



City of Portland Green Purchasing Case Study

Retreaded Tires

Purchasing Green

When tires become worn, new tread can be bonded to the tire casing using a process similar to that of manufacturing new tires. CityFleet has used these retreaded tires for its heavy-duty trucks, about 15 percent of its fleet, since 1992. In a typical year, the city uses 500-600 retreaded tires.

Benefits

A retreaded tire takes only seven gallons of oil to make, compared to 22 gallons of oil to make a new tire. Using retreaded tires also prevents waste by diverting scrap tires from being stockpiled or disposed of in landfills. Stockpiled tires are a potential fire hazard and a common breeding ground for disease-carrying mosquitoes. According to the Oregon Department of Environmental Quality, Oregon generates about four million used tires, or 40,000 tons, every year.

A typical tire can be retreaded up to seven times. When tires can no longer be retreaded, CityFleet sends them to a private company that shreds them into a compound that is used for athletic tracks and other recycled rubber products.

Cost

Retreaded tires cost 30 to 50 percent less than their traditional counterparts. As long as the tire casing is in good condition, it can be reused again and again, saving money by eliminating the need for disposal. Consequently, CityFleet has experienced significant cost savings by purchasing retreaded tires instead of new tires.

Performance

CityFleet reports that retreaded tires perform just as well as regular tires—they can be driven at the same speeds and deliver similar mileage. According to the National Highway Traffic Safety Administration (NHTSA), retreaded tires are just as safe as new tires. The NHTSA also reports that the most common causes of tire-related accidents - regardless of whether the tires are new or retreaded - are road hazards and poor tire maintenance. Retreaded tires are commonly used nationwide on school buses, fire trucks, and ambulances and account for about 80 percent of all aircraft tires in service in the United States.



CityFleet uses retreaded tires on heavy-duty trucks.

At a glance –

Who –

- CityFleet

Product –

- Retreaded tires

Cost –

- Costs 30%-50% less than new tires

Benefits –

- Uses reclaimed/recycled materials
- Saves oil
- Reduces waste
- Product is recyclable

“Heavy-duty truck retreaded tires are a very smart investment for us. The cost of the retreaded tires is significantly less, plus we are able reuse the old tire casing instead of disposing of it, thus having a very minimal impact upon our environment while still getting the product we need to do our job.”

Shae Davies,
Vehicle Maintenance Superintendent,
CityFleet

Lessons Learned

CityFleet has had a positive experience with both the cost and performance of retreaded tires. Whether new or retreaded, it's important to keep tires well maintained, including ensuring the tires are properly inflated and avoiding excessive loading.

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About CityFleet

CityFleet's seven repair facilities maintain Portland's 3,150 vehicles and equipment. This includes parking patrol vehicles, sedans, pick-ups, vans, police sedans, dump trucks, back hoes, and heavy construction equipment. They perform oil, lube, and filter changes; DEQ emission inspections; and engine, transmission, drive train, electrical, suspension, heating, cooling, and air conditioning diagnoses and repairs. CityFleet garages are also certified Eco-Biz Automotive Shops, a designation that recognizes their commitment to minimizing their environmental impacts. CityFleet was also named one of the Top Elite Fleets by Government Fleet Magazine from 2011-2016, after being named the number one fleet in 2010. In 2015 CityFleet became a GFMA Certified Management Operation and Clean Fleet Certified. As a result, CityFleet was the first government fleet in North America to obtain a Master Certification.

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