Green Bay Metro
Green Bay, Wisconsin

Key Project Information

Equipment: Transit Bus
Project: Diesel Particulate Filter Installation
Number of Buses: 4
Project Year: 2010
Funding Agency: US EPA – National Clean Diesel Funding Assistance Program

The inhalation of diesel emissions can trigger adverse health problems, including chest pain, coughing, throat irritation and congestion and can worsen bronchitis, emphysema and asthma. Through a grant provided by the US EPA’s National Clean Diesel Funding Assistance Program, Leonardo Academy partnered with Green Bay Metro to reduce emissions from four transit buses. Green Bay Metro operates 13 full service bus routes throughout the Green Bay Metropolitan Area. Fixed route transit and paratransit services are provided to the cities of Green Bay and De Pere, villages of Allouez, Ashwaubenon, and Bellevue, and the Oneida Nation. Cumulatively, the public transit fleet of 37 buses has annual ridership of approximately 1.7 million, and this number is projected to increase over the next year as people seek more affordable modes of transportation during the economic downturn.

Green Bay Metro installed diesel particulate filters (DPF) on four of their buses that have been in service for more than 7 years. A diesel particulate filter is a device that acts similarly to the catalytic convertor of your car. It traps particulate matter contained in diesel exhaust and prevents it from distribution into the air. The particulate matter is later burned off during the regeneration process. The ThermaCat DPF was selected was because of the long duty cycles and typically lower exhaust temperatures in Northern Wisconsin – this technology successfully addresses both of these issues. The material in the catalyst also allows the particulate filter to regenerate at lower temperatures without operator intervention.

Estimate Project Benefits:

- CO₂ Reduced- 1,370 tons
- NOₓ Reduced- 41 tons
- PM Reduced- 1.5 tons
- Diesel Savings- 52,000 gal
- Fuel Cost Savings- $234,000