

Presentation to the House Select Committee on Energy Independence and Alternative Fuel

North Carolina Department of Administration

Speros Fleggas, Senior Deputy Secretary

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Motor Fleet Management Division

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- Motor Fleet Management was created by the General Assembly in January 1982.
- The purpose of Motor Fleet Management is to serve North Carolina state employees by acquiring, maintaining, repairing, replacing and supplying passenger vehicular transportation needed in the performance of official duties.
- All state agencies, including universities, except for SBI, ALE and Highway Patrol, are required to utilize Motor Fleet Management for their passenger vehicle needs.

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- Motor Fleet Management is located in Raleigh on Blue Ridge Road. The garage on Blue Ridge Road repairs and maintains as many vehicles as possible in the Raleigh area.
- Vehicles outside of the Raleigh area are primarily maintained and repaired by local authorized service centers.
- Motor Fleet maintains sub compact, midsize, full size, SUVs and four wheel drive vehicles to meet the various needs of state agencies.

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- The Division maintains a refueling station at their facility on Blue Ridge Road in Raleigh. Both E-10 and E-85 are available at this location. Additional locations for E-85 are listed on the website and included in the glove box materials. The State of NC Fuel Credit card (Wright Express) is accepted at all of these posted commercial sites.
- Of the 7,716 vehicles in the fleet, more than 5,437 fleet vehicles are either flex fuel or hybrid. Flex fuel vehicles can use either E-10 or E-85. *Data as of Oct. 2011
- The State of NC has term contracts to purchase alternate fuel (E-85, E-10 and B-20)
- In 2009-2011, use of Alternate Fuel (E85) as a percentage of the total fuel used ranged from 7.5-8%.
 - Division Strategic Initiative (Performance Plan) – Implement an education program for drivers to increase the use of alternative fuels

Motor Fleet Management

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Excerpt from the Regulations Handbook, regarding fuel purchase / usage:

Section V – Fleet Services - GASOLINE PURCHASES

Gasoline purchases should be obtained from MFM facilities or other state owned facilities except when state-owned facilities are closed, when travel is out-of-state, or when it is more cost-effective to buy commercially. When available, E-85 or E-10 fuel should be purchased for flex-fuel vehicles. Otherwise, only regular unleaded gasoline from self service pumps (except those who have a physical handicap that would prevent the pumping from self-service pumps) is permitted to be purchased from commercial pumps.

Section XI - ALTERNATIVE FUELS

Motor Fleet Management promotes the use of alternative fuels.

At the Motor Fleet Management facility located on Blue Ridge Road, the following alternative fuels are available:

*Ethanol (E-85)

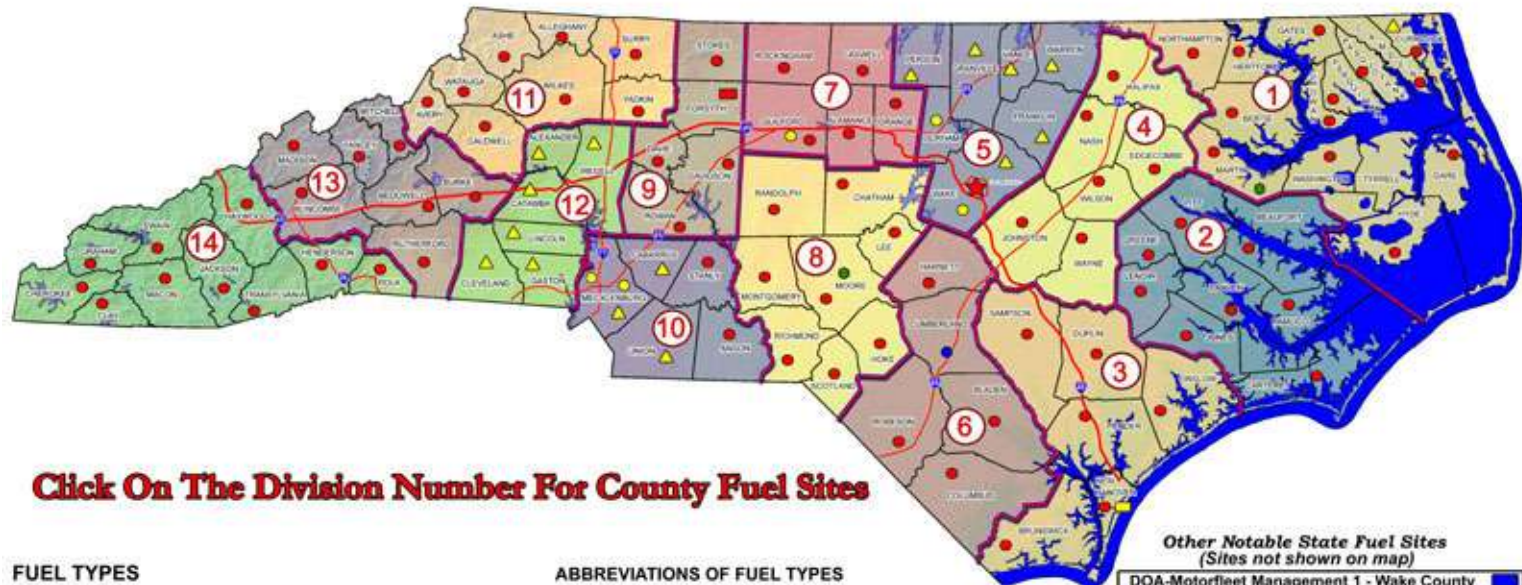
* E-10

Drivers are required to use alternative fuel in their assigned vehicle whenever the alternative fuel is available. A current list of commercial E-85 fueling sites can be found at: <http://www.e85fuel.com/>

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AUTOMATED FUEL SITES



Click On The Division Number For County Fuel Sites

FUEL TYPES

● UNL ONLY	▲ ETH. BIO-DS & PRP
● UNL & DS	▲ UNL & BIO-DS
● UNL DS & PRP	▲ BIO-DS & GASO
● UNL DS & ETH	▲ ETH & DS
● UNL BIO-DS & PRP	▲ ETH & UNL
▲ UNL CNG & ETH	▲ UNL BIO-DS, PRP & CNG
▲ UNL DS, PROP. & ETH	

ABBREVIATIONS OF FUEL TYPES

GASO - GASOLIN (E-10)
UNL - UNLEADED
DS - DIESEL
PRP - PROPANE
CNG - COMPRESSED NATURAL GAS
ETH - ETHANOL (E-85)
BIO-DS - BIO-DIESEL

Other Notable State Fuel Sites (Sites not shown on map)

DOA-Motorfleet Management 1 - Wake County
DOA-Motorfleet Management 2 - Wake County
Highway Patrol Training Center - Wake County
Department of Corrections - Wake County
Cherry Hospital - Wayne County
Fayetteville Highway Patrol - Cumberland County
John Umstead Hospital - Granville County
UNC-Wilmington - New Hanover County

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Statutes guiding alternate fuel usage

G.S. 143-341

- 2a. To participate in the energy credit banking and selling program under G.S. 143-58.4. The Division is eligible to receive proceeds from the Alternative Fuel Revolving Fund under GS 143-58.5 to purchase alternative fuel, develop alternative fuel refueling infrastructure , or purchase AFVs as defined in G.S. 143-58.4
- 2b. As used in this sub-sub-subdivision, "fuel economy" and "class of comparable automobiles" have the same meaning as in Part 600 of Title 40 of the Code of Federal Regulations (July 1, 2008 Edition). As used in this sub-sub-subdivision, "passenger motor vehicle" has the same meaning as "private passenger vehicle" as defined in G.S. 20-4.01. Notwithstanding the requirements of sub-sub-subdivision 2a. of this sub-subdivision, every request for proposals for new passenger motor vehicles to be purchased by the Department shall state a preference for vehicles that have a fuel economy for the new vehicle's model year that is in the top fifteen percent (15%) of its class of comparable automobiles. The award for every new passenger motor vehicle that is purchased by the Department shall be based on the Department's evaluation of the best value for the State, taking into account fuel economy ratings and life cycle cost that reasonably consider both projected fuel costs and acquisition costs. This sub-sub-subdivision does not apply to vehicles used in law enforcement, emergency medical response, and firefighting.

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- The Energy Policy Act (EPA) State and Alternative Fuel Provider Rule requires state government and alternative fuel provider fleets that operate, lease, or control 50 or more light-duty vehicles within the United States to acquire alternative fuel vehicles (AFV).
- A percentage of North Carolina State governments new light-duty vehicle acquisitions must be AFVs.
- The State Energy Office is the designated entity to report acquisition activity to the U.S. Department of Energy annually.
- The state earns credits for every light-duty vehicle acquired annually beyond base requirements which can be banked or sold.
- Credits are also earned through alternative fuel use.
- Funds can be used to purchase alternative fuel, develop alternative fuel refueling infrastructure, or purchase AFVs.

Motor Fleet Management Division

North Carolina General Statute, 143-341(8)(i)(2b) requires the Department of Administration, Division of Motor Fleet Management, to report annually beginning in 2011 to the Joint Legislative Commission on Governmental Operations and to the Environmental Review Commission on state law that requires a preference for fuel economy for new vehicle purchases in the top 15% of its class of comparable vehicles.

- First year of the report
- 109 vehicles were purchased in 2011, 88 of which were Law Enforcement and exempt from the statute. The remaining 21 vehicles purchased were bid and awarded on state term contract in compliance with SL 2009-241.

State Parking Division

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- In August 2011, State Parking Division received its first of two electric vehicles to use in parking operations. The second is scheduled to arrive in late summer 2012.
- State Parking's operations are confined within the downtown State Government Complex. Vehicles are used to patrol parking lots, investigate maintenance problems and support visitor parking operations. Electric vehicles are ideal in our setting where frequent short trips are necessary.



State Parking Division

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Green Square Parking Deck

- 23 electric car chargers for use by visitors and employees.
 - 7 charging stations in the visitor parking area
 - 16 charging stations in the employee parking area.
 - By Spring 2012, up to 20 additional charging stations are planned to be available in the employee parking area.
- LED lights, which consume one-third less energy and last four times longer than comparable fluorescent lights;
- A 20,000-gallon cistern will collect rainwater, flush it through an oil-water separator to remove debris, and store it until needed to irrigate state properties in downtown Raleigh;
- Design that maximizes use of natural light, which in turn reduces the need to burn those highly efficient LED bulbs; and
- Devices installed throughout the facility will track energy consumption and gauge savings.

State Parking Division

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Commuter Alternatives

Employees with workstations in the State Downtown Parking Complex are encouraged to use programs available for commuting to work to reduce driving costs and reduce demand for parking. Employees who use alternatives to commute to work may register for the Emergency Ride Home program operated by [Triangle Transit](#).

- GoPass Transit Program for Raleigh-Based State Employees
- Eligible employees receive an annual transit pass that allows them to ride any [Capital Area Transit](#) or Triangle Transit bus route for free at any time. A valid state I.D. must be presented with the GoPass. Both CAT (Capital Area Transit) and TTA (Triangle Transit Authority) have several routes that serve the complex.
- CAT also operates the [R-Line](#), which is a free circular route that links the complex to other parts of downtown.
- TTA VanPool Subsidy for Downtown State Employees
- Downtown state employees who are members of a Triangle Transit vanpool may be eligible for a \$15 monthly subsidy and up to 24 daily parking passes annually to use on days when they must drive to work. Employees must not have an assigned parking space to receive the subsidy and passes. Learn more about [TTA vanpools](#).

State Construction Office

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Sustainable, Energy Efficient Buildings Program

- 2007 Session of the General Assembly through SB 668 (S.L. 2007-546), which became codified as G.S. 143-135.35 through 143-135.40 (S.B.1946) established Sustainable, Energy Efficient Buildings Program.
- Established specific energy and water efficiency requirements for major new and renovated state-funded facilities.

State Construction Office

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Sustainable, Energy Efficient Buildings Program

- Legislation established three very specific performance goals for major state facilities:
 - Energy: Legislation stipulates that energy efficiency for major new facilities must be at least 30% (20% for renovated facilities) greater than performance goals established by ASHRAE 90.1-2004, as defined in Chapter 7 of the 2006 NC Energy Conservation Code.
 - Indoor Water: Current NC State Building Code sets specific maximum flow limits for various types of plumbing fixtures. Legislation stipulates indoor water consumption by major facilities must be at least 20% less than code requirements.
 - Outdoor Water: Currently no codes or standards. Legislation stipulates that outdoor water consumption by major facilities must be reduced by at least 50%.

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Sustainable, Energy Efficient Buildings Program

- To ensure that the goals of the legislation are met, two additional requirements are imposed:
 - Commissioning must be employed to verify that design requirements have been met.
 - Energy and water consumption meters and other measurement methods must be installed and the actual energy and water consumption over the first year must be verified by the owing agency.
- State Construction Office requires detailed life cycle cost analyses and energy model and water consumption reports be submitted for review during the various design phases of the project.
- Ensures that design decisions are optimized for all building systems throughout the project design process.
- Annual Report, per G.S. 143-135.39 to Government Operations.

Facility Management Division

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- Mission *To maintain state facilities managed by DOA in a cost effective, energy efficient and service oriented manner.*
- *This includes 133 facilities consisting of over 5.56 million square feet of office space and located on 850 acres of landscaped ground*
- Monthly Performance Measures to track the number of kilowatt hours consumed per square foot of space.

Facility Management Division

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- Acquisition of alternate fuel vehicles through Clean Fuel Advanced Technology Project (CFAT) grant program.
- The Department utilizes the battery powered/electric vehicles which are ideally suited to landscape management in the Downtown State Government Complex as they can travel 40 miles on a single charge and carry 1,100 pounds of supplies.



The vehicles replaced two older vehicles with high emissions, helping to further reduce both costs and carbon footprint.