

# **ENVIRONMENTAL STEWARDSHIP IN OUR OPERATIONS**

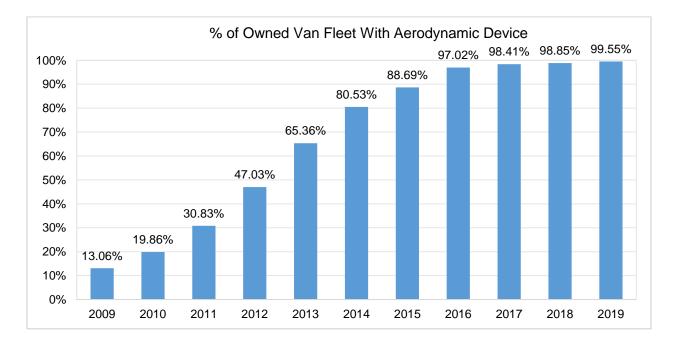
### **Our Commitment**

As part of Landstar's <u>Environmental, Health, Safety & Security (EHS&S) Responsible Care</u> <u>Partnership Program</u>, Landstar is committed to meet or exceed the environmental requirements of regulatory agencies applicable to our operations and to strive to meet other environmental requirements as become known to us.

# **Aerodynamic Features on Trailing Equipment**

Landstar owns over 13,000 pieces of trailing equipment, including over 11,000 van trailers. Almost all of our van trailers are outfitted with aerodynamic features such as side skirts, topkits and/or undertrays that aim to improve fuel mileage and thereby reduce emissions. In fact, in 2015 we announced a multi-year process (since completed) to replace our entire fleet of van trailers operating throughout the United States and Canada to meet or exceed standards promulgated by the California Air Resources Board, or CARB, which are typically considered the most stringent state or federal standards in our industry.

Here is a chart that shows our progress in installing aerodynamic devices on our van trailers since 2009:

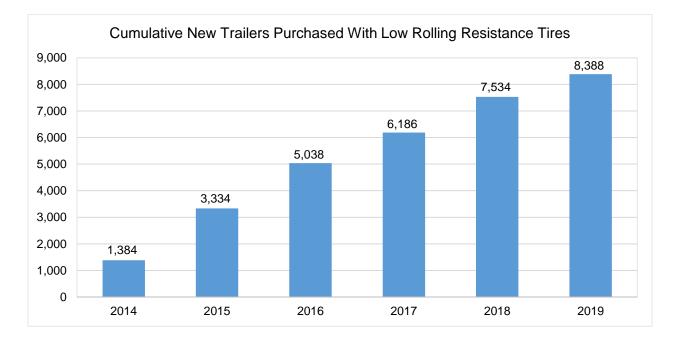




Landstar is committed to looking for new ways to increase the energy efficiency of new trailers we purchase as well as of our existing trailers through after-market updates and routine maintenance.

### Low Rolling Resistance Tires

Landstar also is committed to equipping our trailers with low rolling resistance tires. Low rolling resistance tires are designed to reduce the energy loss as a tire rolls, thereby increasing fuel efficiency and reducing emissions. Since 2014, 100% of our new trailer purchases have been equipped with low rolling resistance tires.



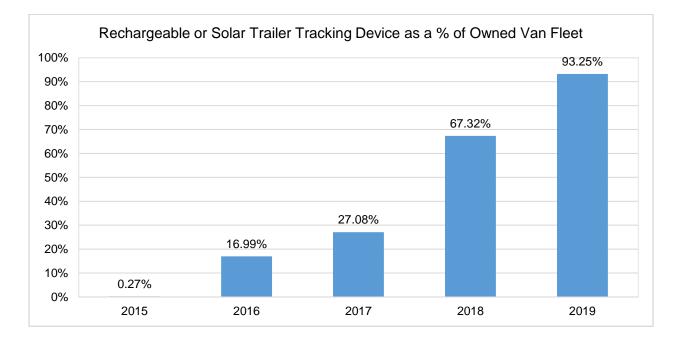
Since 2014, we have also been committed to using low rolling resistance tires to replace existing tires, subject to availability at the location where the tires are being replaced.

## **Trailer-Tracking Device Batteries**

Landstar uses thousands of remote tracking devices on trailers to help us gain efficiencies in our operations. In recent years, we have replaced thousands of single use battery-powered trailer tracking units with rechargeable battery powered and/or solar-powered units. As of the end of the 2019, 11,098, or over 93%, of our van trailers were equipped with rechargeable battery-powered tracking devices.



Here is a chart that shows our progress regarding the use of rechargeable or solar powered batteries in trailer tracking devices used with our van trailer fleet:



## **Reducing Idling and Empty Miles**

Landstar can have an impact on the environment by helping truck capacity providers who participate in our network to reduce empty miles and time spent idling. Landstar uses technology-based tools that, when coupled with our significant scale, can reduce the amount of time a BCO or third-party motor carrier spends idling following delivery while trying to find their next load. Our tools also help truckers in our network to secure loads with limited deadhead, or a load in the direction of home avoiding significant deadhead. For example:

- Load Alerts<sup>®</sup> works on behalf of the trucker by automating searches of Landstar's thousands of available loads for a load that will be available for the capacity provider following delivery of his current load. Once the tool finds a load that matches the criteria set up by the trucker, Load Alerts communicates that information to the capacity provider's mobile device via email or voice recording well in advance of arrival at destination.
- Landstar Maximizer<sup>®</sup> enables Landstar BCOs to find the best combination of back-toback available loads for themselves, creating options for multi-leg, full-week runs right from their smartphones.



• **BCO Analytics** (currently in beta) empowers BCOs by putting leading edge business intelligence tools in the hands of these small business owners to analyze and optimize their operations.

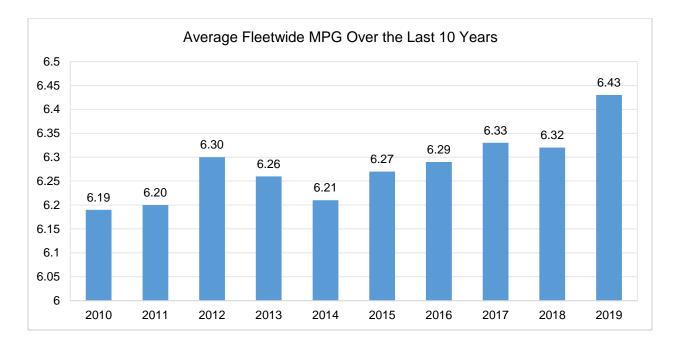
Landstar also uses technology-based tools to help independent Landstar agents to increase the operational efficiency throughout our network. Geo-positional data from electronic logging devices (ELDs) enables Landstar independent agents to gain visibility into truck position, which is used to help Landstar agents determine the availability of a BCO or other third-party truck capacity provider for loads coming available at the truck's current destination. Landstar and its independent agents also collaborate to provide load optimization services to customers to reduce miles traveled and increase efficient use of transportation equipment in a customer's supply chain.

## **BCO Fuel Efficiency**

Fuel is one of the largest sources of carbon emissions within the supply chain. This is a challenge for us as Landstar does not own any tractors nor does it control the fuel purchasing decisions of truckers that participate in our network, including all Business Capacity Owner (BCO) independent truck owner-operators.

Landstar has information regarding BCO fuel usage through the fuel tax administrative program we offer to BCOs. Here is average MPG over the last ten years across all BCOs who participate in our fuel tax administrative program. Please note that MPG is influenced by many factors including freight mix, equipment type, cargo weight, routing and other factors.





In 2019, Landstar reported over 875,000,000 miles traveled by BCOs for fuel tax purposes. The difference in average MPG for these BCO miles between 2019 and 2010 was 0.24 MPG. By improving their MPG over this period, BCOs used 5,200,000 less gallons of fuel in 2019 than they would have had they run these same 2019 miles at the average MPG they experienced in 2010.

Management is committed to taking steps to encourage BCO independent contractors to increase the fuel efficiency in their operations. Landstar promotes the use of Load Alerts<sup>®</sup> and Landstar Maximizer<sup>®</sup> to BCOs and also encourages BCOs to adopt new technologies provided by original equipment manufacturers and aftermarket product manufacturers to increase the fuel efficiency of their operations. For example, BCOs can obtain discounts through the Landstar <u>Contractors' Advantage Purchasing Program (LCAPP)</u> on products such as low rolling resistance tires and auxiliary power units.

#### Safe Transportation of Hazardous Materials

We are one of the largest haulers of hazardous materials in the United States. We are committed to reducing, and where feasible, eliminating the generation, discharge, disposal or spilling of hazardous materials. All Landstar BCOs must receive a hazmat certification endorsement on their commercial driver's license (CDL) to qualify with us. <u>Here</u> is a recent white paper we prepared discussing our approach to the safe transportation of hazardous materials.



### **Environmental Management System (EMS) Certification**

Landstar transportation services companies are certified to <u>ISO 9001:2015</u> quality management system standards and <u>RC14001:2015</u> environmental, health, safety and security management system standards. RC14001 broadens the scope of the ISO 14001 standard beyond the traditional Environmental Management System to include health and safety, security, transportation, outreach, emergency response and other Responsible Care requirements.

# Participation in the EPA's SmartWay® Program

Landstar has been a registered <u>SmartWay<sup>®</sup> Transport Partner</u> in the Environmental Protection Agency's SmartWay Program since April 2005.

Updated: April 2020