

## **Frequently Asked Questions**

### **Why test auto emissions systems?**

Cars and trucks are major air pollution sources, despite controls that have dramatically reduced vehicle emissions over the past two decades. Collectively, highway vehicles account for about one-third of the ozone-forming emissions across North Carolina and up to 70 percent in urban areas. Tests are needed to ensure that vehicle emissions controls are working properly.

### **When are emissions inspections conducted?**

Emissions systems are tested along with the annual safety inspection required for most cars and trucks in North Carolina. Your car should have a sticker in the lower corner of the windshield on the driver's side indicating what month the inspection is due.

### **How much does an emissions inspection cost?**

The maximum annual fee for the motor vehicle emissions test and safety inspection is \$30, but inspection stations can charge less.

### **Where does the inspection fee go?**

Inspection stations receive most (\$23.50) of the total fee for the safety and emissions test. The remainder of the fee (\$6.50) goes to support various related state programs, including oversight for emissions testing, the highway trust fund, air quality, and emergency and rescue squads. (See chart on reverse side.)

### **What vehicles must have emissions systems tested?**

All gasoline-powered vehicles less than 25 years old and registered in Cabarrus, Durham, Forsyth, Gaston, Guilford, Mecklenburg, Orange, Union and Wake must be tested through December 31, 2005. Vehicle models 1996 and newer, excluding new vehicles that have never been titled, must be tested using OBD systems. The testing is being expanded to eventually include 48 counties. (See map on reverse side.)

### **What is On Board Diagnostics (OBD)?**

OBD is a system that assesses and monitors the

performance of engine components, emission controls and sensors, and the car computer itself, and communicates its findings to the technician by means of diagnostic trouble codes.

### **Do all vehicles require an emissions inspection?**

No. Emissions system tests are not required for current model-year vehicles, diesel-powered vehicles, motorcycles and registered motor homes. Tests are not required for any vehicles in counties not included in the program, but all highway vehicles must have annual safety inspections. (See map on reverse side.)

### **What happens if a car fails the emissions inspection?**

If a car fails the test, the vehicle owner must attempt to get the problem fixed. The federal Clean Air Act requires manufacturers to provide an 8-year/80,000-mile warranty on major emissions control equipment, such as catalytic converters and OBD computers.

### **What if a car is unable to pass the test after repairs?**

The Division of Motor Vehicles (DMV) can provide a waiver if the owner has made a good-faith effort to repair the problems and has met minimum expenditure levels. To qualify for waivers, owners must have spent at least \$75 for model years 1976-1980 and \$200 for model years 1981 and newer.



### **Can a car fail if its emissions controls are working?**

In some cases, cars may fail the test even though their emissions controls are working. If there is an outstanding recall or service bulletin on a car, it may fail the test until the repairs are made. A car also may fail the test if it has recently been repaired and it hasn't had time for the OBD system to reset all readiness monitors. Some car models have OBD systems that do not function properly, and the DMV can issue waivers on a case-by-case basis.

### **The "check engine" light is lit on my dashboard. Will my car pass the inspection if a mechanic "clears the codes" to turn out the light?**

No. By clearing the codes, the mechanic has also reset the readiness monitors to "not ready" and your vehicle will be rejected from testing. If your "check engine" light is on, something is wrong with the car and you should take it to a qualified technician for diagnosis.

### **Why don't we test cars older than 1996?**

Vehicle emissions are related more to vehicle maintenance than to vehicle age. Cars older than 1996 do not have OBD systems, and methods for testing older vehicles are prohibitively expensive. By 2006, about three-fourths of the state's urban highway emissions are expected to come from 1996 and newer vehicles. However, the older cars are subject to an annual visual inspection of their emissions control devices. Smoking vehicles also can be cited by law enforcement officers, or reported to the DAQ. To report a smoking vehicle, go to this web address: <http://daq.state.nc.us/motor/>

### **For More Information**

**Air Quality:** N.C. Division of Air Quality, Mobile Sources Branch, 919-733-1480, <http://daq.state.nc.us/motor/inspect/> or [www.ncair.org](http://www.ncair.org)

**Motor Vehicles:** N.C. Department of Transportation, Division of Motor Vehicles, 919-733-0133, <http://www.dmv.dot.state.nc.us/>



North Carolina Department of Environment and Natural Resources  
William G. Ross, Jr., Secretary  
Michael F. Easley, Governor



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DAQ 04-07-03.

# Smokestacks on Wheels

North Carolina Department of  
Environment and Natural Resources

Division of Air Quality

# Smokestacks on Wheels

## Curbing Air Pollution from Motor Vehicles

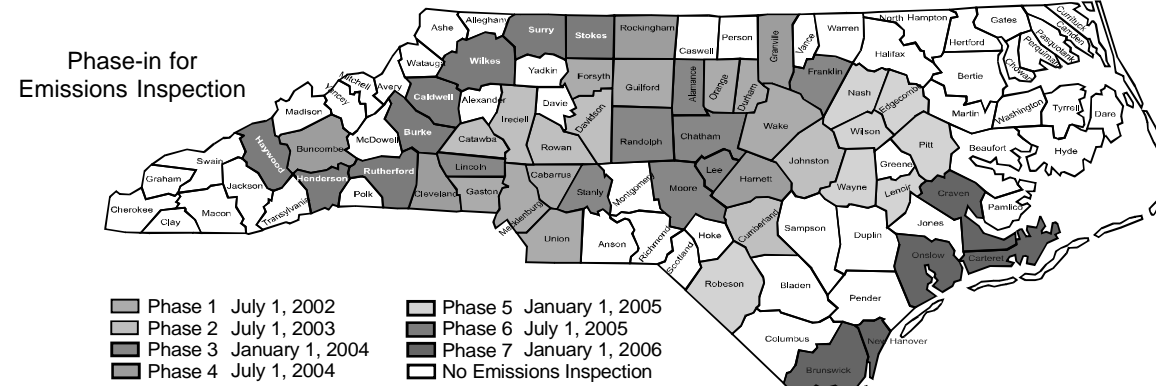
Power plants and other smokestack industries aren't the only major sources of air pollution in North Carolina. Cars, trucks and other motor vehicles contribute substantially to air quality problems – including ozone, haze, particulate matter, and other pollutants collectively referred to as smog.

Highway vehicle emissions account for about one-third of the ozone-forming emissions statewide and up to 70 percent in larger urban counties. Ozone, the state's most widespread air quality problem, is unhealthy to breathe and damages trees and crops. North Carolina typically ranks among the top 10 states in bad ozone days.

## Emissions System Testing for Cars and Trucks

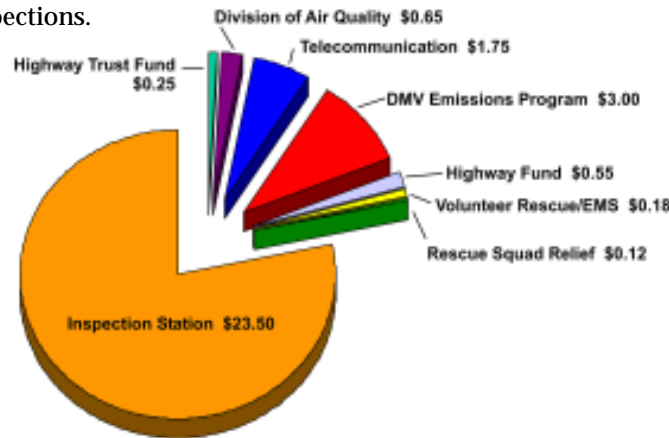
One of the most effective ways to reduce car and truck exhaust is through testing to ensure their catalytic converters and other pollution controls are working properly. Emissions equipment tests also can benefit car owners by helping to ensure their vehicles are running properly and fuel-efficient.

North Carolina began auto emissions inspections in the early 1980s. Emissions tests are conducted annually along with auto safety inspections in nine urban counties: Cabarrus, Durham, Forsyth, Gaston, Guilford, Mecklenburg, Orange, Union and Wake. In 1999, the N.C. General Assembly passed legislation to enhance and expand the auto emissions inspection program to 48 counties between July 2003 and January 2006, based on population, number of vehicles and commuting patterns. New counties will be added to the program according to the following schedule:



Owners of gasoline-powered vehicles in affected counties must have their emissions systems tested annually, along with vehicle safety inspections, at approved inspection stations. The maximum fee for the inspection and test is \$30, but stations can charge less than that amount. Diesel vehicles are exempt from emissions checks, but will continue to need safety inspections.

Total Inspection Fee  
\$6.50 (min) - \$30.00 (max)



## Controlling Other Pollution Sources

The emissions testing program is a key part of North Carolina's plan for reducing ozone and other air quality problems, but the state has a number of other efforts to improve air quality. The General Assembly has enacted legislation that requires the use of cleaner gasoline statewide by 2006, promotes alternative-fuel vehicles, and provides more funding for rail and mass transit.

In 2002, the legislature passed the Clean Smokestacks Act, which requires coal-burning power plants to reduce substantially their emissions of harmful air pollutants over a 10-year period. The legislation requires a three-fourths reduction in nitrogen oxide emissions (which contribute to ozone, acid rain and haze) and sulfur dioxide emissions (which contribute to haze, acid rain and fine particles). The new controls also are expected to reduce toxic mercury emissions by 60 percent or more.

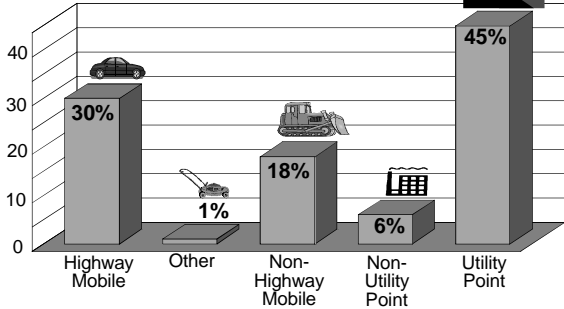
The N.C. Division of Air Quality (DAQ) enforces a number of other regulations aimed at controlling emissions from industry and other sources. The division issues air quality permits for more than 3,500 industrial sources across the state, and DAQ personnel inspect these facilities for compliance with state and federal air quality regulations.

Individuals also can help reduce air pollution in their daily activities. The most important thing to remember is: Anything you can do to reduce energy consumption will help reduce air pollution. Some examples include:

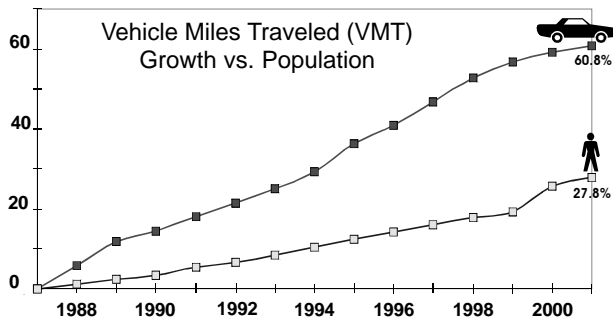
- Driving less by car-pooling, combining trips, riding public transportation to work, or walking and cycling.
- Adjusting home thermostats so you use less heat in cold weather and less air conditioning in hot weather.
- Keeping your car or truck tuned up, maintained and inspected.

For more information on what individuals can do to reduce air pollution call the N.C. Air Awareness program toll-free at 1-888-RU4NCAIR (784-6224) or visit this web site: <http://daq.state.nc.us/> or [www.ncair.org](http://www.ncair.org)

Statewide Daily Ozone-Forming NOx Emissions, 1995



Emissions from cars and trucks have out-paced other air pollution sources, such as industrial emissions, because more people are driving longer distances than in the past.



Originally, emissions tests involved a probe that directly measured pollutants in tailpipe exhaust. In 2002, North Carolina switched to a new testing probe system using On Board Diagnostics (OBD) systems, the computers installed on all new cars and trucks since 1996. The new test doesn't measure pollutants in exhaust, but instead uses vehicles' OBD systems to see if their pollution controls are working. If a vehicle fails the OBD test, the computer helps identify what needs to be repaired. The OBD test is the most effective way to check equipment for controlling nitrogen oxide (NOx) emissions, the main cause of ozone in North Carolina.