. Fayetteville Monitoring Sites Design Values



Graph 2A. Design Value Comparison to 2008 and Proposed Standards



On September 7, 2016 EPA finalize the Cross-State Air Pollution Rule for the 2008 National Ambient Air Quality Standards. The rule will go into effect in 2017 to reduce NOx further reducing ground level ozone.

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**. The trends in actual ozone values following 2013 have demonstrated the projections to be correct.

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 (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 70 ppb by 2014.									

Table 6. Model Ozone Projections (ppb)

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 (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 (O₃) 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 (NO_x) 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 NO_x 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 O₂. 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 they 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 (NO_x).

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 (NO_x) 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 NO_x. Other NO_x 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 nonroad 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. Local Control Measures

Appendix B. Local Resolutions of Participation

Prepared by Sustainable Sandhills Environmental Outreach Manager Denise Bruce and Executive Director Hanah Ehrenreich in cooperation with the Air Quality Stakeholders of Cumberland County including: Vice-Chair Carolyn Justice Hinson, the US Army Fort Bragg, the North Carolina Department of Environmental Quality Division of Air Quality, and the Fayetteville Area Metropolitan Planning Organization.

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AIR QUALITY STAKEHOLDERS SELECTED OZONE CONTROL STRATEGIES AND IMPLEMENTATION SCHEDULE

AWARENESS

City of Fayetteville/Transit	Strategy: Promote Bus Ridership in the	Implementation Date: 02/2012	Updated/revised: 2016
Strategy Description:	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 2016. 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. For the 2015 - 2016 School year more than 300 passes were distributed to students.			
FAMPO/Sustainable Sandhills	Strategy: Air Quality Poster Contest	Implementation Date: 2002-03	Updated/revised: 2017
Strategy Description:			
Promote art contest with Air Quality themes. Twelve 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 portions of Hoke, Robeson, and Harnett counties in the Metropolitan Planning Area for the Fayetteville Area Metropolitan Planning Organization (FAMPO).			
Updated Description:			
Ongoing. For the 2017 update, the contest saw more than 400 participants from schools (Public and Private) in Cumberland County. To increase participation, contest will be promoted along with a short air quality awareness lesson to health and wellness teachers in grades K - 5 through Cumberland County Public Schools.			

AWARENESS

FAMPO/Sustainable Sandhills		Implementation Date: 2011/2012	Updated/revised: 2017
Strategy Description:	Strategy: Direct Community Outreach		
Display Air Quality information at community events and festivals, using educational collateral and games. Enhanced collaboration included info booths at Marksmen Hockey team Kids Nights and Swamp Dogs Green Night.			
Updated Description:			
Information booths were at the Go Green Earth Day Event, Swamp Dogs Green Night and Fayetteville Marksmen. Through a partnership with Fayetteville Marksmen a trivia game has been introduced. Air Quality trivia questions will be announced during hockey games. Participants must visit the Air Quality table in order to answer the question.			

Fayetteville Public Works Commission	Strategy Title: Tree Power	Implementation Year: 05/2005	Updated/revised: 2017
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 utility. 1,000 free tree seedlings are provided annually 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. In addition to the free tree seedlings provided annually (800 in 2017), PWC also annually plants Longleaf pine on its Watershed area.			

Fort Bragg	Strategy: Train Building Occupancy Monitors	Implementation Date: 2013	Updated/revised: 2017
Strategy Description:			
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.			

AWARENESS

Cumberland County Schools	Strategy: Education Reports	Implementation Date: 2015	Updated/revised: 2017
Strategy Description:			
Each of the Cumberland County Schools participate in Air Quality Awareness using the color coded flags. The Flags are raised each day along with the United States Flag and North Carolina Flag. For schools that offer a morning TV program, air quality is one of the discussion topics.			
Updated Description:			
In late 2017 Schools were surveyed for participation. Data from the survey will be shared in the 2018 action plan.			

City of Fayetteville/Transit	Strategy: Increase Ridership	Implementation Date: 2014	Updated/revised: 2017
Strategy Description:			
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:			
The facility opening has been delayed until Late 2017/early 2018.			

City of Fayetteville/Transit	Strategy: Green 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.			

AWARENESS

Fort Bragg	Strategy: Awareness activities and public relations	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:	Fort Bragg Energy Team creates energy awareness articles for the local newspaper, the Paraglide, and the Public Works digest. They also have a presence on social media with periodic updates on the Fort Bragg Facebook page and Sustainable Fort Bragg Facebook page. Fort Bragg also participates in Energy Action Month.		
Updated Description:	Fort Bragg continues to promote awareness programs and information through printed and social media.		

City of Fayetteville	Strategy: Develop alternative energy production opportunities that are financially viable	Implementation Date: 2013	Updated/revised: 2017
Strategy Description:	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:			

City of Fayetteville	Strategy: Retrofit City buildings expand existing smart building monitoring	Implementation Date: 2013	Updated/revised: 2015
Strategy Description:	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.		

AWARENESS

City of Fayetteville	Strategy: Building Efficiency	Implementation Date: 2012	Updated/revised: 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: Land Use Open Space Develop	Implementation Date: 02/2012	Updated/revised: 2016
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 preservation and landscape requirements all of which reduce the heat island effect and prevent ground level ozone production.			
Updated Description:			
Unified Development Ordinance revised in 2016 to promote environmentally conscious development of the Cape Fear River called the Cape Fear River Overlay.			

Sustainable Sandhills	Strategy: Strategy: Alternative Energy	Implementation Date: 06/2015	Updated/revised: 2017
Strategy Description:	Development and Promote Rooftop		
Sustainable Sandhills opened a Solarize Sandhills program in 2015 to develop small-scale commercial and residential solar energy production in Fayetteville, Cumberland County, and the region.			
Updated Description:			
2016-2017 request for proposal was posted seeking a solar installer. No responses to the RFP closed the Solarize program. SSH focused on developing a Solar Schools pilot program and presented it at the Green Schools National Conference in March 2017. SSH is assisting with the promotion of a Community Solar option to be offered by a local utility in 2018.			

AWARENESS

Sustainable Sandhills	Strategy: Green Business Certification Program	Implementation Date: 2009	Updated/revised: 2017
Strategy Description:	Sustainable Sandhills began the Green Business Certification Program in 2009 to recognize businesses who were leaders of environmental stewardship. A key component of the program is raising awareness about multiple environmental impacts including Air Quality and Transportation		
Updated Description:	The Green Business program expanded to include NC Green Travel Designation for qualified businesses in 2017. SSH added two new Green Business Certifiers to meet business demand. The City of Fayetteville Airport recertified and won a NC Green Travel Designation as the first North Carolina		

Sustainable Sandhills	Strategy: Burnwise Awareness	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:	Sustainable Sandhills will begin promoting the EPA'S Burnwise Campaign beginning the Fall of 2016. These efforts will be to increase awareness to reduce pollution from burning wood for heat.		
Updated Description:	Sustainable Sandhills worked to build partnership with projected launch in the region in late 2017.		

Town of Spring Lake	Strategy: Educational Outreach	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:	Providing educational outreach to citizens and businesses by providing solutions to reduce pollution and improve air quality. The Town will publicly support initiatives such as Bike to Work Day, National Dump the Pump Day and Air Quality Awareness Week.		
Updated Description:	The Spring Lake Board of Aldermen unanimously approved a proclamation supporting "Dump the Pump" in an effort to reduce fuel usage and emissions by utilizing public transportation.		

AWARENESS

Town of Spring Lake	Strategy: Advisory Committee	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:	Awareness		
The Sustainability Advisory Committee was created to assist the Board of Aldermen adopt and promote sustainable practices in air quality, water quality, energy reduction and efficiency, reduction of waste, recycling, transportation, and resource conservation.			
Updated Description:			
The committee and bylaws have been adopted by the Board of Aldermen were adopted and are currently appointing members.			

Fort Bragg	Strategy: Green Barracks Contest	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:	Public relations		
Fort Bragg Energy Team created the Green Barracks contest to promote energy conservation and waste reduction in barracks facilities. This is a quarterly contest.			
Updated Description:			
The Green Barracks Contest has been funded for an additional year and continues to award participants for the best recycling and energy savings efforts on a quarterly basis.			

Fort Bragg	Strategy: Green Barracks Contest	Implementation Date: 2017	Updated/revised: 2017
Strategy Description:	Public relations		
Fort Bragg Energy Team created the "Turn Down for Watt" program to promote energy awareness. The program uses energy producing spin bikes to make users aware of the effort required to produce a watt of power.			
Updated Description:			
Newly listed measure - see above.			

AWARENESS

Town of Parkton	Strategy: Wood Smoke Reduction	Implementation Date: 2017	Updated/revised: --
Strategy Description:			
The Town of Parkton adopted a no open burning ordinance to address particulate air quality			
Updated Description:			
Newly listed measure - see above.			

ENERGY REDUCTION

Sustainable Sandhills		Implementation Date: 2012	Updated/revised: 2017
Strategy Description:	Strategy: Local Food Access Program		
Educate community on benefits of sourcing food locally, reducing miles traveled by food and consumers. Liaison with Downtown Restaurant Association, Slow Food Fayetteville in 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 a Community Supported Agriculture (CSA). For the 2017 year Sustainable Sandhills coordinated five CSA pickup sites. Sustainable Sandhills partners with Slow Foods and Pop-up Dinners with an 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 Commission	Strategy Title: Advanced Metering Infrastructure	Implementation Year: 06/2014	Updated/revised: 2017
Strategy Description:			
Installation of Advanced Metering Infrastructure to provide utility services 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 of 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:			
The installation of 180,000 advanced meters was completed in September 2017. Since the installation began in 2014, annual service trips/vehicle usage has already been reduced. Since 2015, 268,000 truck roles have been eliminated and annual mileage has been reduced approximately 100,000 a year for field vehicles.			

ENERGY REDUCTION

Fayetteville Public Works Commission	Strategy Title: LED Street Lighting	Implementation Year: 06/2014	Updated/revised: 2017
Strategy Description:			
Conversion of over 15,000 streetlights to LED for longer life span and less energy usage. 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:			
To date, 17,147 streetlights have been installed and PWC has completed the LED installation in neighborhoods and started replacement of lighting on major thoroughfares and private lighting such as parking lots and security lighting. Through 2016, LED Lighting is saving approximately 2.7 million kWh annually.			

Fayetteville Public Works Commission	Strategy Title: LED Street Lighting	Implementation Year: 06/2014	Updated/revised: 2017
Strategy Description:			
Conversion of over 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			
Updated Description:			
To date, 17,147 streetlights have been installed and PWC has completed the LED installation in neighborhoods and started replacement of lighting on major thoroughfares and private lighting such as parking lots and security lighting. Through 2016, LED Lighting is saving approximately 2.7 million kWh annually.			

Fayetteville State University	Strategy: LEED Silver or Equivalent	Implementation Date: 2012	Updated/revised: 2017
Strategy Description:	Building Standard		
Saving goal related to projected new building space starting 2012. A 20% electrical and natural gas savings, GHG reduction of 154 tons (CO2 Equivalent) annually and total of 2,000 tons by 2025			
Updated Description:			
Two buildings on campus are LEED Silver Certified. One building on Campus is awaiting certification. Two additional buildings will be renovated to meet LEED Silver Certification by 2018. This program is ongoing.			

ENERGY REDUCTION

Fayetteville State University	Strategy: FSU Energy-Savings	Implementation Date: 2015	Updated/revised: 2017
Strategy Description:	Performance Contract (ESPC) Program		
A 15% electrical and natural gas savings, GHG reduction of 183 tons (CO2 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:			
For the 2015 -2016 school year FSU reported a 41% decrease in total energy usage from the baseline year 2002. For 2017 FSU has a set a goal to become carbon neutral by 2050.			

Fayetteville State University	Strategy: Continuous Re-Commissioning Program	Implementation Date: 2016	Updated/revised: 2016
Strategy Description:			
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.			

Fayetteville State University	Strategy: Improved Space Utilization and Building Scheduling	Implementation Date: 2015	Updated/revised: 2015
Strategy Description:			
5% electrical and natural gas savings, GHG reduction of 455 tons (CO2 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: 2017
Strategy Description:			
Capture 100% of food waste, both pre- and post- consumer; GHG reduction of 50 tons (CO2 equivalent) annually and total 600 tons by 2025.			
Updated Description:			
FSU capturing 80% of food waste by 2015. FSU has replaced the food waste dehydrator with a contract with a commercial compost hauler. This initiative is ongoing.			

ENERGY REDUCTION

Fort Bragg	Strategy: Retro-Commissioning	Implementation Date: 2011	Updated/revised: 2017
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 ongoing.			

Fort Bragg	Strategy: Thermal Energy Storage	Implementation Date: 2011	Updated/revised: 2017
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 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: 2017
Strategy Description:	Equipment		
Energy efficient products are procured and installed. This strategy reduces energy consumption.			
Updated Description:			
Fort Bragg's green procurement policies provide ongoing purchasing of Energy Star certified equipment.			

Fort Bragg	Strategy: Implement "Low-cost/No-cost" energy conservation measures	Implementation Date: 2011	Updated/revised: 2017
Strategy Description:			
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.			

ENERGY REDUCTION

Fort Bragg	Strategy: Load management in cubicle/office space	Implementation Date: 2011	Updated/revised: 2016
Strategy Description:	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."		

Fort Bragg	Strategy: LEED certifiable facilities	Implementation Date: 2011	Updated/revised: 2017
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: 2017
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: 2017
Strategy Description:	Eliminate inefficient lighting with more efficient lighting, such as LEDs, to reduce energy consumption.		
Updated Description:	Fort Bragg's 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.		

ENERGY REDUCTION

Fort Bragg	Strategy: Energy Audits	Implementation Date: 2000's	Updated/revised: 2016
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:	Address mechanical issues and/or work with building occupants to use energy more efficiently.		

Fort Bragg	Strategy: Building level micro-grid demonstration	Implementation Date: 2000's	Updated/revised: 2016
Strategy Description:	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.		
Updated Description:	The first phase of the microgrid project has been constructed and the second phase is underway.		

Fort Bragg	Strategy: Building Automation Systems metering	Implementation Date: 2000's	Updated/revised: 2017
Strategy Description:	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. In 2016, Fort Bragg participated in a retuning study with Pacific Northwest National Laboratories to optimize energy use by returning control systems.		

Fayetteville Public Works Commiss	Strategy: Electric Vehicle Charging Stations	Implementation Year: 2015	Updated/revised: 2017
Strategy Description:	PWC received a \$37,000 grant from NC Green Technology Center to purchase, install, and promote use of four Level 2 Dual Electric Vehicle Charging stations throughout the PWC service area.		
Updated Description:	Charging stations were installed in four locations around the Fayetteville Area. The Charging stations are free for public use and are managed and reported through the Chargepoint Network. Installation completed in December 2015. Since installation, the charging stations have been used over 1,400 times and the estimated Greenhouse Gas savings from the EVC stations is 3,364 kg.		

ENERGY REDUCTION

City of Fayetteville/ Transit	Strategy: Fuels Efficient Bus Upgrades	Implementation Date: 2016	Updated/revised: --
Strategy Description:			
	Upgrading buses for maximum fuel efficiency.		
Updated Description:			
	16 small capacity busses have been converted to propane. Resulting in a 40% savings of fuels savings. All transit buses regardless of age have been upgraded with new radiators to improve engine cooling and fuels efficiency.		

City of Fayetteville/ Environmental Services	Strategy: Hybrid Vehicle Adoption	Implementation Date: 2016	Updated/revised: --
Strategy Description:			
	City of Fayetteville Environmental Services along with other city agencies will purchase hybrid fleet vehicles for employees to use		
Updated Description:			
	Environmental Services purchased one hybrid vehicle in 2016, with plans to purchase more in 2017.		

City of Fayetteville	Strategy: Improved Traffic Flow	Implementation Date: 2016	Updated/revised: --
Strategy Description:			
	The City of Fayetteville has implemented numerous traffic round - about within the city to reduce idle time normally seen at traffic stops. Four traffic around about were completed in 2016 and plans for 3 more projects to be completed in 2017.		
Updated Description:			
	New strategy see above.		

Town of Spring Lake	Strategy: LED Street Lights	Implementation Date: 2016	Updated/revised: 2016
Strategy Description:			
	The Town of Spring Lake worked with Duke Energy Progress to begin converting all existing street lighting (800+) to LED bulbs to reduce energy consumption and provide a \$10,000/year savings cost to the Town (\$100,000 over 10 years).		
Updated Description:			
	Approximately 50% of the street lights have been converted to LED. Project is scheduled to be completed in September 2016.		

ENERGY REDUCTION

Town of Spring Lake	Strategy: Transportation	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:			
The Town is currently working with FAST to offer additional routes to Spring Lake residents to increase public transportation ridership and reduce emissions from vehicle usage.			
Updated Description:			
This is an ongoing project.			

Town of Spring Lake	Strategy: Idle Reduction Policy	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:			
Development of policy for reduction of idle time of Town fleet vehicles to reduce fuel use and emissions.			
Updated Description:			
Policy development is ongoing.			

Fort Bragg	Strategy: Load management	Implementation Date: 2016	Updated/revised: --
Strategy Description:	Demonstration Projects		
Fort Bragg regularly participates in DoD funded demonstration projects focused on implementing energy efficiency technologies. Examples include a high efficiency dehumidification HVAC unit and phase change insulation material.			
Updated Description:			
Newly listed measure - see above.			

Fayetteville Public Works Commiss	Strategy: LEED Gold Building	Implementation Year: 2009	Updated/revised: 2017
Strategy Description:			
PWC's 10,000 sqft. Customer Payment Center is one of the first buildings in Cumberland County to earn LEED certification. The project met over 25 LEED standards including a geothermal heat pump, solar reflective roof surface and motorized louvers on the building's west side to minimize			
Updated Description:			
An energy management system was added in 2014 that allowed for increased monitoring and better scheduling controls. Since the addition of the EMS, energy consumption has been since a 10% annual reduction			

ENERGY REDUCTION

Fayetteville Public Works Commiss	Strategy : Community Solar	Implementation Year: 2017	Updated/revised: 2017
Strategy Description:	Infrastructure		
PWC has planned a 1MW solar farm that will be funded through a community solar model.			
Updated Description:			
PWC is working with the North Carolina State Clean Technology Center to design and build a 1 MW solar farm in 2018. The farm will have over 3,600 panels that will be available for customer subscription beginning in 2018. The project will also include a 500 kW battery storage unit.			

Fayetteville Public Works Commiss	Strategy: Customer Incentive	Implementation Year: 2014	Updated/revised: 2017
Strategy Description:	Programs		
PWC provides customer incentive programs that help customers save energy and money by replacing outdated appliances with Energy Star certified appliances. Programs include: Refrigerator, Clothes Washer, Dryer, Dishwasher, HVAC, LED lighting and LED Seasonal Lighting			
Updated Description:			
In 2017, 438 customers participated in incentive programs and the results of their replacements is anticipated to have a annual projected savings of 297,693 kwh.			

Cumberland County	Strategy: Methane Gas Uses	Implementation Year: --	Updated/revised: 2017
Strategy Description:			
The Cumberland County Landfill has an agreement with Cargill to capture methane gas from the landfill to use for operations at the Cargill Soybean Oil Plant.			
Updated Description:			
At this time Cumberland County Solid Waste is seeking new opportunities to use landfill gas.			

Cumberland County	Strategy Title: Building Efficiency	Implementation Year: 2017	Updated/revised: --
Strategy Description:			
Utilizing existing operating funding for County facilities, Engineering & Infrastructure staff will identify opportunities to improve energy efficiencies for County owned facilities. Possible efficiencies may include the installation of LED lights and replacement of end of life mechanical			
Updated Description:			
New Initiative - See Above			

ENERGY REDUCTION

Cumberland County	Strategy Title: Hybrid Fleet	Implementation Year: 2017	Updated/revised: --
Strategy Description:			
The Central Maintenance Department will continue the practice of purchasing hybrid vehicles to replace existing fleet vehicles as they become eligible for replacement.			
Updated Description:			
New Initiative - See Above			

TRANSPORTATION

City of Fayetteville/Transit	Strategy: Sidewalks	Implementation Date: --	Updated/revised: 2016
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:			
Ongoing construction to enhance the connectivity to sidewalks and bus stops if "right of way" is available.			

City of Fayetteville/Transit	Strategy: New Transit Routes	Implementation Date: 2013	Updated/revised: 2016
Strategy Description:			
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:			
Two additional routes have been added or extended to bring connectivity to neighborhoods and shopping centers. These routes began operation in 2016.			

City of Fayetteville/Transit	Strategy: Providing Transportation	Implementation Date: 2014	Updated/revised: 2016
Strategy Description:			
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 assist 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, who may use transit services to get to places of employment.			

FAMPO	Strategy Title: Bicycle Connectivity	Implementation Year: 2017	Updated/revised: --
FAMPO has received a grant from the North Carolina Department of Transportation Bicycle and Pedestrian Division to carry out a Regional Bicycle Plan. FAMPO is currently in the RFP stage, however when complete the plan will show how bicycling can be a more viable option within an eight			
Updated Description: New initiative see above			

TRANSPORTATION

City of Fayetteville/Transit	Strategy: Providing free	Implementation Date: 10/2014	Updated/revised: 2016
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:			
Updated in 2016. 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. For the 2015 - 2016 School year more than 300 passes were distributed to students.			

City of Fayetteville/Transit	Strategy: Rider Promotion	Implementation Date: 2015	Updated/revised: 2016
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:			
For 2016 FAST has added Rider promotions which include "Stuff the Bus" and a "Canned Food Drive". Both endeavors have resulted in increased ridership. The Canned Good Drive saw an increased ridership average of 537 riders. These promotions will continue in the future.			

City of Fayetteville	Strategy: Blue Toad Device use	Implementation Date: 2013	Updated/revised: 2017
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:			
Following Hurricane Mathew in fall 2016 the City has been unable to remotely monitoring traffic signal timing with vehicle timing. The equipment necessary for this monitoring was damaged in the flood related to Hurricane Mathew. The City is working with NC DOT to reinstate remote monitoring and optimization of traffic signals.			

TRANSPORTATION

City of Fayetteville	Strategy: Perform financial analysis of	Implementation Date: 2013	Updated/revised: 2016
Strategy Description:	future vehicle replacements		
Updated Description:	Analyze diesel-powered vehicles replacement with CNG-powered and/or hydraulic assisted hybrid garbage trucks. This strategy reduces NOx emission.		
	Analysis is ongoing. Four trucks have been replaced in 2015 with vehicle that burn cleaner fuel, and have particulate filters.		

City of Fayetteville	Strategy: Idle Reduction Policy	Implementation Date: --	Updated/revised: 2016
Strategy Description:	Enforce the City's Idle Reduction Policy for city-owned fleet vehicles 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 emissions strategy.		

Fayetteville Public Works Commi	Strategy Title: Fleet Management	Implementation Year: 2012	Updated/revised: 2017
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 has been recognized at the "Champion" level of the NC Smart Fleet program for reducing fuel use. An average of 220 short tons of carbon dioxide were offset with fleet best practices and using telematics software to reduce idling and conserve fuel.		

Fayetteville State University	Strategy: Student, Faculty, and Staff	Implementation Date: 2012	Updated/revised: 2016
Strategy Description:	Community Improvements		
Updated Description:	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 with all current and future new building projects; bike rack campaign with all current and future		
	LEV parking and bike rack campaign ongoing. Covered bus stop for FSU students by FAST completed 2015.		

TRANSPORTATION

Fayetteville Public Works	Strategy Title: Alternate Fuel/Hybrid Vehicles/Equipment	Implementation Year: 2012	Updated/revised: 2017
Strategy Description:	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 truckers with two hybrids 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 stands which reduces		
Updated Description:	Ongoing fleet replacement that includes hybrid vehicles, electric vehicles and lower emission vehicles (LEVs). An electric Chevy Volt sedan was added in 2017 and replaced a SUV.		

Fayetteville Area Metropolitan Planning Organization	Strategy Title: Alternate Transportation	Implementation Year: 2014 (2017 First Year Reporting)	Updated/revised: 2017
Strategy Description:	Increase the amount of alternative transportation options while also improving accessibility to these options. This strategy can include sidewalks, greenways, public transportation, and rail.		
Updated Description:	In 2017, FAMPO awarded \$218,181 to public transportation oriented projects through the 5310 Grant Program. The Cumberland County Community Transportation Program will receive funds to provide public transportation for individuals who live in rural parts of the county but need access to services within the city. Meanwhile, the City of Fayetteville and Town of Spring Lake will receive funds to build sidewalks that will provide access to destinations as well as transit stops within their communities.		

FAMPO	Strategy Title: Congestion Management	Implementation Year: 2017	Updated/revised: --
Strategy Description:	FAMPO has hired a consulting firm to compile a Congestion Management Plan for the Town of Hope Mills. This is a \$149,554 investment and will develop strategies, highway and non-highway, for reducing congestion within the Hope Mills town limits. Reduced congestion will lead to less idle time and travel time, reducing the negative effects on air quality within the FAMPO region.		
Updated Description:			

LAND USE

Town of Wade	Strategy: Proposed Zoning	Implementation Date: 02/2012	Updated/revised: 2016
Strategy Description:	Ordinance		
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 is still supporting the development of green space in subdivisions. 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: 2016
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.			

Town of Eastover	Strategy: Zero Lot Line Development	Implementation Date: Summer	Updated/revised: 2016
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:			
Zero Lot live development is ongoing.			

LAND USE

Town of Linden	Strategy: Development-Conditional	Implementation Date: Winter	Updated/revised: 2016
Strategy Description:	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 Open Space	Implementation Date: 2014	Updated/revised: 2016
Strategy Description:	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:			
The Town Manager will review and implement strategies.			

Fort Bragg	Strategy: Creation of green space	Implementation Date: 2000's	Updated/revised: 2016
Strategy Description:	review board for construction		
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 protect the Long Leaf Pine ecosystem. They have earned the Tree City USA Growth Award seven consecutive years for progress in the areas of community forestry programs, education and public relations. the provide 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: 2016
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 ecosystem by maintaining prescribed burns and replanting on unused property.			

LAND USE

City of Fayetteville	Strategy: Enforcement of adopted	Implementation Date: 2011	Updated/revised: 2016
Strategy Description:	ordinances for open space		
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.			

City of Fayetteville	Strategy: Open Space Development	Implementation Date: 2012	Updated/revised: 2016
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 Long Leaf pine habitat. Development plans are required to include an area of open space with 24 trees per acre.			

City of Fayetteville	Strategy: Commercial/Mixed Use	Implementation Date: 2012	Updated/revised: 2016
Strategy Description:	Development		
The UDO supports up to 24 dwelling units per acre (due) in commercial areas and 32 due 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 density with mixed use/commercial development.			

City of Fayetteville	Strategy: Tree canopy/Specimen	Implementation Date: 2011	Updated/revised: 2016
Strategy Description:	trees		
Protect and retain existing tree canopy/specimen trees during and after 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.			

LAND USE

City of Fayetteville	Strategy: Redevelopment Toolbox	Implementation Date: 2011	Updated/revised: 2016
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.			

City of Fayetteville	Strategy: Increase use of sustainable	Implementation Date: 2011	Updated/revised: 2016
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 partners with Sustainable Sandhills to design a Climate Adaption Plan. The plan was completed in 2015.			

City of Fayetteville/Cumberland Parks and Recreation	Strategy: Extension of Cape Fear River Trail	Implementation Date: 2012	Updated/revised: 2017
Strategy Description:			
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.			
Updated Description:			
In Summer 2016 Funds to extend the Cape Fear River Trail from PWC Water Treatment Plant to Linear Park was approved by the State Legislature and the project received Federal Alternative Transportation Funds. The 1.5 mile trail extension from Ann Street to RT301 was completed in late 2016.			

LAND USE

City of Fayetteville	Strategy: Urban Heat Island Reduction	Implementation Date: 2016	Updated/revised: --
Strategy Description:			
The City of Fayetteville has implemented a number of projects around the city to reduce the urban heat island normally caused by open pavement. These projects include road medians with tree plantings, and islands planted with flowers and grass. In 2016 there are 5 projects underway.			
Updated Description:			
New Initiative - See Above			

City of Spring Lake	Strategy: Murchison Road Landscaping	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:			
The Town partnered with NCDOT to upgrade interior medians along Murchison Road project (NCDOT U-4444B) from asphalt/concrete to tree lined grassed median for aesthetics and to help mitigate emissions from vehicular traffic.			
Updated Description:			
Improvements to medians will occur after completion of the U-4444B roadway construction. Anticipated completion in mid to late 2018.			

City of Spring Lake	Strategy: Sidewalk Improvement	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:			
The Town received a \$200,000 Section 5310 Grant from FAMPO to install sidewalks and pedestrian improvements along Bragg Blvd and Lillington Highway to enhance mobility for seniors and individuals with disabilities, upgrading interconnectivity between commercial and residential			
Updated Description:			
This project is ongoing.			

City of Spring Lake	Strategy: Land Use Ordinance	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:			
The City of Spring Lake has a Land Use Ordinance in place. Proposed amendments will be reviewed by Sustainability Advisory Committee, additional amendments and/or revisions may be included based upon their review.			
Updated Description:			
Awaiting completion of Sustainability Advisory Committee.			

LAND USE

City of Spring Lake	Strategy: Land Conservation	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:			
The Town acquired approximately 60 acres of undeveloped property along Little River to dedicate as a conservation area that will include walking trails and serve as an educational tool for educational outreach. The property will serve as a protective buffer by restricting development along that portion of Little River. The Town is proposing to acquire an additional 40 acres that is adjacent to include in the project.			
Updated Description:			
Property was zoned under the Town's Conservation District and master planning for future use will begin in 2018-2019.			

Town of Falcon	Strategy: Tree Plantings	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:			
The Town of Falcon has committed to planting additional trees on public property. The trees selected for the project will include those varieties that are hearty and easy to maintain.			
Updated Description:			
This initiative is ongoing.			

Town of Eastover	Strategy: Tree Plantings	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:			
On the Site on of the new Town Hall, the Town of Eastover planted more than a dozen Dogwood Trees. Landscaping around the facility also includes hearty varieties of shrubs and grasses.			
Updated Description:			
This initiative is on hold until the Town of Eastover has built the new Town Hall. The Town Hall is on currently on hold.			

Town of Eastover	Strategy: Land Conservation	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:			
The Town of Eastover acquired 28 acres of undeveloped land adjacent to the local ball field. A review has been set up to determine the best use for the property. Proposals currently include a park with green space and an amphitheater.			
Updated Description:			
Proposed plans have been reviewed by the Town Council. Plans include an additional soccer/Multi use field and an additional walking path and green			

LAND USE

City of Fayetteville	Strategy: Land Conservation	Implementation Date: 2016	Updated/revised:--
Strategy Description:			
The City of Fayetteville put together the Cape Fear River Plan in 2016. The plan outlines potential uses for the river including new developments, conservation initiatives, and parks.			
Updated Description:			
New Initiative			

Town of Eastover	Strategy: Land Conservation	Implementation Date: 2016	Updated/revised: 2017
Strategy Description:			
The Town of Eastover acquired 28 acres of undeveloped land adjacent to the local ball field. A review has been set up to determine the best use for the property. Proposals currently include a park with green space and an amphitheater.			
Updated Description:			
Proposed plans have been reviewed by the Town Council. Plans include an additional soccer/Multi use field and an additional walking path and green			

Sustainable Sandhills	Strategy: Carbon Bank	Implementation Date: 2017	Updated/revised:
Strategy Description:			
4,632 Loblolly and long leaf pine trees were planted on Cumberland County Schools property in 2017. The initial planting was a pilot project to demonstrate how the carbon bank will work. In 2018 the program will focus on selling available carbon credits.			
Updated Description:			
New Initiative See Above			

RESOLUTION OF THE CITY COUNCIL, CITY OF FAYETTEVILLE, NORTH CAROLINA TO ADOPT A RESOLUTION 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 2015 federal ozone standard of 0.070 parts per million (ppm);

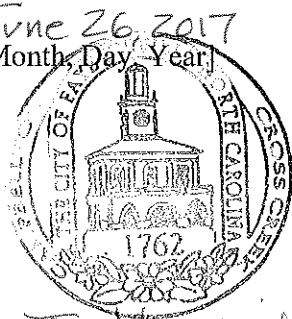
WHEREAS, in 2003 the Cumberland County Board of Commissioners partnered with all of its municipalities to participate in the EPA's Early Action Compact and created the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

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 Quality 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 City of Fayetteville 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.

Adopted this Day ^{June 26, 2017} [Month, Day, Year]



By: _____

NAT ROBERTSON, MAYOR

ATTEST:

Pamela J. Megill
PAMELA J. MEGILL, CITY 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 2017-01

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);

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;

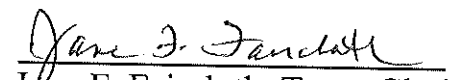
NOW, THEREFORE, BE IT RESOLVED, that the Eastover Town Council fully supports the Ozone Advance Program as approved by the Cumberland County Board of Commissioners, and will participate in the development and implementation of an Action Plan which will reduce ground-level ozone concentrations.

Adopted this 11th day of April, 2017.

TOWN OF EASTOVER


Charles G. McLaurin, Mayor

ATTEST:


Jane F. Faircloth, Town Clerk



TOWN OF FALCON

Clifton L. Turpin, Jr., MAYOR

Post Office Box 112 • 7156 South West Street • Falcon, North Carolina 28342
Phone: (910) 980-1355 • Fax: (910) 980-5639 • E-mail: townoffalcon@embarqmail.com

RESOLUTION SUPPORTING THE OZONE ADVANCE PROGRAM RESOLUTION 2017-01

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);

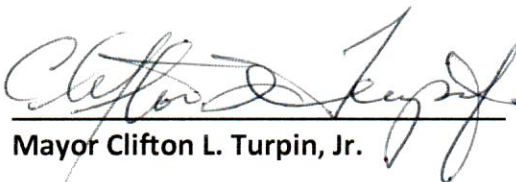
WHEREAS, in 2003 the Cumberland County Board of Commissioners partnered with all of its municipalities to participate in the EPA's Early Action Compact and created the Air Quality Stakeholders of Cumberland County to proactively improve air quality for our citizens; and

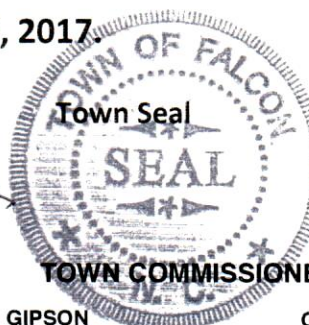
WHEREAS, EPA, in conjunction with state governments, business, industry and environmental interest has developed an option known as an "Ozone Advance Program", through which an area, in partnership with the North Carolina Department of Environmental and Natural Resources and EPA, can voluntarily improve 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 Town of Falcon 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.

ADOPTED THIS DAY, MAY 8, 2017.


Mayor Clifton L. Turpin, Jr.



Attest:


Belinda D. White, Town Clerk

WILEY T. CLARK
FINANCE OFFICER

JOHN W. GIPSON
MAYOR PROTEM / WATER SYSTEM

GERALD L. LUCAS
PARKS / RECREATION

R. DWAYNE DUNNING
STREETS / HIGHWAYS

Mrs. Belinda D. White, TOWN CLERK



Hanah Ehrenreich
Sustainable Sandhills
PO Box 144, Fayetteville, NC 28302
(910) 484-9098
hanahe@sustainablesandhills.org
www.sustainablesandhills.org

Deloma West
Air Quality Planner
130 Gillespie Street, Fayetteville, NC 28301
(910) 678-7628
delomawest@co.cumberland.nc.us
www.fampo.org/airquality

AIR QUALITY STAKEHOLDERS OF CUMBERLAND COUNTY

GARY SLATER
Chairman

CAROLYN HINSON
Vice-Chairman

RESOLUTION SUPPORTING THE OZONE ADVANCE PROGRAM

RESOLUTION 2017-14

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);

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

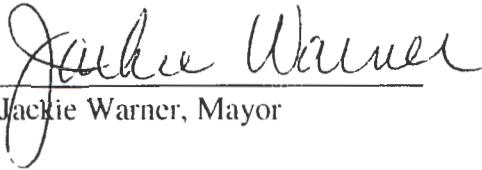
WHEREAS, EPA, in conjunction with state governments, business, industry, and environmental interest, has developed an option known as an "Ozone Advance Program", through which an area, in partnership with the North Carolina Department of Environmental and Natural Resources and EPA, can voluntarily improve 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 Town of Hope Mills 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.

Adopted this 1st Day of May, 2017.

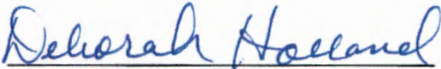
Town of Hope Mills



Jackie Warner, Mayor

ATTEST:





Deborah Holland
Interim Town Clerk



Hanah Ehrenreich
Sustainable Sandhills
PO Box 144, Fayetteville, NC 28302
(910) 484-9098
hanah@ sustainablesandhills.org
www.sustainablesandhills.org

Deloma West
Air Quality Planner
130 Gillespie Street, Fayetteville, NC 28301
(910) 678-7628
delomawest@co.cumberland.nc.us
www.fampo.org/airquality

AIR QUALITY STAKEHOLDERS OF CUMBERLAND COUNTY

GARY SLATER
Chairman

CAROLYN HINSON
Vice-Chairman

RESOLUTION SUPPORTING THE OZONE ADVANCE PROGRAM

RESOLUTION 2017-01

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);

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 Town of Wade 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.

Adopted this Day May 9, 2017

Town of Wade

Joseph Dior
Mayor

ATTEST:

Cindy C. Burnett
Clerk to the Board

RESOLUTION (2017) 6

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 2015 federal ozone standard of 0.070 parts per million (ppm);
- 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 BOARD OF ALDERMEN OF THE TOWN OF SPRING LAKE, THAT:

The Town of Spring Lake 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.

Adopted this 8th day of May, 2017.

AYE

Mayor Pro Tem Larry Dobbins
Alderman James Christian
Alderwoman Densie Lucas
Alderman James O'Garra
Alderwoman Fredricka Sutherland

NO



Chris V. Rey
Mayor

Attest:

Rhonda D. Webb, MMC, NCCMC
Town Clerk