



ROCKWOOD SCHOOL DISTRICT

GREEN FLEET REPORT

2015

Mid-America Collaborative for Alternative Fuels Implementation



www.metroenergy.org

Metropolitan Energy Center

816-531-7283

Supported by funds from U.S. Dept. of Energy Award No. DE-EE0006009.

ROCKWOOD SCHOOL DISTRICT FLEET FOOTPRINT REPORT

For Fiscal year 2014, Rockwood's white fleet of 92 vehicles included in this report traveled 990,711 miles and consumed 67,798 gallons of fuel, priced at nearly \$254,656. Overall, these vehicles required 13,943 barrels of petroleum (oil) to operate and produced 878 tons of greenhouse gas emissions. Vehicle counts, miles traveled, fuel consumption, and fuel and maintenance costs data were provided by the Director of Purchasing and Transportation.

VEHICLES



92

MILEAGE



990,711

FUEL USED



53,348 gallons gasoline

14,450 gallons diesel

PETROLEUM USED



4,012 barrels

EMISSIONS PROFILE



2.514



875



.450



.010



.009



.076

RECOMMENDATION 1 | TELEMATICS/ DATA GATHERING

Making informed decisions about fleet operations can be difficult without detailed information on a fleet's history of vehicle and fuel usage. Telematics makes it easier for fleet managers to understand their assets, how they are being used, and where waste is occurring within the fleet. Telematics can also allow the School district to better enforce an anti-idling policy, perform route optimization, and monitor driving behavior of staff. There are many different options for telematics hardware and software available today. Below are several options School district may wish to consider, although it is recommended that Rockwood School district conduct research to learn about other options as well:

ASSETWORKS

AssetWorks develops software and hardware technology, as well as customized consulting services, for asset- and infrastructure-intensive organizations. Their technology and services are designed to help organizations of all sizes manage and maintain their assets -- including fleets, consumables, equipment, property and infrastructure efficiently and cost-effectively. AssetWorks is a popular choice for government fleets.

FLEETMATIC

Fleetmatics is a software service provider for fleets of all sizes. The complexity of the software and its output depends on the needs of the fleet; varying levels of service are offered, from GPS-tracking, to field service management. The website also features case studies categorized by industry or fleet size.

GPS INSIGHT

GPS Insight provides GPS tracking, navigation and messaging technology to fleet-based companies. Benefits reduce fuel costs, improve productivity, improve service and reduce labor costs. Features include alerts, customer maps, dashboard, driver ID, fuel card reporting, Garmin integration, graphs, hierarchy capability, landmarks, mapping, messaging, reporting, scheduled maintenance and vehicle history.

UTILIMARC

The Utilimarc software modules for fleet management include benchmarking, vehicle replacement, and technician staffing, dashboards, telematics, and repair time standards. The software works with all major fleet information systems to organize your fleet's data in a useful way.

VERIZON NETWORKFLEET

Networkfleet is a GPS tracking software that provides vehicle diagnostics such as speed, fuel efficiency, and emissions, as well as access to roadside assistance. The Networkfleet website also features a blog and downloadable e-books on topics like green fleet management and optimizing maintenance.

RECOMMENDATION:

STLRCC recommends that Rockwood School district assess the need for telematics before developing a list of desired features. The School district should also determine the cost it is willing to pay for this service annually. From there, the School district should determine which telematics provider matches the desired criteria and price.

RECOMMENDATION 2 | INTRODUCE ALT FUELS

The School districts Cargo Vans are ideal candidates to replace with an alternative fuel option. These vehicles are highly utilized and experiencing middle-of-the-road fuel economy. Switching to either CNG or LPG would yield significant savings for the fleet. At a price of \$1.98 per GGE, switching the fleet's 47 vans to CNG would pay back in just over 4.5 years. This equates to an annual fuel savings of nearly \$52,683. At a price of \$3.34 per gallon, LPG would payback in 10+ years. As gasoline prices rise or if CNG can be purchased at a cheaper rate, payback periods will drop even further.