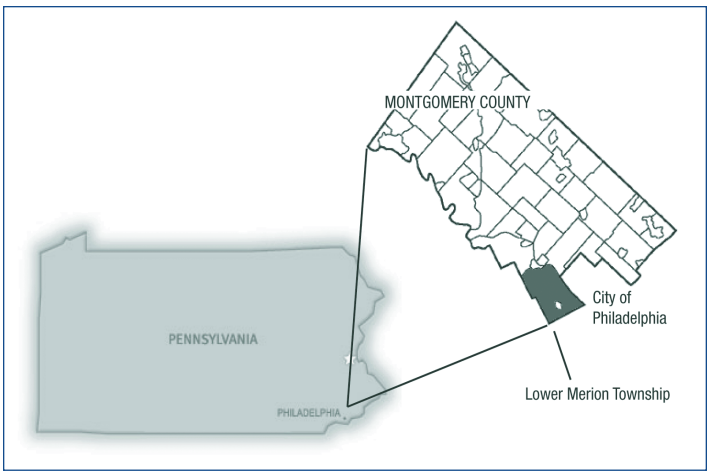
Clean Cities

Success Story April 2004

Lower Merion a Key Player in Alternative Fuel Buses

Lower Merion Township is located in the western suburbs of Philadelphia, with about 60,000 people living within its 24 square mile area. The township is mostly residential, with many historic districts and a politically-engaged populace.

The Lower Merion School District serves this Township as well as the Borough of Narberth, a 1-1/2 square mile town of 1,900. The school district aggressively cultivates its image as a progressive educational institution. Lower Merion offers one of the lowest tax rates in Pennsylvania and one of the highest per-pupil expenditures in the state. A total of 6,598 students attend the six elementary schools, two middle schools, and two high schools within the district.



Lower Merion Township, located just outside Philadelphia

The Lower Merion School District transportation department provides bus transportation for a total of 8,200 students attending 125 public, private, and parochial schools. The Lower Merion School District is also a member of the Greater Philadelphia Clean Cities Program Board of Directors due to their interest in alternative fuels.

Lower Merion School District

Lower Merion Bus Being Refueled

Alternative Fuel School Bus Activities in Lower Merion

Lower Merion School District currently operates a total of 68 dedicated CNG school buses. The fleet consists of 60 Blue Bird rear-engine buses with John Deere 8.1 liter engines, one Thomas rear-engine bus with a Cummins 5.9 liter engine, and seven Blue Bird minibuses with converted Chevrolet 5.7 liter engines. The district also operates a pair of Ford Econoline CNG vans as support vehicles.

Lower Merion's CNG program began in 1992, in response to local community concerns about noise and pollution from the district's diesel school buses. The CNG program began operations in October 1995 with the delivery of the first bus. Since that time, the natural gas bus fleet has logged over 4.5 million miles. Individual buses have logged between 11,000 and 120,000 miles. They have displaced a total of 900,000 gallons of diesel to date.

The district's buses travel about 60 miles per day per bus. On average, the buses can go about 120 miles between refuelings in stop-and-go traffic, and about 200 miles in highway driving. The buses are averaging about 5 miles per gallon overall.

For More Information

For more information on Lower Merion's activities, please contact the local Clean Cities Coordinator:

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Coordinator
Greater Philadelphia Clean Cities Program
Clean Air Council
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Suite 300
Philadelphia, PA 19103
(215) 567-4004 ext. 237 (phone)
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http://www.cleanair.org/cleancities/

Alternatively, you can contact the school district directly:

Michael Andre
Supervisor of Transportation
Lower Merion School District
301 East Montgomery Avenue
Ardmore, PA 19003
(610) 645-1945 (phone)
andrem@lmsd.org
http://www.lmsd.org

Initially, Lower Merion refueled its CNG buses at stations operated by the local gas utility, PECO Energy. Today, however, Lower Merion has its own refueling stations, consisting of two fast-fill CNG stations of 110 standard cubic feet per minute capacity. One station is located in Ardmore, and the other is located in Rosemont. Each station has a two-hose dispenser. The stations dispense an average total of 900 diesel-gallon-equivalents per day to the 68 buses. The buses typically take about ten minutes each to fill, and buses are assigned fueling time windows to equalize natural gas demand on the stations. If needed, the school district has a mobile emergency fueling unit.

Lower Merion School District

Lower Merion CNG Buses

The school district has been very successful in receiving grant funding for its alternative fuel activities, having gotten funding and technical support from the U.S. Department of Energy, the Pennsylvania Department of Environmental Protection, and PECO Energy. The district has received over $1.1 million in grant funding for its activities, and has matched that funding with a like amount of school district funding.

The school district would like to eventually convert its entire fleet of 79 school buses and 30 operational support vehicles to natural gas.

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