



Triangle Region Air Quality Initiatives

Examples from Local Governments, Regional Organizations and the Private Sector

August 1, 2004

On April 15, 2004, communities in eight Triangle counties were designated by the U.S. Environmental Protection Agency as “non-attainment” for ozone pollution, based on a new, stricter standard for air quality. Ozone is formed when exhaust from vehicles, machinery, industrial smokestacks and power plants reacts with other chemicals on hot, sunny days. It can irritate people’s eyes and throats and damage their lungs. Both individually and in partnership, local communities have already begun to take actions and put programs in place to improve our air quality and attain the new standard. Listed below are some examples of programs and actions involving Triangle communities and organizations, along with information about how you can learn more.

Initiative	Description	Status	Organization/Contact
<i>Triangle J Council of Governments</i>			
Triangle Best Workplaces for Commuters SM	Partnership to spur employers to offer worker benefits to reduce single-occupant vehicle commuting	Campaign will be launched April 20, 2004 with first campaign milestone in October 2004.	Triangle J COG Sanford Cross 848-0987 sanfordcross@nc.rr.com www.trianglebwc.org
Triangle Clean Cities Coalition	Partnership to accelerate the use of alternative transportation fuels such as biodiesel, ethanol, natural gas, propane and electricity	Received US DOE designation in 2001. Currently over 60 stakeholders. Develops and administers grant programs, awareness activities and incentive programs	Triangle J COG Tobin Fried 558-2700 tobin@tjcog.org www.trianglecleancities.org
National AFV Day Odyssey	Event to educate and raise awareness about cleaner, advanced technology vehicles and alternative transportation fuels	TJCOG partnered with Wake Tech and EV Challenge for an April 2, 2004 event attracting 120 participants and 200+ students with demonstrations, displays and presentations	Triangle J COG Tobin Fried 558-2700 tobin@tjcog.org www.trianglecleancities.org
Triangle Air Quality Partnership	Partnership of technical staff in local, regional and state organizations working on air quality issues	Sponsored by the region’s two metropolitan transportation planning organizations, the partnership has been meeting since November 2003	Triangle J COG John Hodges-Copple 558-9320 johnhc@tjcog.org www.triangleair.org
Regional Tree Planting Program	Effort to increase the tree cover in the Triangle to improve air quality and provide other benefits	Planted 6,000+ hardwoods on public land over six years; partnership of Triangle J COG, local organizations and the National Tree Trust	Triangle J COG Renee Boyette 558-9403 rboyette@tjcog.org
Green Building Program	Projects and technical assistance to spur the use of energy-efficient building practices	High performance building guidelines, case studies and database of projects online at www.tjcog.dst.nc.us/hpgtrpf.htm	Triangle J COG John Hodges-Copple 558-9320 johnhc@tjcog.org

Initiative	Description	Status	Organization/Contact
<i>Wake County</i>			
Seek Designation as a Best Workplace for Commuters SM	Offer benefits to workers who decrease commuting by single-occupant vehicles	Some benefits are already offered. Funding is requested to fully implement program for FY 2004-2005	Wake County Government Mike Jennings 856-7447 mjennings@co.wake.nc.us
Cleaner school bus fleets	Decrease school children's exposure to harmful emissions and particulate matter from school buses	Wake County applied for and WCPSS was awarded a \$100,000 grant to retrofit buses with diesel oxidation catalysts	Wake County Public School System Vernon Hatley 856-8050 transportation@wcpss.net
Promote low-emission, hybrid and alternative fuel vehicles	Replace fleets with low-emission, alternative fuel and hybrid vehicles	Wake County GSA is currently purchasing flex-fuel vehicles and some departments are purchasing hybrid vehicles	Wake County GSA Tom Kuryla 856-5736 Thomas.Kuryla@co.wake.nc.us
Implement a commute-trip reduction program	Adoption of ordinance requiring employers to offer commuter benefits	Will work with RTP to implement in Wake County portion of RTP. Pursuing countywide implementation with municipalities through Capital Area Metropolitan Planning Organization. Study of an ordinance is ongoing	Wake County Government Mike Jennings 856-7447 mjennings@co.wake.nc.us
Develop regional partnerships	Creating regional collaboration on measures to improve air quality	Commissioner chairs are meeting on air quality, staff members are collaborating through Triangle AQ partnership	Wake County Government Mike Jennings 856-7447 mjennings@co.wake.nc.us
Support Air Awareness Program	Become a partner. Do education and outreach on air quality	Wake County joined in October 2003. Ozone forecast will be published at county worksites May-Sept	Wake County Government Mike Jennings 856-7447 mjennings@co.wake.nc.us
Support Triangle Clean Cities Coalition	Encourage increased AFV use to improve air quality and reduce foreign oil dependence	Wake County joined in October 2003	Wake County Government Mike Jennings 856-7447 mjennings@co.wake.nc.us
Reduce energy use	Implement standards for environmentally-friendly buildings that use less energy	Guidelines for Energy Efficient County Facilities have been in use since 1996, have been updated, and will be used for all WCPSS facilities	Wake County Government Mike Jennings 856-7447 mjennings@co.wake.nc.us
Bike/ pedestrian facilities	Encourage development of countywide bike/ped plan	Capital Area Metropolitan Planning Organization Bike/ped committee has completed plan	Wake County Government Mike Jennings 856-7447 mjennings@co.wake.nc.us
Promote State incentives for alternative fuel vehicles, fuels, and refueling infrastructure	State legislation is needed to fund programs and facilities	Environmental Services staff has joined Triangle Clean Cities Coalition Public Affairs and Incentives committee that is working to encourage State legislation	Wake County Government Mike Jennings 856-7447 mjennings@co.wake.nc.us

Initiative	Description	Status	Organization/Contact
<i>Chapel Hill</i>			
Fare-Free Transit	Eliminate all fares for all bus routes	Implemented 2003	David Bonk 968-2728 dbonk@townofchapelhill.org
Travel Demand Management	Require Transportation Management Plans as conditions of approval for new development, to include a Rideshare Coordinator, bike racks, showers in buildings and/or other measures	Has been required of new development since 1991	David Bonk 968-2728 dbonk@townofchapelhill.org
Construction of greenways, sidewalks, bikelanes	Town/state/federal funding of improvements to encourage biking and walking	Regular component of annual Capital Improvements Programs for 20 years	Gordon Sutherland 968-2728 gsutherland@townofchapelhill.org
Urban Services Boundary	Defined limit to urban growth, reducing sprawl	Implemented 1986	Roger Waldon, Planning Director 968-2728 rwaldon@townofchapelhill.org
Land Use/Zoning to encourage transit-friendly land use patterns	Land Use Plans, Zoning Map, and Development approvals encourage development to be concentrated along transit corridors	Implemented 1981	Roger Waldon, Planning Director 968-2728 rwaldon@townofchapelhill.org
Protocols for Ozone Alert Days	Restrict fueling of town vehicles on ozone action days	Implemented in 1999.	Bill Terry Acting Director, Public Works bterry@townofchapelhill.org
Compressed Natural Gas (CNG) vehicles in Town fleet	Town has CNG vehicles and fast-flow refueling station	Implemented; looking to expand program with move to new public works facility	Bill Terry Acting Director, Public Works bterry@townofchapelhill.org
Electric/Hybrid vehicles added to Town fleet	Town leased two electric vehicles for pilot program	Ongoing test program	Bill Terry Acting Director, Public Works bterry@townofchapelhill.org
Greenhouse Gas Audit and Action Plan	Greenhouse Gas audit and action plan to be adopted by Orange County, Chapel Hill and Carrboro	Audit and action plan to be completed by consultant by end of 2004	Dave Stancil Orange County Environment and Resource Conservation DSTANCIL@co.orange.nc.us
Active Living By Design Initiative	Project to promote planning for facilities that encourage walking and biking as alternatives to automobile travel	Project initiated Spring, 2004	David Bonk 968-2728 dbonk@townofchapelhill.org

Initiative	Description	Status	Organization/Contact
<i>Durham County</i>			
Designation as a Best Workplaces for Commuters SM	County offers a number of commuter benefits that allows employees to commute by alternative modes or in non-peak hours	Designated in 2003; benefits include subsidized bus passes, emergency ride home, ride matching services, a commuting website, an employee telecommuting program and flexible work schedule program	Durham County Heidi Duer 560-0000
Commuter Trip Reduction Ordinance	Ordinance requires all major employers with 100+ employees to promote transportation demand management (TDM) by encouraging alternative modes of travel - carpooling, telecommuting, and other strategies - to reduce peak travel	Implemented; ordinance was developed in partnership with the private sector; first such ordinance in North Carolina; activities administered with Triangle Transportation Authority staff	Durham County John Tallmadge (TTA) 485-7430 jtallmadge@ridetta.org
RAVE (reduction alternatives to vehicle emissions) transportation demand management program	Program has annual employee survey tracking miles traveled, commuting methods, etc. Web site has ride matching, links to resources, bus schedules, etc. Also send ozone alerts during the summer and other commuting information	Implemented	Durham County www.co.durham.nc.us/rave
Air Quality Task Force Report strategies	Agree to cooperate with Wake County to implement action strategies outlined in Wake County Report	Durham City/County Environmental Affairs Board prepared policy guidance; report available at: www.triangleair.org	Durham County Bonnie Estes 560-4137, ext. 258 bestes@ci.durham.nc.us
Focused development	Site County facilities on Main Street so can walk between them; updating Comprehensive Plan and ordinances to encourage mixed use and walking	Plans and ordinances revisions underway	Durham County Frank Duke 560-4137, ext. 213 fduke@ci.durham.nc.us
2025 Long Range Transportation Plan	48% of total budget allocated for transit, bikeways, and sidewalks	Plan adopted in 2002; 2005 update (2030 Long Range Transportation Plan) underway	Dur.-Ch. Hill-Carrboro MPO Felix Nwoko 560-4366 fnwoko@ci.durham.nc.us
Ethanol-fueled vehicles and infrastructure	purchase vehicle and install ethanol tank	truck ordered; installing tank; additional vehicles in FY2005 budget request	Durham County Engineering Glen Whisler - 560-0718 gwhisler@co.durham.nc.us

Initiative	Description	Status	Organization/Contact
<i>Orange County</i>			
Orange County-Chapel Hill-Carrboro Greenhouse Gas Emissions Inventory and Action Plan	Local government and MPO partnership to inventory greenhouse gas (GHG) emissions within the County and develop measures to reduce emissions	Eight firms replied to RFO. Consultant being selected by inter-jurisdictional staff team, recommendation to elected boards April 29, 2004 -- Project anticipated to begin summer 2004	Orange County (coordinating entity) David Stancil, Environment and Resource Conservation Director 245-2590 dstancil@co.orange.nc.us
Orange County Ground-Level Ozone Strategies Assessment	Examine implications of non-attainment, review local and regional reports, develop strategies, ensure consistency with GHG project, incorporate into State of the Environment report	Orange County Commission for the Environment, Air Quality Committee, currently conducting research -- Report expected fall, 2004	Orange County Commission for the Environment David Stancil 245-2590 dstancil@co.orange.nc.us
Review of "Alternative Fuel & Low-Emission Vehicle" (AFLEV) Report (2000)	Review report and update on status and feasibility of alternative fuel vehicles, develop proposals for new AFV purchases and fueling options	Orange County staff, members of 2000 AFLEV Work Group -- Report expected fall 2004.	Orange County David Stancil 245-2590 dstancil@co.orange.nc.us
Land Use Planning – Managing Sprawl	Update Comprehensive Plan Land Use Element with tools designed to reduce sprawl's negative impacts, discouraging a medium-density sprawl pattern that results in longer commute times, high Vehicle Miles Traveled, and air pollution.	Existing Land Use Element currently undergoing update, projected for public hearing in fall 2004	Orange County Craig Benedict, Planning Director 245-2575 cbenedict@co.orange.nc.us
Economic Development District design standards	Promotes mixed-use development to minimize trips, prohibits commercial drive-through windows	Adopted 1992, revised 2001	Dianne Reid Economic Development Director 245-2325
Cooperative Forestry Initiative /No Net Loss of Woodlands	Collaborate with N.C. Forest Service to promote management plans, minimize burning on high ozone days; Develop plan for no net woodlands loss	Ongoing review of collaborative program opportunities with Forest Service; Commission for the Environment exploring No Net Loss of Woodlands (report fall 2004)	Orange County David Stancil 245-2590 dstancil@co.orange.nc.us
Participate in NC Air Awareness Coalition	Email daily alerts to County workers with ozone reduction recommendations	Email alerts from NCDAQ forwarded to all employees during ozone "season"	Orange County Ron Holdway Environmental Health 245-2370

Initiative	Description	Status	Organization/Contact
<i>Raleigh</i>			
Compressed Natural Gas (CNG) fueling station	Construction of CNG fueling station that will make CNG readily available for all government vehicles in Wake County	Complete April 15, 2004 -- Station also open to general public during normal business hours and accepts major credit cards	City of Raleigh David Scarborough 890-3079 David.scarborough@ci.raleigh.nc.us
Aggressive expansion of alternative-fuel fleet	Expand alternative-fuel fleet from current 31 vehicles to 40 vehicles	Scheduled for Fiscal Year 2005	City of Raleigh David Scarborough 890-3079 David.scarborough@ci.raleigh.nc.us
Mixed-use development	Urban design guidelines that promote pedestrian-oriented communities	Adopted in 2002. Expanding to include future development near Triangle Transit Authority rail stations	City of Raleigh George Chapman 890-3654 george.chapman@ci.raleigh.nc.us
NeighborWoods Program	Program to plant at least 1,500 trees annually on rights-of-way in residential neighborhoods and in thoroughfare medians	Have implemented program and planted over 1,000 trees	City of Raleigh Liz Zimmerman 872-4115 elizabeth.zimmerman@ci.raleigh.nc.us
Preservation of open space	Development of parks and greenway system to encourage walking and bicycling	7,958 acres of parks and 45 miles of trails	City of Raleigh Jayne Kirkpatrick 890-3100 Jayne.kirkpatrick@ci.raleigh.nc.us
Traffic Signal Synchronization	Renew request to update traffic signal system to improve traffic flow and reduce vehicle emissions	Continuing to work with Capitol Area Metropolitan Planning Organization and NC Department of Transportation to undertake project	City of Raleigh Ed Johnson 807-8511 ed.johnson@ci.raleigh.nc.us
<i>Hillsborough</i>			
Purchase of Alternative Fuel or Hybrid Vehicles	Evaluate each vehicle purchase request to consider the use of alternative fueled or hybrid vehicles	Initiative to be considered by the Town Board	Hillsborough Eric Peterson, Manager 732-1270, ext. 80 eric.peterson@hillsboroughnc.org
Priority Use of Alternative Fuel or Hybrid Vehicles	Policy to place highest priority for AFV or hybrids for employees with take-home vehicles to maximize use	Initiative to be considered by the Town Board	Hillsborough Eric Peterson, Manager 732-1270, ext. 80 eric.peterson@hillsboroughnc.org
Fuel-efficient vehicle research	Engage in regular research and testing on alternative fuel/fuel-efficient vehicles	Initiative to be considered by the Town Board	Hillsborough Eric Peterson, Manager 732-1270, ext. 80 eric.peterson@hillsboroughnc.org

Initiative	Description	Status	Organization/Contact
<i>Carrboro</i>			
Bicycle Facilities	Provide bike lanes on most of the arterial and collector road network and a regular maintenance program to ensure that bike lanes are free of debris; Town has two miles of bike paths, bike racks are provided on buses, and bike racks are available at most schools, libraries, office buildings, and retail centers	Carrboro has been designated a Bicycle Friendly Community by the League of American Bicyclists -- Bike lanes currently provided along 53 percent of the arterial road miles	Town of Carrboro Dale McKeel 918-7329 dmckeel@ci.carrboro.nc.us
Safe pedestrian routes to schools and other destinations	Sidewalks and crossing guards are provided to ensure that children can safely walk and bike to schools in Carrboro	Voters in November 2003 approved a \$4.6 million referendum to construct additional sidewalks and greenway trails in Carrboro	Town of Carrboro Dale McKeel 918-7329 dmckeel@ci.carrboro.nc.us
Fare-free transit	Free transit is provided in partnership with the Town of Chapel Hill and UNC-Chapel Hill	Ongoing	Town of Carrboro Dale McKeel 918-7329 dmckeel@ci.carrboro.nc.us
Bicycles for use by Town employees	Bikes are available for use by police and fire fighters during special events	During the current fiscal year, steps are being taken to make bicycles available for use by Town Planning staff	Town of Carrboro Dale McKeel 918-7329 dmckeel@ci.carrboro.nc.us
Greenhouse gas emissions (GHG) inventory and reduction plan	Adopt a plan in partnership with the Town of Chapel Hill and Orange County	Town has been a member of ICLEI and the Cities for Climate Protection program since 2001 and committed to conduct a GHG inventory, set a GHG reduction goal and adopt a plan by 2006	Town of Carrboro Patricia J. McGuire 918-7327 pmcGuire@ci.carrboro.nc.us
Tree Cover Protection	Carrboro has extensive tree protection and replanting requirements for development, and requires that 40% open space be maintained in new residential development	The Town has been a designated Tree City for nearly 20 years	Town of Carrboro Patricia J. McGuire 919-918-7327 pmcGuire@ci.carrboro.nc.us
Ecological Assessment	Conduct assessment related to air and water quality of pre- and post-development land cover	Assessment is underway using funds from the Forestry Service	Town of Carrboro Patricia J. McGuire 919-918-7327 PMcGuire@ci.carrboro.nc.us

Initiative	Description	Status	Organization/Contact
<i>Research Triangle Foundation</i>			
SmartCommute @RTP – General program	Created by the RTP Owners and Tenants Association to address traffic concerns, reduce congestion and improve air quality; partnership with companies and public agencies to spur firms to offer benefits to workers for decreasing commuting by single-occupant vehicles	Begun as voluntary committee in 1999; now Transportation Management Association with full time Director -- 19 member employers, representing ~ 32,700 employees	SmartCommute@RTP Julie Woosley, Director (919) 549-8181 Woosley@rtp.org
SmartCommute @RTP – Ozone Sign program	Offer free Ozone Action Day signs to RTP firms to alert workers and promote commute alternatives	Currently taking orders for signs	SmartCommute@RTP Julie Woosley, Director (919) 549-8181 Woosley@rtp.org
Smart Commute – Great Commuter Challenge	Annual event for RTP employees to pledge to try commute alternatives at least one day that month, including public transit, carpooling or vanpooling, telecommuting, or walking, biking, or running	In September 2003, over 2,150 employees pledged to try an alternative method of commuting to work, and followup surveys indicated that >99% did. Planning is beginning for September 2004 event. Prizes are drawn from the pool of participants	SmartCommute@RTP Julie Woosley, Director (919) 549-8181 Woosley@rtp.org
<i>Greater Triangle Regional Council</i>			
“Air Quality in the Triangle – Is the Sky Falling?”	Community Success Forum to provide information to the region on causes of air quality and its effects on health & the economy.	Sponsored by the Greater Triangle Regional Council and Greater Raleigh Chamber of Commerce, it was held in June, 2003, at the RTP EPA facility, attended by over 200 people.	Greater Triangle Reg. Council Pam Wall 840-7372, ext. 16 pwall@triangleregion.org Greater Raleigh Chamber of Commerce 664-7000
Greater Triangle Regional Council Air Quality Task Force	Group of public/private leaders organized to work toward regional air quality education and collaboration	Organized by the Greater Triangle Regional Council, the task force has been meeting since June, 2003.	Greater Triangle Reg. Council Pam Wall 840-7372, ext 16 pwall@trangleregion.org
“Air Quality in the Triangle Region”	First report on air quality for a region in NC by the NCDENR; identifies causes of air pollution, effects on health and EPA requirements	Prepared for the GTRC air quality task force to educate the region on air quality issues; serves as a model for reports on the other 5 state air quality regions; presented to the public April 12, 2004.	Greater Triangle Reg. Council Pam Wall 840-7372, ext 16 pwall@triangleregion.org Millie Hayman, NCDAQ 715-6267 milli.hayman@ncmail.net

Initiative	Description	Status	Organization/Contact
<i>Universities and State Agencies (partnerships involving communities)</i>			
Triangle Air Awareness Program	Educates business, local governments, and the public about the causes and effects of air pollution, and encourages action to improve air quality	The program began in the Triangle in 1998 and is ongoing	Division of Air Quality-DENR Anne Galamb, NCDAQ (919) 715-6267 anne.galamb@ncmail.net
Triangle Best Workplaces Coalition membership	NCDENR is a member of the Triangle Best Workplaces Coalition, helping promote the program in the region	Initial coalition member in 2004	Division of Air Quality-DENR Milli Hayman (919) 715-6267 milli.hayman@ncmail.net
Mobile Source Emissions Reduction Grant program	Supports local initiatives to improve air quality	In March 2004, DAQ awarded \$350,000 in grants to install diesel oxidation catalysts on school buses to help control particle pollution, a major health issue for children who are in close proximity to this pollution source. \$100,000 was awarded to the Wake County Public School System. Additional grants may be available for 2005.	Division of Air Quality-DENR Heather Hildebrandt (919) 733-1498 heather.hildebrandt@ncmail.net
Fannie Mae Smart Commute™ Mortgage Program	Promote homeowner-ship near public transportation to reduce fuel consumption, car emissions and demand for new roads and sprawling development	UNC-Chapel Hill worked with the Fannie Mae Partnership Office to bring the Smart Commute™ Mortgage product to the Triangle; Greater Triangle Regional Council and other regional organizations are promoting the effort. Project launch May 20, 2004.	Robert (Bob) Knight Assistant Vice Chancellor for Finance and Administration 962-3795 knightr@email.unc.edu For more info, see: www.efanniemae.com/hcd/single_family/mortgage_products/smartcommute.html
The Center for Transportation and the Environment Roundtable and the Gold Circle Team	Foster stakeholder collaborations to achieve transportation conformity with air quality standards; Gold Circle team assists in communicating with and engaging local and state decision-makers who play key roles in transportation and air quality planning and conformity.	Roundtable established in 2001. The NCDENR and NCDOT has asked the Gold Circle team to develop the education and communication plan to accomplish the goal of working with affected areas to educate staff and decision-makers on their responsibilities. Work on a communication plan began in November 2003	Janet D'Ignazio, CTE Senior Research Fellow 515-8587 jdignaz@unity.ncsu.edu

*Report compiled by Triangle J Council of Governments
To provide updated information, contact John Hodges-Copple at 558-9320, johnhc@tjcog.org*