What Would Happen to the U.S.'s Annual Energy Situation if 50 Million of the 92 Million Single-Occupant Commuters Drove Tangos?

According to the 2002 Urban Mobility Report* (a study of the 75 largest urban areas in the U.S.), 5.7 billion gallons of fuel** are wasted annually due to idling in traffic. To add insult to injury, 3.6 billion hours of commuters' time is wasted every year. As shown in the chart below, the total energy costs of fueling 50 million *Tangos* for one year would be less than the value of that wasted fuel—not to mention the time-saving benefits gained by reduced road congestion.

Energy Requirements of Electric Vehicles as Compared to Internal Combustion Engine-Powered Vehicles

Retail value of fuel/energy in U.S. Dollars Electricity fuel costs calculated at 10¢ per kWh Gasoline fuel costs calculated at \$3.00 per gallon



Internal Combustion Vehicles

Tangos

Assumptions:

Average round-trip commute is 20 miles (U.S. Bureau of Transportation Statistics)

Internal Combustion Engine (ICE) costs: average fuel economy figured at 20 mpg.

Electric vehicle costs: *Tango's* energy consumption calculated at 200 Watt-hours per mile; 4 kWh energy required for 20 mile trip, equivalent to one 1500-watt space heater operated for 2 hours, 40 minutes.

Energy required to fuel 50 million Tangos for average commutes over one year: 73 terawatts

* David Schrank and Tim Lomax, Texas Transportation Institute, The Texas A & M University System (http://mobility.tamu.edu)

** 5.7 billion gallons of fuel would fill II4 supertankers or 570,000 gasoline tank trucks which, placed back-to-back, would stretch from New York to Las Vegas and back.