

North Carolina Department of Transportation

Alternative Fuel Fact Sheet

Table 1 – NCDOT Alternative Fuel Vehicles		
Type of Fuel	Number of Vehicles	Type of Vehicles
Flex Fuel E85	2,000+	Light duty vehicles (<8,500 GVW)
Biodiesel (B20)	6,500	On and off-road

Table 2- Alternative Fuel Stations	
Type of Fuel	Number of Stations
E85	5
Biodiesel (B20)	100

Alternative Fuel Experience

Level of satisfaction with alternative fuels

The quality of the B20 fuel has been excellent since NCDOT began purchasing from a contract that has specifications on feedstocks allowed at certain times of the year (see below). From NCDOT's experience, fuel quality is essential and can only be achieved with detailed bid specifications.

Why did the DOT adopt alternative fuel vehicles?

The Energy Policy Act of 1992 set goals, created mandates, and amended utility laws to increase clean energy use and improve overall energy efficiency in the United States. This act prompted NCDOT to enter the alternative fuel arena. Biodiesel was one of the fuels of choice for many reasons.

- Infrastructure was already in place.
- Could make the greatest impact in a short period of time.
- No changes needed in the engine fuel system in order to use.

The North Carolina legislature established a requirement in 2006 for NCDOT to reduce petroleum use by 20%.

Procurement Process

NCDOT generated specifications for Purchase and Contract to establish a state contract for B20. They are happy to share their specifications with anyone who is interested.

Notes on Bio-Diesel Feedstock

In the NCDOT contract a feedstock neutral product is allowed April through August. A soy based product is required September through March and cold weather additives are included in contract provisions for winter months. All B20 producers must be BQ9000 certified. The quality of the B20 fuel has been excellent since they began purchasing from this contract. NCDOT has not used B100 fuel.

NCDOT currently dispenses 6 million gallons of B20 biodiesel out of 50 million gallons of fuel used annually.

Photos



Flex Fuel Pickup Truck



Biodiesel Dump Truck



Biodiesel Fuel Station