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Executive Summary

Executive Order 04-10 establishes ambitious goals for reducing state government’s consumption of petroleum fuels for transportation needs. This report summarizes the efforts of state government toward achieving the goals of the Executive Order.

The Executive Order provides a great deal of flexibility for state agency creativity toward achieving reduced dependence on petroleum. For starters, increasing the use of biofuels and reducing travel are logical steps in the direction of this significant objective.

State government is moving toward the goals established in Executive Order 04-10. The SmartFleet Committee began tracking fuel use in January of 2005 and fuel reports are distributed to agencies on a quarterly basis. SmartFleet is working with the Department of Administration on modifying vehicle acquisition contracts to reflect the necessity of reducing petroleum dependence. This is especially true of light duty vehicles, which feature the greatest availability of alternative-fuel options. SmartFleet is also implementing a fleet information system, which will be a valuable tool for helping agencies track fuel use and improve fleet management. Furthermore, SmartFleet is working with three agencies – Administration, Transportation and Natural Resources – on a plug-in hybrid conversion project at Minnesota State University, Mankato.

Early reports from state agencies indicate an overall reduction in the use of petroleum fuels and an increase in the use of biofuels:

- Combined retail and bulk purchases of gasoline have decreased 4.3 percent
- Combined retail and bulk E85 purchases have increased 64.5 percent.
- Combined retail and bulk diesel fuel purchases have decreased 4.8 percent.

The SmartFleet Committee recommends retaining the goals of Executive Order 04-10, with the recognition that many factors will influence state government’s ability to achieve them. Some of these factors are beyond the control of state government: Market forces largely drive the availability of fuels and vehicles. However, wise purchasing decisions and vehicle operator education are within the control of state government.

It is the viewpoint of SmartFleet, based on initial information, that Minnesota state government can potentially achieve the goals of Executive Order 04-10. SmartFleet recommends no changes in the goals at this time.
**Introduction**

Executive Order 04-10 calls for reducing state government’s dependence on petroleum-based vehicle fuels in favor of alternative fuels, including ethanol and bio-diesel. The Executive Order establishes ambitious goals for significantly reducing the use of petroleum fuels by the state’s on-road vehicle fleet. These goals call for:

- A 25 percent reduction in gasoline use by 2010
- A 50 percent reduction in gasoline use by 2015
- A 10 percent reduction in petroleum-based diesel fuel use by 2010
- A 25 percent reduction in petroleum-based diesel fuel use by 2015

The Executive Order also calls for ensuring that at least 75 percent of the state’s new on-road vehicles:

- Use “cleaner fuels,” including ethanol, bio-diesel and hydrogen
- Have fuel economy ratings of at least 30 miles per gallon city/35 miles per gallon highway

Additionally, the Executive Order calls for increasing the use of technology for delivering state government information and services to the public.

**Accomplishments**

**Fuel use reporting** – The Executive Order calls for tracking fuel use against a 2005 baseline. Fuel reporting and tracking mechanisms were implemented in January of 2005 and the baseline has been established. Fuel tracking will continue as data is collected over the next several years.

**Fleet management information system** – The departments of Administration, Natural Resources and Transportation have taken a lead role in the selection and implementation of M5, a statewide fleet management information system that is currently rolling out to agencies. The departments of Agriculture and Public Safety and the Pollution Control Agency are adapting M5, with full enrollment of all cabinet-level agencies by January of 2008 (See Appendix B for a complete schedule). M5 will significantly improve management of state fleet vehicles and fleet resources, including infrastructure and personnel.

**New vehicle purchases** – SmartFleet is also extremely active in working with the Department of Administration’s Materials Management Division in the establishment of vehicle acquisition contracts. Flex-fuel vehicles are included on the contracts whenever possible, while less-fuel-efficient gasoline-powered passenger vehicles have been dropped in favor of fuel-efficient models.

SmartFleet continues to work toward implementation of the miles-per-gallon criteria set out in the Executive Order and has established temporary targets of 28 mpg city/33 highway for the 2006 and 2007 contract years because of the lack of model availability from manufacturers.
Mileage criteria will reach 30/35 as manufacturers offer models that can meet state fleet needs, possibly as early as 2008. Opportunities for 30/35 mpg vehicles will also improve as more hybrid vehicles are marketed for fleets.

**Flex-fuel plug-in hybrid pilot project** – SmartFleet is also working with Minnesota State University, Mankato, on a pilot project converting a gasoline hybrid vehicle to a flex-fuel plug-in hybrid vehicle. The Department of Natural Resources is supplying a vehicle, while the departments of Administration and Transportation are providing other necessary resources for this project.

**First statewide SmartFleet meeting** – SmartFleet’s inaugural statewide meeting, held in July 2006, provided a forum for advancing the objectives of Executive Orders 04-10 and 06-03, sharing fuel-usage information and announcing a model policy for E85 fuel purchases. The model policy (Appendix C) can be used as written or modified for individual agency use.

**The State is Making Progress**

**Gasoline purchases are decreasing** – State government is making progress toward reducing its consumption of gasoline. Initial data shows that gasoline use in the first three quarters of 2006 has decreased by 4.3 percent, or 204,895 gallons, compared to the base year of 2005 (Chart 1).
**E85 purchases are increasing** – State government is also increasing its use of E85 (a blend of 85 percent ethanol and 15 percent gasoline). E85 use during the first three quarters of 2006 totaled 121,354 gallons, or 64.5 percent (47,570 gallons) above the same period during 2005 (Chart 2).

![E85 Usage Chart](image)

**Diesel fuel use is also decreasing** – Reducing diesel fuel use is a more difficult challenge. However, initial diesel fuel use for the first three quarters of 2006 has decreased by 4.8 percent, or 86,242 gallons, compared to the same period in 2005 (Chart 3).

![Diesel Fuel Usage Chart](image)
**Improving fleet efficiency** – State government is working on opportunities for improving fleet efficiency in areas that will positively affect the goals set out in Executive Order 04-10. The Fleet Management Shared Services project of the State of Minnesota’s Drive to Excellence envisions enterprise-wide coordination of fleet management business, technology and operational functions. The Fleet Council, formed through this project, will oversee the SmartFleet Committee that was empowered by Executive Order 04-10.

**Can Minnesota Government Meet the Goals of Executive Order 04-10?**

The goals in Executive Order 04-10 are aggressive. Although the decline in gasoline use is encouraging, success is dependent on many factors, not all of which the state can manage or control. Among these:

**Light trucks** are a significant share of the state fleet, but manufacturers are only now beginning to offer flex-fuel models. This limited availability restricts the state’s ability to use E85 in its fleet workhorse. As more flex-fuel light trucks become available, the state will have additional opportunities for reducing petroleum fuel use.

**Diesel power** is an attractive alternative for some agencies. Because of the limited availability of flex-fuel light trucks, some agencies are opting for diesel engines because they offer a good opportunity for moving toward cleaner fuels. In effect, some agencies are making an investment in diesel-powered light trucks to capture potential longer-term gains from bio-diesel as this fuel becomes more available in the future.

**State bulk fuel tanks** typically dispense gasoline, rather than E85, because of the wide variety of engines – from lawn mowers to trucks – that they must fuel. A state agency contemplating a change from gasoline to E85 in a bulk tank must consider all potential impacts of that decision. In many instances, state agencies are encouraging flex-fuel vehicle fueling at E85 retailers whenever practical while maintaining gasoline in their bulk tanks.

**Biodiesel blending** could reduce the use of petroleum diesel fuel. More than half of the state’s current diesel fuel purchases are from retail vendors. Biodiesel fuel is readily available in a 2 percent blend (B2) throughout the state. Although blends above B2 are not yet readily available, the state will have an increasing opportunity to use higher blends as they are added by retailers. State agencies with bulk diesel fuel tanks are also exploring the use of higher blends in these tanks. In order to meet the diesel fuel reduction goals of the Executive Order, agencies with bulk fuel tanks will need to blend biodiesel at rates higher than 2 percent. Higher level blending in bulk tanks is expected to begin as early as 2007.

**Hybrid vehicles** offer potential for saving fuel, but at a higher cost. Hybrid vehicles have the disadvantage of not qualifying for EPAct credits and tend to have higher purchasing and operating costs than conventional vehicles. Despite these issues, hybrids are beginning to contribute to reductions in gasoline use. The state contract currently includes the Ford Hybrid Escape, which is a fuel efficient small SUV. Although Toyota and Honda have been reluctant to
bid on state contracts, there are indications that one or both of these manufacturers may bid in future years. Manufacturers likely will be more willing to bid on state contracts as the supply of hybrid vehicles begins to satisfy the current demand. It is expected that future prices will also become more competitive with conventional vehicles.

**Recommendations**

The SmartFleet Committee recommends continuing toward the goals of Executive Order 04-10. SmartFleet will persist in its work with state agencies toward reducing petroleum fuel use. Based on fuel use statistics, SmartFleet members continue to believe that these goals are ambitious, but are achievable with some help from the automotive and fuel industries.

SmartFleet will continue to:

- Supply agencies with quarterly fuel reports showing progress toward the goals.
- Implement the new statewide fleet information system.
- Work with state agencies on ongoing development of alternative fuel policy and procedure.
- Work with the Department of Administration on developing vehicle acquisition contracts that reflect the goals of the Executive Order.
- Sponsor annual meetings of state agencies focusing on the goals and objectives of Executive Order 04-10, and for the distribution of information and promotion of best practices for effective, efficient fleet management.
Appendix A – Executive Order 04-10

EXECUTIVE ORDER 04-10 -- September 27, 2004
PROVIDING FOR STATE DEPARTMENTS TO IMPROVE FLEET AND TRAVEL MANAGEMENT

I, TIM PAWLENTY, GOVERNOR OF THE STATE OF MINNESOTA, by virtue of the authority vested in me by the Constitution and applicable statutes, do hereby issue this executive order:

WHEREAS, increased use of agricultural renewable fuels such as ethanol, biodiesel and hydrogen made from agricultural products will reduce Minnesota's dependence on imported oil and help protect our environment; and

WHEREAS, Minnesota's rural communities and agricultural economy stand to benefit enormously from increased use of these renewable fuels; and

WHEREAS, Minnesota leads the nation in the production and use of ethanol and biodiesel and Minnesota is a charter member of the Governors' Ethanol Coalition; and

WHEREAS, compared to other states, Minnesota has a unique economic advantage in the ability to produce clean, renewable, domestic fuels; and

WHEREAS, Executive Order 04-08 provides for state departments to take actions to reduce air pollution in daily operations; and

WHEREAS, Minnesota Statutes, Section 16C.135 requires state agencies, where feasible, to use cleaner fuels like ethanol, biodiesel, and hydrogen in state vehicles, and to purchase vehicles capable of being powered by these cleaner fuels;

NOW, THEREFORE, I hereby order:

Using 2005 as a baseline, the State of Minnesota shall reduce the use of gasoline by on-road vehicles owned by state departments by 25 percent by 2010 and by 50 percent by 2015, and the use of petroleum-based diesel fuel by those vehicles 10 percent by 2010 and 25 percent by 2015.

To meet the goals established above, each state department will, whenever legally, technically and economically feasible, subject to the specific needs of the department and responsible management of agency finances:

a. Ensure that at least 75 percent of purchases of new on-road vehicles, excluding emergency and law enforcement vehicles:

1) use "cleaner fuels" as that term is defined in Minnesota Statutes Section 16C.135, clauses 1, 3 and 4; or

2) have fuel efficiency ratings that exceed 30 miles per gallon for city usage or 35 miles per gallon for highway usage, including but not limited to hybrid electric cars and hydrogen-powered vehicles.
b. Increase its use of renewable transportation fuels, including ethanol, biodiesel and hydrogen from agricultural products.

c. Increase its use of web-based Internet applications and other electronic information technologies to enhance the access to and delivery of government information and services to the public, and reduce the reliance on the department's fleet for the delivery of such information and services.

The Commissioner for the Department of Administration, or designee, shall chair a SmartFleet Committee consisting of representatives designated by the commissioners of the Pollution Control Agency, Department of Agriculture and Department of Commerce and other state departments that wish to participate. To ensure effective and efficient state participation under this order, the SmartFleet Committee shall assist state departments in implementing the requirements of this order, including providing information, guidance, sample policies and procedures, and technical and planning assistance.

The SmartFleet Committee shall evaluate the goals and directives established above by December 2006 and periodically thereafter. The Committee shall make recommendations to the Governor for new or adjusted goals and directives, in light of the progress the state has made implementing this order, and of the availability of new or improved technologies.

For the systematic and efficient monitoring of progress in implementing this order by the Smart Fleet committee, the Department of Administration shall implement a fleet reporting and information management system. Each state department will use this management system to demonstrate its progress in complying with this order.

Petroleum-based diesel fuel used in a vehicle which a state department has retrofit to use ultra low sulfur diesel fuel and to add additional emissions control technologies is excluded when evaluating progress toward the reduction goals established in paragraph 1 of this Order. This exclusion applies only to vehicles purchased before the model year in which the federal Environmental Protection Agency's new clean diesel emission reduction rules take effect.

Pursuant to Minnesota Statutes 2004, section 4.035, subd. 2, this Order shall be effective fifteen (15) days after publication in the State Register and filing with the Secretary of State and shall remain in effect until it is rescinded by proper authority or it expires in accordance with Minnesota Statutes 2004, section 4.035, subd. 3

IN TESTIMONY WHEREOF, I have set my hand on this 27th day of September 2004.

TIM PAWLENTY
Governor
## Appendix B – Fleet Information System Roll-out Plan

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Appendix C – Model Policy for E85 Fuel Purchasing

Model Policy for E85 Fuel Purchasing

Executive Order 06-03 states, “All state employees utilizing vehicles from the state’s fleet shall, whenever practical, use E85 fuel when operating flexible-fuel vehicles. For the purpose of this executive order, the term ‘whenever practical’ refers to the reasonableness of obtaining E85.”

In an effort to clarify ‘whenever practical’ and ‘reasonableness,’ state employees should consider the following guidelines when fueling state-owned flex-fuel vehicles:

1. If E85 fuel is available (bulk or retail) within a five-mile radius of your normal parking location, you are expected to use E85 fuel whenever you fuel your vehicle.

2. You are expected to become aware of the E85 locations in your travel area (see links below). Many more retail fueling sites are or will be adding E85 in the future. Plan your travel so that you will be able to fuel your flex-fuel vehicle with E85 with the least amount of lost time and additional travel distance. You are expected to use E85 fuel in your flex-fuel vehicle if E85 is available without traveling more than five additional miles in your normal route.

3. In some cases it may be necessary to use gasoline in your flex-fuel vehicle. You are expected to reasonably limit these instances to a minimum.

When making fueling decisions, weigh the factors of the spirit of the executive order: increased use of renewable fuels, decreased dependence on petroleum fuels, protection of the environment, the best use of taxpayer dollars, and common sense. Please keep in mind that your agency is reporting E85/gasoline usage to the Governor’s Office and to the Legislature.

Thank you for your help in complying with the Executive Orders calling for the use of alternative fuels.

Current listings of E85 retail sites are available at these websites:

www.cleanairchoice.org/outdoor/E85InCounty.asp?State=MN

www.cleanairchoice.org/outdoor/StationList.asp?state=MN

www.cleanairchoice.org/outdoor/E85Fuel.asp
Appendix D – SmartFleet Committee Members

Diane Droeger – Minnesota Pollution Control Agency
Jackie Finger – Minnesota Department of Administration
Tim Gerlach – American Lung Association of the Upper Midwest
Ralph Groschen – Minnesota Department of Agriculture
Stacy Miller – Minnesota Department of Commerce
Tim Morse – Minnesota Department of Administration - Chair
John Scharffbillig – Minnesota Department of Transportation
Dave Schiller – Minnesota Department of Natural Resources