Study of the Potential Impacts of Exempting Motor Vehicles from Emissions Inspections

A Report to the
Joint Legislative Transportation Oversight Committee,
the Environmental Review Commission,
the Joint Legislative Commission on Governmental Operations,
the House and Senate Appropriations Subcommittees on Natural and Economic Resources,
the House Appropriations on Transportation,
and the Senate Committee on Appropriations on Department of Transportation

Submitted by the Department of Transportation, Division of Motor Vehicles and
the Department of Environment and Natural Resources, Division of Air Quality

This report is submitted pursuant to the requirement of Section 28.24(a) of Session Law 2011-145, House Bill 200, enacted June 15, 2011.

March 1, 2012

Signed: _____

Gene Conti, Secretary

Department of Transportation

Signed: _____

Dee Freeman, Secretary

Department of Environment and Natural Resources

March 1, 2012

I. Study Exempting Motor Vehicles from Emissions Inspections

The 2011 General Assembly directed the Department of Transportation (DOT), Division of Motor Vehicles along with the Department of Environment and Natural Resources (DENR), Division of Air Quality, to study the impacts of exempting (i) the three newest model year vehicles and (ii) all vehicles from the emissions inspection requirements. The legislation requires DOT and DENR to submit a report to the Joint Legislative Transportation Oversight Committee, the Environmental Review Commission, the Joint Legislative Commission on Governmental Operations, the House and Senate Appropriations Subcommittees on Natural and Economic Resources, the House Appropriations on Transportation, and the Senate Committee on Appropriations on Department of Transportation.

Specifically, Session Law 2011-145 requires:

"**SECTION 28.24.(a)** The Department of Transportation, Division of Motor Vehicles, shall lead a study to examine exempting from the emissions inspection required for motor vehicles under G.S. 20-l83.2(b) (i) the three newest model year vehicles and (ii) all vehicles. As part of this study, the Department of Environment and Natural Resources, Division of Air Quality, in coordination with the Department of Transportation, Division of Motor Vehicles, shall evaluate the potential impacts of exempting these motor vehicles on emissions levels and air quality. In evaluating these potential impacts, the Division of Air Quality shall consider all of the following:

(1) Whether North Carolina would be in jeopardy of the United States Environmental Protection Agency (USEPA) finding that the State failed to implement its State Implementation Plan; if so, what specific alternative programs would result in emissions reductions that would be equivalent to any increased emissions resulting from exempting these motor vehicles from emissions testing; and what approvals, demonstrations, documentation, or other requirements is the State subject to in order to comply with federal law and to assure that the State does not lose eligibility to secure federal transportation funds.

(2) Whether air quality standards would be violated based on (i) existing air quality standards adopted under Article 21B of Chapter 143 of the General Statutes and (ii) revised air quality standards, including a revised standard for ozone, that are currently being considered for adoption by the United States Environmental Protection Agency.

(3) Whether the State would be in jeopardy of being found to be out of conformity such that its State and local transportation plans would interfere with the State's ability to attain federal air standards, resulting in loss of future federal transportation funds.

(4) What new or amended rules would be necessary regarding any recommendation of this study and the time frame for adopting such new or amended rules.

(5) What fiscal impacts would result for motor vehicle owners, licensed inspection stations, the Department of Transportation, and the Department of Environment and Natural Resources.

(6) Any other issues pertinent to the study under this section.

SECTION 28.24.(b) No later than March 1, 2012, the Department of Transportation and Department of Environment and Natural Resources shall submit a joint report of the results of the study under this section, including the findings, recommendations, and any legislative or administrative proposals, to the Joint Legislative Transportation Oversight Committee, the Environmental Review Commission, the Joint Legislative Commission on Governmental Operations, the House and Senate Appropriations Subcommittees on Natural and Economic Resources, the House Appropriations Subcommittee on Transportation, and the Senate Committee on Appropriations on Department of Transportation."

INTRODUCTION

The federal Clean Air Act (CAA) as amended established National Ambient Air Quality Standards (NAAQS) for the following criteria pollutants: carbon monoxide, lead, ozone, nitrogen dioxide, particulate matter and sulfur dioxide. The U.S. Environmental Protection Agency (USEPA) is required to review, and revise if necessary, the NAAQS every five years. Areas that violate a NAAQS are designated nonattainment by the USEPA. In North Carolina, areas have been designated nonattainment for carbon monoxide, ozone and particulate matter. Areas designated as moderate nonattainment or higher for carbon monoxide or ozone are required to implement a vehicle inspection and maintenance program (i.e., an emissions inspection program) in accordance with the CAA, Sections 187(a)(4) and 182(b)(4), respectively. The requirements of an inspection and maintenance program were established in the Code of Federal Regulation (CFR) under Title 40 CFR Part 51.

The North Carolina vehicle inspection and maintenance program started in 1982 with Mecklenburg County being required to have an emissions inspection program to address violations of the carbon monoxide NAAQS. In 1984, Wake County was added to the program for carbon monoxide NAAQS violations. With the passage of the Clean Air Act Amendments of 1990, Cabarrus, Durham, Forsyth, Gaston, Guilford, Orange and Union Counties were added to the emissions inspection program to address violations of the 1-hour ozone and/or carbon monoxide standards. Under the 1997 8-hour ozone standard, the Charlotte/Gastonia/Rock Hill area was designated as a moderate nonattainment area, which required the following additional counties to be included in the emissions inspection program: Cabarrus, Iredell, Lincoln and Rowan. Senate Bill 953 (Session Laws 1999-328, Section 3.1(d)) required an additional 36 counties to have the vehicle emissions program in order to improve air quality in North Carolina. Counties were added to the program based on population, vehicle miles traveled, and the likely contribution by motor vehicles to high ozone levels in these counties and nearby counties. This expanded the program to a total of 48 counties.

The North Carolina Division of Motor Vehicles (DMV), License and Theft Bureau, has operational responsibility for the emissions inspection program in North Carolina and has created rules for implementing and monitoring the program under the North Carolina Administrative Code (Title 19A NCAC 03D.05). The North Carolina Division of Air Quality (DAQ) has adopted regulations to reflect the requirements of Senate Bill 953 and USEPA regulations. In addition, both agencies develop specifications for the program and certify the emissions testing equipment used in the program.

The initial emissions inspection program in North Carolina was based on a “tail-pipe” test. The tailpipe test was administered by inserting a probe in the vehicle’s tailpipe and measuring the amount of pollution emitted. The tailpipe test was able to measure carbon monoxide and volatile organic compound emissions from the vehicles. The tailpipe test could not identify the emissions component that was malfunctioning nor could it measure the nitrogen oxides emissions.

Starting in October 2002, inspection stations in the original nine counties converted from tailpipe testing to the new On Board Diagnostic II (OBD) emissions testing for all 1996 and newer light duty gasoline vehicles. The program continued to expand until Jan. 1, 2006, at which time inspection stations in 48 counties were performing the OBD emissions test on all 1996 and newer light duty gasoline vehicles. Once the program was fully implemented, tailpipe testing for vehicles older than 1996 was discontinued. Model year 1996 and newer vehicles have standardized computer systems that continually monitor the electronic sensors of engines and emission control systems, including the catalytic converter, while the vehicles are being driven. When a potential problem is detected, a dashboard warning light is illuminated to alert the driver. An OBD system detects a problem well before symptoms such as poor performance, high emissions or poor fuel economy are recognized by the driver. An OBD emission test provides a more comprehensive picture of a vehicle's emissions status because it evaluates emissions during everyday operating conditions whereas a tailpipe test measures emissions only at a particular moment in time. Early detection helps to avoid costly repairs and improves vehicle emissions.

In 2008, North Carolina began the electronic authorization program. This program replaced the paper stickers that had been placed on vehicle windshields by inspection stations with electronic authorizations. The electronic authorization program also synchronized the vehicle registration renewal date with the vehicle inspection renewal date, essentially requiring a passing safety only or safety/OBD inspection prior to the vehicle's registration renewal. A safety only inspection is required for all vehicles less than 35 years old in counties without the inspection and maintenance (I/M) program and vehicles older than 1996 in counties with the I/M program. A vehicle that qualifies for an emissions waiver may have their registration renewed after passing the safety equipment portion of the vehicle inspection and receiving a waiver for the OBD portion. The Division of Motor Vehicles currently contracts with Verizon Business to manage the Vehicle Inspection Database (VID) and the other inspection system's infrastructure. Verizon Business notified the Division of Motor Vehicles on June 22, 2011 that they would not renew their current contract with the State. The Divisions' contract with Verizon is set to expire in October 2012. The Division is aggressively pursuing a new vendor to replace Verizon as the State's contractor and to dramatically enhance the program's functionality. These new enhancements we believe will not only benefit the State by dramatically reducing administrative cost but they will significantly minimize the financial impact currently placed on inspection station owners who are providing the inspection service to the consumers. These enhancements will be recognized through the implementation of a web based solution whereby we believe this enhancement will eliminate the need for businesses to own specific analyzers, maintain costly service contracts and maintain dedicated phone lines for dial up connections. This new system will allow for real time data transfer between the inspection stations, the VID and the Division's vehicle registration data base thus minimizing wait time for vehicle registration issuance and renewals. This real time data transfer will allow the License & Theft Bureau to better monitor inspection activity occurring at stations and will enhance our ability to immediately detect inspection fraud and discover cloned and stolen vehicles that are being inspected in our state.

EMISSIONS INSPECTION STUDY BILL REQUIREMENTS

(1) Whether North Carolina would be in jeopardy of the United States Environmental Protection Agency (USEPA) finding that the State failed to implement its State Implementation Plan; if so, what specific alternative programs would result in emissions reductions that would be equivalent to any increased emissions resulting from exempting these motor vehicles from emissions testing; and what approvals, demonstrations, documentation, or other requirements is the State subject to in order to comply with federal law and to assure that the State does not lose eligibility to secure federal transportation funds.

Lynorae Benjamin, chief of the Regulatory Development Section for the USEPA Region 4, confirmed by email correspondence on Oct. 14, 2011 that North Carolina will need to submit a revision to the inspection and maintenance (I/M) State Implementation Plan (SIP) and demonstrate that the federal I/M performance standard will still be met in order to change the I/M program in North Carolina to exempt the three newest model year vehicles. The I/M performance standard (see 40 CFR 51.352) establishes the minimum performance standard expressed as emission levels that the state's I/M program must meet. The latest USEPA model is run using specific inputs set by the USEPA in federal rules and inputs representing the state's program elements. If the state's program results in emission levels lower than the minimum performance standard, the performance standard is met.

If the three newest model years are exempt or the emissions inspection program is eliminated, a SIP revision would also have to be submitted to the USEPA demonstrating that the SIP complies with the requirements of Section 110(l) of the Clean Air Act as amended. Section 110(l) states:

> "Each revision to an implementation plan submitted by a State under this chapter shall be adopted by such State after reasonable notice and public hearing. The Administrator shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171 of this title), or any other applicable requirement of this Act."

This means that North Carolina would have to demonstrate that any emission increases would not hinder any area where the emissions program is implemented from attaining and/or maintaining all of the national ambient air quality standards or require compensating or equivalent emissions reductions to offset increased emissions due to changes in the vehicle emissions program. This demonstration could mean that the current attainment demonstrations and/or maintenance SIPs may have to be revised.

Failure to have a revised SIP approved by USEPA before eliminating or modifying an I/M program could result in the state being sued for non-compliance with the Clean Air Act. For example, Kentucky legislation immediately ending the emissions program for the Louisville, KY

area prompted a lawsuit by the Kentucky Resource Council since the appropriate SIP revisions demonstrating compliance with Section 110(l) of the Clean Air Act had not been submitted to the USEPA. The lawsuit resulted in a court order reinstating the emissions inspection program until the Section 110(l) of the Clean Air Act demonstration had been submitted to the USEPA.

The USEPA does not require that the demonstration required for changes to the I/M program address sulfur dioxide (SO_2), lead, or fine particulate matter ($PM_{2.5}$) because vehicle emissions have little or no impact on ambient concentrations of those pollutants. The pollutants that need to be reviewed are nitrogen dioxide (NO_2), carbon monoxide (CO), nitrogen oxides (NOx) and volatile organic compounds (VOCs). NOx refers to nitric oxide (NO) and NO_2. Since NOx includes NO_2, NO_2 does not need to be reviewed separately.

(i) Exempting the three newest model year vehicles from the emissions inspection requirement.

The DAQ ran the approved USEPA's Motor Vehicle Emission Simulator (MOVES) mobile model version 2010a to determine the emission increases if the three newest model year vehicles are exempted from the emission inspection requirement. The results are displayed in Table 1.

Table 1. Emission Increases from Exempting the 3 Newest Model Years

Pollutant	Emission Increase
Nitrogen Oxides (NOx)	26 tons/year
Volatile Organic Compounds (VOCs)	4 tons/year
Carbon Monoxide (CO)	729 tons/year

Since exempting the three newest model years from the emission inspection resulted in increased emissions, we looked at the current emissions inspection program to determine whether other factors could offset those increases. Our review determined that the program's compliance rate could be adjusted as a result of the program change that now requires the inspection be completed before a vehicle can be registered. The current State Implementation Plan assumes that the I/M program has a compliance rate of 92 percent. Now that inspections are tied to vehicle registration, the actual compliance rate varies between 96 to 99 percent. We ran the USEPA model for the exemption for the three newest model years to determine if a 95 percent compliance rate would compensate for the emission increases. Table 2 displays the results of these model runs.

Table 2. Emission Reduction Benefits from Tightening Compliance Rate to 95 Percent

Pollutant	Emission Reduction Benefit
Nitrogen Oxides (NOx)	237 tons/year
Volatile Organic Compounds (VOCs)	126 tons/year
Carbon Monoxide (CO)	1,618 tons/year

We have determined the three newest model years could be exempted from the state's emission inspection program without having a negative effect on the SIP. The change could be implemented once a revision to the I/M SIP has been submitted to the USEPA demonstrating that the performance standards are met with the three newest model years exempt and the compliance rate set at 95 percent. The state would not lose eligibility to secure federal transportation funds due to exempting the three newest model years since the change would still result in an emissions reduction benefit.

(ii) Exempting all vehicles from the emissions inspection requirement.

We ran the MOVES model to determine the emission increase if the emissions inspection program is eliminated in North Carolina. The results are displayed in Table 3.

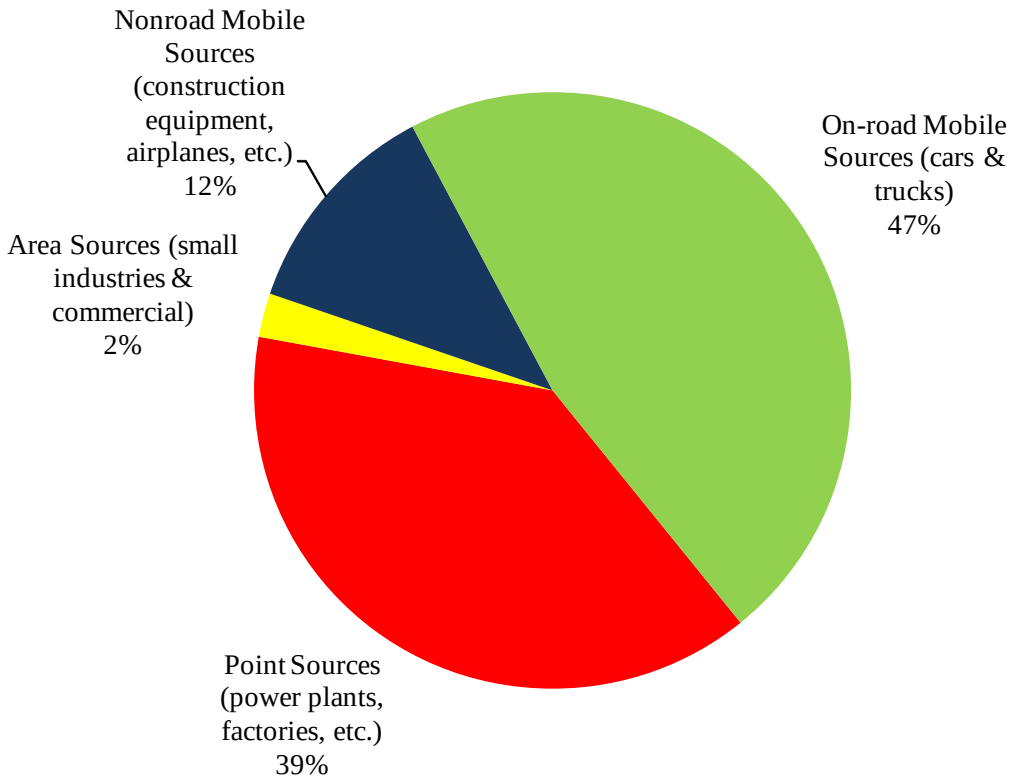
Table 3. Emission Increases from Elimination of the Emissions Inspection Program in North Carolina

Pollutant	Emission Increase
Nitrogen Oxides (NOx)	8,100 tons/year
Volatile Organic Compounds (VOCs)	3,987 tons/year
Carbon Monoxide (CO)	72,715 tons/year

With respect to carbon monoxide (CO), the current ambient air quality is approximately one quarter of the standard. The combined effect of vehicle fleet turnover and the emissions inspection program results in significant reductions in CO emissions, and the CO maintenance SIP heavily relies on those factors. It might be possible to revise the CO maintenance plan and demonstrate that vehicle fleet turnover alone would still allow the area to demonstrate compliance with Section 110(l) of the Clean Air Act.

Since the current CO ambient air concentrations are one quarter of the standard, the CO emission impacts were not considered a significant issue. Therefore, we focused on the NOx emission increases for the purpose of this study. To reduce ozone in North Carolina, reductions in NOx emissions are required. (Although VOCs contribute to ozone formation, the abundance of naturally occurring VOC emissions from trees in North Carolina mean that reductions in man-made VOC emissions have little to no impact on reducing ozone.) NOx emission increases resulting from the elimination of the emission inspection program would have to be compensated through alternative programs in order for North Carolina to comply with Section 110(l) of the Clean Air Act. The emission reductions would have to occur in the region where the emissions inspection program was being eliminated or it would be necessary to demonstrate that emission reductions outside of the region would reduce the ozone concentrations within the region being analyzed. Figure 1 displays the percent of NOx emissions for each source sector for 2010 with the current emissions inspection program in place. As Figure 1 indicates, the on-road mobile source sector accounts for almost half of the NOx emissions in North Carolina. Elimination of

the emissions inspection program would require alternative programs to reduce emissions from on-road mobile sources and additional reductions for the large industrial sources (point sources)



and the nonroad mobile source sector.

Figure 1. 2010 statewide NOx emissions by source category.

If the emissions inspection program is eliminated, other emission reduction strategies for the on-road mobile sources would need to be considered; those strategies could include:

- Lowering the speed limit on interstate highways. The speed limit change could be for all vehicles or just the heavy duty vehicles. Some states have a lower speed limit for heavy duty vehicles on interstate highways. These vehicles contribute the largest percentage of the overall on-road mobile source NOx emissions and the emission rate for NOx is higher at higher speeds.
- Funding for mass transit programs in order to reduce the vehicle miles traveled. This could be either through improved bus transit, new commuter rail infrastructure or a combination of the two.

Large industrial, or point sources, of NOx, require an air permit to operate. In North Carolina, the largest point sources of NOx emissions are combustion sources; coal fired utility boilers top

the list, followed by paper mills, natural gas pumping stations and glass manufacturers. Control equipment for these sources includes:

Coal-fired boilers
Selective non-catalytic reduction control equipment (SNCR) – 35-40 percent reduction*
Low NOx burners – 40-50 percent reduction
Selective catalytic reduction control equipment (SCR) – 80-90 percent reduction

Pulp and paper
SNCR – 50 percent reduction
Low NOx burners – 50 percent reduction
Oxy trim and water injection – 65 percent reduction
SCR – 89-90 percent reduction

Glass Manufacturing
Cullet pre-heat – 25 percent reduction
SNCR – 40 percent reduction
Low NOx burners – 40 percent reduction
SCR – 75 percent reduction
Oxy-firing – 85 percent reduction

Natural Gas Pumping Station
Low NOx burners – 65-85 percent reduction
Steam/water injection – 75-80 percent reduction
Low emission combustion – 87 percent reduction
SCR – 90-95 percent reduction

**Percent reduction represents the expected emission reduction from the specific control technology.*

Finding more NOx reductions from point sources to offset the increase from mobile sources would require careful examination of the types of sources located in the region, since some sources already have air quality controls for NOx, and if additional NOx emissions reductions are possible. For example, many of the coal-fired power plants are already controlled with either low NOx burners or selective non-catalytic reduction control equipment, and the largest of the North Carolina power plants already have the highest control for coal with selective catalytic reduction control equipment. Therefore, it would be difficult to get additional NOx reductions from the largest power plants and changes to the controls for those boilers already controlled by SNCR or low NOx burners would be costly.

An alternative program to put additional controls on point sources of NOx would involve a detailed analysis of the sources located in each region, the controls that are currently in place and identification of additional controls that could be installed at specific sources.

"Nonroad mobile sources" refers to sources that move but do not use the highway system. Nonroad mobile sources include agricultural equipment, aircraft and airport ground support equipment, construction equipment, industrial and commercial equipment, lawn and garden equipment, locomotives and rail maintenance equipment, logging equipment, recreational and commercial marine vessels, and recreational equipment. Emission reduction strategies for the nonroad mobile source sector could include:

- Idle reduction requirements for locomotive engines and heavy construction equipment
- Require new or repowered locomotive engines at switching yards
- Require low/no emitting airport ground support equipment
- Require commercial marine vessels docking in North Carolina to use shore power
- Require construction equipment used in building roads and/or new developments use new, repowered or retrofitted construction equipment

Area sources are stationary sources that individually have relatively small emissions but collectively have significant emissions due to the large number of these sources. NOx emissions from area sources come primarily from combustion of fuels for heating purposes. Structure fires and wild fires also contribute to area source NOx emissions. These types of sources would be very difficult to control and would result in very little benefit in reducing ozone levels since area source NOx emissions only account for 2 percent of the statewide NOx emissions.

If the emissions inspection program were eliminated in North Carolina, an assessment of the NOx emission increases for each Combined Metropolitan Statistical Area (CMSA) or Micropolitan Statistical Area (MiSA) would have to be made. A careful assessment of the types of sources in each CMSA and MiSA would have to be analyzed to determine from where the necessary NOx emission reductions could come. The needed emissions reductions may come from a single source sector or a combination of emission reduction strategies from on-road mobile sources, nonroad mobile sources and/or stationary point sources. North Carolina would have to revise the attainment demonstrations and maintenance plans SIPs to account for the loss of the emissions inspection program and the addition of new control programs.

In order to assure that the state does not lose eligibility to secure federal transportation funds due to a potential legislative change, the SIPs that establish motor vehicle emission limits for transportation conformity would have to be revised and approved by the USEPA prior to the elimination of the emissions inspection program to ensure that there are no potential issues with an area failing to demonstrate transportation conformity solely due to this legislative change. It would take approximately nine to 12 months for the DAQ to revise the SIPs that establish new motor vehicle emission limits. This timeline is based on the need to obtain the latest projections of vehicle miles traveled, perform the emission calculations, develop the revised SIPs and take the SIPs through a public comment process prior to submittal to the USEPA. Once these SIPs

are submitted to the USEPA, it can take an additional 12 to 18 months for these motor vehicle emission limits to be approved for use.

(2) Whether air quality standards would be violated based on (i) existing air quality standards adopted under Article 21B of Chapter 143 of the General Statutes and (ii) revised air quality standards, including a revised standard for ozone, that are currently being considered for adoption by the United States Environmental Protection Agency.

Since the emission increases from exempting the three newest model years can be addressed through revising the compliance rate in the I/M SIP, this exemption should not result in the violation of any of the existing air quality standards. Therefore, the following discussion will focus on the impacts to air quality standards due to the elimination of the emissions inspection program.

(i) Existing air quality standards adopted under Article 21B of Chapter 143 of the General Statutes.

Historically in North Carolina, we have adopted the National Ambient Air Quality Standards. The air quality standards are displayed in Table 4 below.

Table 4. Current National Ambient Air Quality Standards

Pollutant	Averaging Time	Level
CO	1-hour 8-hour	35 ppm 9 ppm
Lead	3 month average	0.15 $\mu g/m^3$
NO_2	1-hour Annual	100 ppb 53 ppb
Ozone	8-hour	75 ppb
$PM_{2.5}$	Annual Daily	15 $\mu g/m^3$ 35 $\mu g/m^3$
PM_{10}	Daily	150 $\mu g/m^3$
SO_2	1-hour standard	75 ppb

ppm = parts per million
$\mu g/m^3$ = micrograms per cubic meter
ppb = parts per billion

The USEPA has stated that on-road mobile sources do not contribute significantly to SO_2 or lead ambient concentrations. Therefore, the elimination of the emissions inspection program is not expected to result in the violation of either of these standards.

Although on-road mobile sources are a significant contributor to CO ambient air concentrations, the current ambient air quality levels for CO are about 25 percent of the standards. For this reason, it is unlikely that the elimination of the emissions inspection program would result in a violation of the CO standards.

The primary species impacting $PM_{2.5}$ concentrations are the secondarily formed sulfates and organic carbons. Sulfates are formed through the chemical reaction of SO_2 and ammonia. The majority of the organic carbons come from natural sources such as trees. Although NOx is a precursor pollutant to $PM_{2.5}$, in the southeast, it is a very minor contributor. In North Carolina, directly emitted $PM_{2.5}$ is a very small component of the overall $PM_{2.5}$ ambient concentrations. Based on the USEPA's MOVES model, on-road mobile sources are not a significant source of SO_2 or directly emitted $PM_{2.5}$ so these pollutants are not expected to impact $PM_{2.5}$ ambient concentrations. Although on-road mobile sources are a significant source of NOx emissions, NOx is a minor contributor to $PM_{2.5}$ concentrations in North Carolina. Therefore, it is unlikely that the elimination of the emissions inspection program would result in a violation of the $PM_{2.5}$ standards.

The majority of the ambient concentrations for particulate matter 10 micrometers or less (PM_{10}) come from sources that directly emit PM_{10}. On-road mobile sources are not believed to be a significant contributor to PM_{10} concentrations. Additionally, the current ambient air quality levels are about 30 percent of the standard. Consequently, it is unlikely that the elimination of the emissions inspection program would result in a violation of the PM_{10} standard.

The revised NO_2 standard was promulgated in January 2010. The monitoring requirements are focused on near-road monitoring and therefore the primary focus of this standard is on-road mobile sources. To date, none of the near-road NO_2 monitors have been established in North Carolina. DENR is working with the USEPA, Office of Research and Development to establish and operate an NO_2 site in Wake County by mid to late 2012. The Mecklenburg County NO_2 monitoring site will not be operational for one to two years. As a result, no state monitoring data exists for the NO_2 standard. However, on-road mobile sources are a significant contributor of NOx emissions and NO_2 is a component of NOx. Based on the MOVES model emission estimations, the elimination of the emissions inspection program would have an impact on the NO_2 concentrations and could result in a violation of this standard near roads with high traffic volumes.

The Charlotte-Gastonia-Salisbury area is currently in violation of the 2008 8-hour ozone standard, based on ambient air quality data collected from 2009 to 2011. The Greensboro/Winston-Salem/High Point area and the Raleigh/Durham area have design values that are close to the ozone standard. In North Carolina, ozone formation must be addressed through reductions in NOx emissions. In these three urban areas, the majority of the NOx emissions come from on-road mobile sources (approximately 60-70 percent). With the elimination of the emissions inspection program, the MOVES model shows that the NOx

emissions would increase from the on-road mobile sector. This increase in emissions could result in additional exceedances of the 8-hour ozone standard that could result in a violation of the standard in the Greensboro/Winston-Salem/High Point and the Raleigh/Durham areas, as well as the continued violation of the standard in the Charlotte-Gastonia-Salisbury area.

ii) Revised air quality standards, including a revised standard for ozone, that are currently being considered for adoption by the United States Environmental Protection Agency.

The ozone and $PM_{2.5}$ standards are currently under review by the USEPA. It is possible that the $PM_{2.5}$ review will be completed and a new standard promulgated within the next year. The latest USEPA's staff paper recommends lowering the annual standard from 15 $\mu g/m^3$ to a range of 11 to 13 $\mu g/m^3$. The staff paper also recommends that the daily standard be set between 35 $\mu g/m^3$ to 25 $\mu g/m^3$ with the current standard at 35 $\mu g/m^3$. As stated above, on-road mobile sources are not expected to significantly impact $PM_{2.5}$ ambient concentrations in North Carolina. Therefore a revised $PM_{2.5}$ standard would not be expected to be impacted by the elimination of the emissions inspection program.

The reconsideration of the 2008 8-hour ozone standard is expected to occur in 2013, with the final promulgation expected in 2014. The USEPA was considering lowering the 8-hour ozone standard to 60 – 70 ppb. Based on the current design values for ozone, the state's four larger urban areas would violate a 70 ppb standard (Charlotte, Raleigh/Durham, Greensboro/Winston-Salem and Fayetteville); an additional seven areas would have design values just below the standard. If the standard was lowered to 60 ppb, every ozone monitor in the state would violate the standard based on current design values. With a standard as low as 60 ppb, smaller urban areas, such as Rocky Mount, Greenville and Jamesville could be designated nonattainment. Since achieving the ozone standard in North Carolina requires NOx reductions, the increase in NOx emissions from the elimination of the emissions inspection program could result in additional areas violating a lower standard and make it more difficult to attain a lower standard in areas that would be in violation.

(3) Whether the State would be in jeopardy of being found to be out of conformity such that its State and local transportation plans would interfere with the State's ability to attain federal air standards, resulting in loss of future federal transportation funds.

Under the 1990 Clean Air Act amendments, Transportation Conformity (conformity) requires that transportation plans, programs (TIP), and projects be consistent with the SIP and ensures that only projects that are consistent with air quality goals receive federal funding and approval. To make a conformity determination, the motor vehicle emissions from the transportation plan, program or project should be less than the motor vehicle emissions limit included in the most recent SIP for the area.

Conformity is required in geographic areas that are either violating a NAAQS or have violated a NAAQS in the past. The conformity process ensures that plans, TIPs and projects will not create new violations of the NAAQS, increase the frequency or severity of the NAAQS violations, or delay attainment of the NAAQS.
Metropolitan Planning Organizations (MPOs) are required to update their plan at least once every four years. This plan outlines the roadway networks and transit projects projected to be built in the area in the next 20 years. TIPs are a subset of the plan and detail the scope of the transportation projects projected out for seven years. It is this list of projects that the Federal Highway Administration approves approximately once every two years. To receive federal funding, a project must be part of an approved plan and TIP.

Neither exempting the first three model years from the emissions inspection nor eliminating the program entirely would directly trigger a conformity determination. The area would have to take into account the changes to the emissions inspection program, however, with respect to the impacts on emissions within the nonattainment and maintenance areas. If an area could not demonstrate conformity due to the lost emission reductions from the change in the emissions inspection program, a lapse could occur when the area reached a date for a required conformity determination. A conformity "lapse" means that the conformity determination for a transportation plan or transportation improvement program has expired and there is no currently conforming plan or transportation improvement program. A conformity determination is required within four years of the last conformity determination, two years after emission limits are deemed adequate or approved, and one year after the effective date of a new designation. Under Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which authorizes federal transportation funding, there is an additional one year grace period before the lapse would take effect except in the case of a new designation.

During a conformity lapse, no federal actions (such as approval or funding of projects) can be taken on roadway projects in nonattainment and maintenance areas. While a project can continue through the phase for which it has received federal approval, it cannot continue beyond that phase until the issue causing the lapse has been resolved. Exempt projects that have been identified in the MPO's plan can continue during a lapse. These projects are typically safety projects and do not add capacity to the roadway networks.

(4) What new or amended rules would be necessary regarding any recommendation of this study and the time frame for adopting such new or amended rules.

The rules implementing the inspection and maintenance program are found in G.S. 20-183 and Administrative Code (NCAC) 15A NCAC 02D .1000 (Motor Vehicle Emission Control Standard), 15A NCAC 02D .1001 (Purpose), 15A NCAC 02D .1002 (Applicability), and 15A NCAC 02D .1005 (On-Board Diagnostic Standards). These laws and rules would need to be

amended to reflect the change in model year applicability if legislation exempts the three newest model years from emissions inspection requirements.

Rulemaking under the regular permanent rulemaking procedures would follow the process as outlined by the Administrative Procedures Act, which would take approximately 13 months.

Appendix A lists the statutes that will need revising to implement the three year exemption.

(5) What fiscal impacts would result for motor vehicle owners, licensed inspection stations, the Department of Transportation, and the Department of Environment and Natural Resources.

(i) Impacts of a three-year exemption

Fees collected for emissions electronic authorization fees are payable to the Division of Motor Vehicles. Inspection stations are authorized by statute and may charge between $0.00 and $23.75 for a combined safety and OBD inspection. Stations are required to collect an additional $6.25 Emissions Electronic Authorization fee for a passing inspection. The Emissions Electronic Authorization fee distribution is listed in the Table 5 below.

Table 5. Current Fee Distribution

Recipient	Emissions Electronic Authorization Fee
Highway Fund	$0.55
Emissions Program Account	$3.00
Telecommunications Account	$1.75
Volunteer Rescue/EMS Fund	$0.18
Rescue Squad Workers' Relief Fund	$0.12
Division of Air Quality	$0.65
Total	$6.25

New vehicles are currently exempted from emissions inspections for the first year. With a three-year exemption of the emissions inspection, vehicle owners will still be required to pass a safety-only inspection that costs $13.60. Therefore, vehicle owners would save $16.40 per vehicle per year in years two and three for a total savings of $32.80 per new vehicle. In the 48 counties where emissions inspections are required the following fiscal impact would be recognized.

The financial impacts for the three year exemption were calculated by using the number of registered vehicles exempted by model year in the 48 counties in calendar year 2011 and multiplying the total number of vehicles that would be exempted in model years two and three by each emissions electronic authorization fee. The financial impact of program elimination was calculated by using the total number of Emissions Electronic Authorizations sold to inspection

stations in calendar year 2011 and multiplying that number by each emissions electronic authorization fee.

- **Vehicle Owners**: Owners of vehicles three model years old and newer would save $16.40 annually by exempting the first three model year vehicles from emissions inspections.
- **Inspection Stations**: Based on the current number of registered vehicles three model years old and newer, Inspection stations in the 48 Emissions Counties would see a combined loss of revenue equaling $10,359,418 per year.
- **State of North Carolina:** Based on current number of registered vehicles (based on vehicles two to three years old) registered in the 48 Emissions Counties the state revenues would be reduced annually as shown in the table below.

Table 6. Agency Fiscal Impacts

Account/Agency	Amount/Inspection	Annual Net Loss
Inspection Program Account	$3.00	$1,308,558.00
Telecommunications Account	$1.75	$763,325.50
Division of Air Quality	$0.65	$283,520.80

A potential cost to consumers may occur if a defective emissions control component fails when the vehicle is out of warranty before the vehicle was subject to an emissions inspection. The Federal CAA requires an 8-year or 80,000 mile warranty on the major emissions control components such as the catalytic converter, but only a 2-year or 24,000 mile warranty on other emissions control components.

(ii) Impacts of program elimination

Consumers would see a savings of $16.40 per year. This figure assumes motorist would still be subject to the safety only inspection that costs $12.75 plus a $0.85 authorization fee for a passing inspection.

Inspection stations in the 48 Emissions Counties would see a loss in revenue of $118 million per year collectively based on 2011 electronic emissions authorization fees.

The impact of elimination of the emissions program on the Department of Environment and Natural Resources, Division of Air Quality would be a loss in funds of approximately $3.2 million per year for DAQ based on calendar year 2011 emissions electronic authorization fee sales.

The impact of elimination of the emissions program on the Department of Transportation, Division of Motor Vehicles would be a loss in funds of approximately $14.9 million per year for the Emissions Program Account, $8.6 million per year for the Telecommunications Account, and $2.7 million per year for the Highway Fund based on calendar year 2011 emissions electronic authorization fee sales.

Another notable impact due to eliminating the emissions inspection program would be loss of funding directed to the Volunteer Rescue/EMS Fund annually in the amount of $894,483 as well as $596,322 given to fund the Rescue Squad Workers Relief Fund. These funding figures are based on calendar year 2011 emissions electronic authorization fee sales.

(6) Any other issues pertinent to the study under this section.

Other issues that would need to be addressed if the three newest model years were exempted from emissions inspection:

- Leased vehicles – Consumers who lease new vehicles will benefit the most from the three-year exemption as most leases usually last three years.
- Permanent plated vehicles (state/city/county owned) do not have an annual registration requirement. Since there is no annual registration requirement, DMV requires these vehicles to be inspected annually by the end of each calendar year if registered within one of the 48 counties that require an emissions inspection.
- The state of Massachusetts eliminated its two-year exemption in favor of a one-year exemption for consumer protection (if there is any problem with the vehicle in the first two years, it is more likely to be repaired under warranty) and to reduce the loophole for fraudulent inspections (inspectors no longer tempted to try to change something to make the vehicle look newer to get the exemption). See Appendix B for details of other state's emissions inspection program exemptions.

II. Recommendation for Exempting Vehicles from Emissions Inspections

The recommendation is that the legislature exempt the three newest model year vehicles from emissions inspections and the state will use adjusted compliance rates to make up for the projected deficit in emission reductions. The effective date of this legislation should allow enough time for the Department of Environment and Natural Resources to submit the appropriate SIP revisions to the USEPA – this will take approximately 9 to 12 months. Additionally, the Division of Motor Vehicles will need time to recode its software to properly reflect the change in legislation. Therefore, if legislation were passed in the 2012 Short Session, the legislation should

have an effective date no earlier than Jan. 1, 2014. It is important that the state submit to USEPA the appropriate SIP revisions addressing any legislative change in the program prior to the legislation taking effect.

Appendix A – Required Changes to General Statutes for Three Year Exemption

Article 3A.

Safety and Emissions Inspection Program.

Part 1. Safe Use of Streets and Highways.

§ 20-183.1: Repealed by Session Laws 1993 (Reg. Sess., 1994), c. 754, s. 3.

Part 2. Safety and Emissions Inspections of Certain Vehicles.

§ 20-183.2. Description of vehicles subject to safety or emissions inspection; definitions.

(a) Safety. – A motor vehicle is subject to a safety inspection in accordance with this Part if it meets all of the following requirements:

(1) It is subject to registration with the Division under Article 3 of this Chapter.

(2) It is not subject to inspection under 49 C.F.R. Part 396, the federal Motor Carrier Safety Regulations.

(3) It is not a trailer whose gross weight is less than 4,000 pounds or a house trailer.

(a1) Safety Inspection Exceptions. – The following vehicles shall not be subject to a safety inspection pursuant to this Article:

(1) Historic vehicles, as defined in G.S. 20-79.4(b)(63).

(2) Buses titled to a local board of education and subject to the school bus inspection requirements specified by the State Board of Education and G.S. 115C-248.

(b) Emissions. – A motor vehicle is subject to an emissions inspection in accordance with this Part if it meets all of the following requirements:

(1) It is subject to registration with the Division under Article 3 of this Chapter, except for motor vehicles operated on a federal installation as provided in sub-subdivision e. of subdivision (5) of this subsection.

(2) It is not a trailer whose gross weight is less than 4,000 pounds, a house trailer, or a motorcycle.

(3) It is a 1996 ~~or later~~ model and not less than three model years old measured by comparing the vehicle year to the current calendar year.

(4) Repealed by Session Laws 1999-328, s. 3.11, effective July 21, 1999.

(5) It meets any of the following descriptions:

a. It is required to be registered in an emissions county.

b. It is part of a fleet that is operated primarily in an emissions county.

c. It is offered for rent in an emissions county.

d. It is a used vehicle offered for sale by a dealer in an emissions county.

e. It is operated on a federal installation located in an emissions county and it is not a tactical military vehicle. Vehicles operated on a federal installation include those that are owned or leased by employees of the installation and are used to commute to the installation and those owned or operated by the federal agency that conducts business at the installation.

f. It is otherwise required by 40 C.F.R. Part 51 to be subject to an emissions inspection.

(6) It is not licensed at the farmer rate under G.S. 20-88(b).

(7) It is not a ~~new~~ motor vehicle less than three model years old (measured by the vehicle's model year compared to the current calendar year).~~as defined in G.S. 20-286(10)a. and has been a used motor vehicle, as defined in G.S. 20-286(10)b., for 12 months or more. However, a motor vehicle that has been leased or rented, or offered for lease or rent, is subject to an emissions inspection when it either:~~

~~a. Has been leased or rented, or offered for lease or rent, for 12 months or more.~~

~~b. Is sold to a consumer purchaser.~~

(8) It is not a privately owned, nonfleet motor home or house car, as defined in G.S. 20-4.01(27)d2., that is built on a single chassis, has a gross vehicle weight of more than 10,000 pounds, and is designed primarily for recreational use.

(c) Definitions. – The following definitions apply in this Part:

(1) Electronic inspection authorization. – An inspection authorization that is generated electronically through the electronic accounting system that creates a unique non-duplicating authorization number assigned to the vehicle's inspection receipt upon successful passage of an inspection. The term "electronic inspection authorization" shall include the term "inspection sticker" during the transition period to use of electronic inspection authorizations.

(2)Emissions County. – A county listed in G.S. 143-215.107A(c) or designated by the Environmental Management Commission pursuant to G.S. 143-215.107A(d) and certified to the Commissioner of Motor Vehicles as a county in which the implementation of a motor vehicle emissions inspection program will improve ambient air quality.

(3) Federal installation. – An installation that is owned by, leased to, or otherwise regularly used as the place of business of a federal agency.

(1965, c. 734, s. 1; 1967, c. 692, s. 1; 1969, c. 179, s. 2; cc. 219, 386; 1973, c. 679, s. 2; 1975, c. 683; c. 716, s. 5; 1979, c. 77; 1989, c. 467; 1991, c. 394, s. 1; c. 761, s. 7; 1993 (Reg. Sess., 1994), c. 754, s. 1; 1995, c. 163, s. 10; 1997-29, s. 12; 1999-328, s. 3.11; 2000-134, ss. 7, 7.1, 9, 11; 2001-504, ss. 4, 5, 6, 10; 2004-167, s. 10; 2004-199, s. 59; 2006-255, s. 1; 2007-503, s. 2; 2008-172, s. 1; 2009-570, s. 33.)

§ 20-183.4C. When a vehicle must be inspected; 10-day trip permit.

(a) Inspection. – A vehicle that is subject to a safety inspection, an emissions inspection, or both must be inspected as follows:

(1) Repealed by Session Law 2012-xxx, effective month, day, 2012.~~A new vehicle must be inspected before it is sold at retail in this State. Upon purchase, a receipt approved by the Division must be provided to the new owner certifying compliance. (1a) A new motor vehicle dealer who is also licensed pursuant to this Article may, notwithstanding subdivision (1) of this section, examine the safety and emissions control devices on a new motor vehicle and perform such services necessary to ensure the motor vehicle conforms to the required specifications established by the manufacturer and contained in its predelivery check list. The completion of the predelivery inspection procedure required or recommended by the manufacturer on a new motor vehicle shall constitute the inspection required by subdivision (1) of this section. For the purposes of this subdivision, the date of inspection shall be deemed to be the date of the sale of the motor vehicle to a purchaser.~~

(2) A used vehicle must be inspected before it is offered for sale at retail in this State by a Dealer. Upon purchase, a receipt approved by the Division must be provided to the new owner certifying compliance.

(3) Repealed by Session Law 2007-503, s. 5, effective October 1, 2008.

(4) Except as authorized by the Commissioner for a single period of time not to exceed 12 months from the initial date of registration, a ~~new or~~ used vehicle more than three years old acquired by a resident of this State from outside the State must be inspected before the vehicle is registered with the Division.

(5) Except as authorized by the Commissioner for a single period of time not to exceed 12 months from the initial date of registration, a vehicle more than three years old owned by a new resident of this State who transfers the registration of the vehicle from the resident's former home state to this State must be inspected before the vehicle is registered with the Division.

(5a) Repealed by Session Law 2007-503, s. 5, effective October 1, 2008.

(6) A vehicle that has been inspected in accordance with this Part must be inspected by the last day of the month in which the registration on the vehicle expires.

(7) A vehicle that is required to be inspected in accordance with this Part may be inspected 90 days prior to midnight of the last day of the month as designated by the vehicle registration sticker.

(8) A ~~new or~~ used vehicle more than three years old acquired from a retailer or a private sale in this State and registered with the Division with a new registration or a transferred registration

must be inspected in accordance with this Part when the current registration expires unless it has received a passing inspection within the previous 12 months.

(9) Repealed by Session Laws 2010-97, s. 3, effective July 20, 2010.

(10) An unregistered vehicle may be registered with the Division in accordance with G.S. 20-50

(b) for a period not to exceed 10 days prior to the vehicle receiving a passing inspection in accordance with this Part.

(11) A person who owns a vehicle located outside of this State when its emissions inspection becomes due may obtain an emissions inspection in the jurisdiction where the vehicle is located, in lieu of a North Carolina emissions inspection, as long as the inspection meets the requirements of 40 C.F.R. § 51.

(b) Permit. – The Division may issue a 10-day trip permit to a person that authorizes the person to drive a vehicle whose inspection authorization or registration has expired. The permit may only be issued when the person has furnished proof of financial responsibility. The permit must describe the vehicle whose inspection authorization or registration has expired. The permit authorizes the person to drive the described vehicle for a period not to exceed 10 days from the date of issuance.

(c) Exemption. – The Division may issue a temporary exemption from the inspection requirements of this Article for any vehicle that has been determined by the Division to be principally garaged, as defined under G.S. 58-37-1(11), in this State and is primarily operated outside a county subject to emissions inspection requirements or outside of this State. (1993 (Reg. Sess., 1994), c. 754, s. 1; 1997-29, s. 2; 2001-504, s. 11; 2007-481, s. 2; 2007-503, s. 5; 2008-190, s. 3; 2009-319, s. 2; 2010-97, s. 3.)

Appendix B – Details on Other States' Programs

Criteria - 1996 a nd newer, Light Duty, gasoline						
States	**Program Required**	**Network Type**	**Inspection Frequency**	**Model Years Exempt**	**Criteria for 1st inspection**	**Contact Name (email)**
AZ, Phoenix	Enhanced	Centralized	Annual	5 Model Years	Exemption is based on when the vehicle is first registered - ie "the birth date", does not depend on model year. The count starts with the vehicle's first registered year as year one. Generally that is the first year of a new model vehicle. If first registered in 2008, you have to count 2008 as year one, 2009 is year two, 2010 is year three, 2011, is year four, 2012 is year five, and the vehicle will require an emissions test in 2013 registered for the 1st time in October 2011 will not require an inspection until registration is due in 2016. Then vehicle will be inspected every even year from then on.	Adrion L. Osborne [Osborne.Adrion@azdeq.gov] 602-771-3959
AZ, Tucson	Basic	Centralized	Annual	5 Model Years	Exemption is based on when the vehicle is first registered - ie "the birth date", does not depend on model year. The count starts with the vehicle's first registered year as year one. Generally that is the first year of a new model vehicle. If first registered in 2008, you have to count 2008 as year one, 2009 is year two, 2010 is year three, 2011, is year four, 2012 is year five, and the vehicle will require an emissions test in 2013 registered for the 1st time in October 2011 will not require an inspection until registration is due in 2016. Then vehicle will be inspected every even year from then on.	Adrion L. Osborne [Osborne.Adrion@azdeq.gov] 602-771-3959
CA	Enhanced	Decentralized	Biennial	6 Model Years	In 2011 the newest vehicle being tested will be 2005 model year vehicles of the vehicle was puchased in CA and was first registered in CA. Example - A 2008 Toyota from NC and registered with CA this year (2011), would require an inspection to complete registration and would then fall in line with State's Biennial test schedule. Note: If same 2008 was purchased and registered in CA in same year, first inspection would be required in 2014.	Patrick Dorais, (Pratrick. Dorais@dca.ca.gov)
CO, Bolder/Denver and Northern Front Range	Enhanced	Centralized	Biennial	4 Model Years	Inspection is based by the VIN model year of the vehicle. That means in 2011 the newest vehicle being tested are 2007 model year vehicles.	Sidebottom, James [James.Sidebottom@dphe.state.co.us]
CT	Enhanced	Decentralized	Biennial	4 Model Years	Exemption is based on model year of vehicle. In 2011 the newest model to be tested will be 2008 model year vehicles. Exempt will be 2009, 2010, 2011 and 2012 model years.	Dan Jalbert [Dan.Jalbert@ct.gov] 860-263-5333

Criteria - 1996 a nd newer, Light Duty, gasoline						
States	**Program Required**	**Network Type**	**Inspection Frequency**	**Model Years Exempt**	**Criteria for 1st inspection**	**Contact Name (email)**
DE, Kent/New Castle	Low Enhanced	Centralized	Biennial	5 Model Years	Exemption is based on model year of vehicle. In 2011 the 2005 model year vehicles will be requiring their first inspection. In 2012 the 2006 will be getting their first inspection.	Clapper, Scott A (DelDOT) [Scott.Clapper@state.de.us] 302-744-2533
DE, Sussex Co.	Basic	Centralized	Biennial	5 Model Years	Exemption is based on model year of vehicle. In 2011 the 2005 model year vehicles will be requiring their first inspection. In 2012 the 2006 will be getting their first inspection.	Clapper, Scott A (DelDOT) [Scott.Clapper@state.de.us] 302-744-2533
ID, Ada County	Basic	Decentralized	Biennial	4 Model Years	SIP requirement - 4 model year exemption. Exemption is based on the VIN's Model Year. That means in 2011 the newest vehicle being tested will be 2007 model year vehicles .	Jon Pettit jonathan.pettit@deq.idaho.gov 208-373-0582
ID, Canyon County	Basic	Decentralized	Biennial	5 Model Years	State requirement for Ozone 5 model year exemption. Exemption is based on the VIN's Model Year. That means in 2011 the newest vehicle being tested will be 2006 model year vehicles .	Jon Pettit jonathan.pettit@deq.idaho.gov 208-373-0582
IL	Enhanced	Centralized (State contractor run) & Decentralized (private)	Biennial	4 Model Years	First four years based on model year of vehicle are exempt. Inspection will be required in the 5th year. I.E. In 2011, the 2007 model year vehicles will be coming in for their first inspection. Since this is a biennial test state, even model year vehicles are inspected in even years and odd model year vehicles tested in odd years. If a vehicle comes into the state they must receive an inspection before registration and will be given either a one-year or two-year sticker. A one-year sticker will be given in order to get vehicle syned back to their required inspection year, even to even, odd to odd.	Steve Thorpe (steve.thorpe@illinois.gov) 217-524-5607
IN	Enhanced	Centralized	Biennial	4 Model Years	First four years based on model year of vehicle are exempt. Inspection will be required in the 5th year. In 2011 the newest vehicle being tested will be 2007 model year vehicles. Older vehicles or those coming into the State, for example a 2009 Toyota coming from NC, registered Indiana, the first inspection would be required in 2013.	Phil Doyle, PDoyle@idem.in.gov 317-232-8420
KY (Louisville area)	NA	NA	NA		IM program was cancel in 2003. Took Nox credit by regulating kiln temp at concrete plants.	Lauren Anderson 502-574-60000

Criteria - 1996 a nd newer, Light Duty, gasoline						
States	**Program Required**	**Network Type**	**Inspection Frequency**	**Model Years Exempt**	**Criteria for 1st inspection**	**Contact Name (email)**
ME	Low Enhanced	Decentralized	Annual		No exception in the program because OBD joined the existing safety program and Maine did not want to create any confusion to the motorist.	Scott Wilson Scott.wilson@maine.gov 207-287-8442
MA	Low Enhanced	Decentralized	Annual	1Model Years	Program runs actually as NC.	Davis, Paul (DEP) [paul.davis@state.ma.us] 617-348-4080
MO	Basic	Decentralized	Biennial	4 Model Years	Exemption is based on model year of vehicle. The vehicle will receive an inspection in the fourth (4th) year. For example: In 2011, the 2007 model year vehicles will be receiving their first inspection. A 2011 model vehicel will receive its first inspection in 2015. The state also perform inspections within these first four years on change of ownership if milage is greater than 6,000 miles, then vehicle falls back in line to regular exemption schedule.	Dachroeden, Chuck [chuck.dachroeden@dnr.mo.gov] 314-416-2115
NV, Clark/Washoe Co	Low	Decentralized	Annual	2 Model Years	Based off registration date not model year of vehicle. Waiver	Sig Jaunarajs
NH	Enhanced	Decentralized	Annual	No Exemptions		Jennifer Jakubauskas jjakubauskas@safety.state.nh.us 603-271-8800
NJ	Low Enhanced	Centralized (private) & Decentralized (state owned)	Biennial	5 Model Years	Exemption is a straight up absolute five (5) model years. In 2011 the newest model year to be inspected will be 2006 model year vehicles. Example: If you brought a used (but <5 yr old) vehicle into NJ, it would get a sticker for 5 years out from the model year without an inspection. A 2009 vehicle will receive its first inspection in 2014.	Rob Schell [Rob.Schell@dep.state.nj.us] 609-292-3196
NM, Albuquerque	Basic	Decentralized	Biennial	2 registration cycles (4 model years)	In 2011 the newest vehicle being tested will normally be 2007 model year vehicles. However, vehicle must be inspected on change of ownership and therefore it is likely newer vehicles will appear in 2011. Once change of ownership has taken place, the vehicle than falls in line with the State's regular Biennial test schecule.	Glenn Dennis (gdennis@cabq.gov) 505-764-1110
NY	Enhanced	Decentralized	Annual	2 Model Years	Exemption is based on model year of vehicle. In year 2011, the model year 2009 vehicle will be receiving their first inspection. The 2011 model year vehicle will in like manner receive their first inspection in 2012 (model year plus 2.	James Clyne (jjclyle@gw.dec.state.ny.us) 518-402-8310

Criteria - 1996 a nd newer, Light Duty, gasoline						
States	**Program Required**	**Network Type**	**Inspection Frequency**	**Model Years Exempt**	**Criteria for 1st inspection**	**Contact Name (email)**
OH	Enhanced	Centralized	Biennial	4 Model Years	Exemption is based on model year of vehicle. 2011 Model Year vehicle first required inspection will be 2015. Odd Model Year will alwasys be inspected in odd years and even Model Year vehicles will always be inspected in even years.	Riggleman, Mike [Mike.Riggleman@epa.state.oh.us] 614-644-3060
OR, Portland,	Basic	Centralized	Biennial	4 Model Years	Inspection follows the initial registration date of the plate number. A new vehicle purchase and registered with a new plate in OR, will receive 4 model year exemption. IE If you purchased a 2011 model year vehicle or even a 2012 model year vehicle and register it in November 2011, your first inspection will be at plate renewal in 2015. Note: Any transfers of plates or out-of-state coming into Ooragon wil fall in line to regular Biennal test schedule and would not receive any exemptions.	BEYER, Gary [BEYER.Gary@deq.state.or.us] 971-673-1641 Also spoke with Abby Ulam
RI	Enhanced	Decentralized	Biennial	First 2 Model Years	Inspection is not required on a new motor vehicle until 24 months after its date of initial purchase since this is a biennial state. Note: If a "new" vehicle has more than 25,000 miles and is up for sale on used car lot within these first two years it must be inspected, otherwise it will be inspected at its regular biennial schedule.	Frank Stevenson frank.stevenson@dem.ri.gov 401-222-2808 ext 7021
TN	Basic	Centralized	Annual	First Model Year	Just like NC progam.	Vickie Lowe, (Vickie.Lowe.tn.gov) 615-532-6811
UT - Davis County, Salt Lake County, Utah County, Weber County	Basic	Decentralized	Biennial /Annual	2 Model Years no inspection, then biennial for next next six years, and then annual	There are decentralized stations available in each of the four counties. However, Davis county also has an inspection station that is also used as a challenge station. All four counties have been standardized and the registration for all 1996 or newer light duy gasoline vehicles is that the first eight years of the vehicle are biennial inspection and afterwards the inspection becomes annual, all based on registration. - Example: A 2011 vehicle purchased in 2010 is registered in 2010 so that is the time the eight year period begins. No inspection due in 2010 (year of regsitration) or 2011. The first inspection it will receive will be November 2012, then November 2014, next November 2016 and last 2018. Then from November 2018 and on the inspection will be annual and is tied to registration denial. Uath legislature is currently studying wheather to change to a straight 4-5 year exemption.	Joe Thomas (jthomas7@weber.edu) (801) 626-7836

Criteria - 1996 a nd newer, Light Duty, gasoline						
States	**Program Required**	**Network Type**	**Inspection Frequency**	**Model Years Exempt**	**Criteria for 1st inspection**	**Contact Name (email)**
VT	Enhanced	Decentralized	Annual	No Exemption		Tom Moye (tom.moye@state.vt.us) 802-241-3819
VA	Enhanced	Decentralized	Biennial	currently 2, going to 4 with SIP approval	Current exemption is based on registration year for the new vehicle. Since a brand new vehicle is "considered "to have receive an inspection, the next inspection would occur upon registration renewal, thus a two (2) year exemption. If and when EPA approves new SIP, vehicle exemptions would be based on model year.	Mike Thompson (jmthompson@deq.virginia.gov) 703-583-3866
WA	Basic	Centralized	Biennial	4 Model Years	Exemption is based on VIN model year of vehicle. Required inspection in the 5th year. For example in 2011, the 2006 model year vehicle will receive their first inspection. In 2012, newest model year tested will be 2007, etc.	John Raymond jray461@ecy.wa.gov 360-407-6856