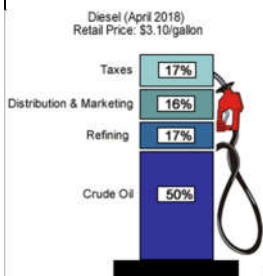


## Choosing the Optimum Tires for your Fleet

To view verified low rolling resistance (LRR) new tires and retreads go to [Smartway](#)



Source: US Energy Information Administration

It's not easy determining what the best combination of tires is to run in your fleet. The ultimate tire for your operation would be the best of all worlds: great fuel economy, maximum tire removal miles, casings that can handle multiple retreads and traction in all weather conditions. However, tire managers recognize that choosing the best tire is a compromise. Each wheel position, steer, drive, trailer and dolly require different characteristics in order to optimize performance. Different service vocations (ie. Linehaul, P&D, mixed service) also require different tire solutions.

Acquisition price should not be the final decision maker in choosing the proper tire. The entire life cycle cost, from initial mounting to multiple retreads is most important. Tire brand "A" may cost 20% more than tire brand "B", but if casing retreadability is significantly better with brand "A" then the overall cost/mile will clearly favor the tire which initially had a higher purchase price. Fuel economy is another major consideration. If Tire "C" outperformed tire "D" by 3 percent in fuel efficiency, then tire "C" would be able to justify a higher initial buying price.

Every fleet is unique. To determine what tires will perform best for your fleet and generate the lowest cost/mile over its entire life cycle requires a serious tire evaluation. You can't just track a couple of trucks and trailers for the evaluation. There are so many variables that can affect tire performance that unless the test sample size is large enough, you really won't be able to determine which is the best combination of tires. Some of these variables include the vehicle make/model, load, service vocation, tires removed early because of damage/punctures and of course the driver. Industry studies over the years revealed that drivers can influence treadwear by up to 35% depending on how aggressive they drive. The TMC of the Ameri-

can Trucking Association recommends a sample size of 30 tires (if fleet size can accommodate that) to be statistically significant.

This all means that a fleet manager must take the time to really think through any tire evaluation. The worst scenario is running an evaluation for 2 or 3 years and not being able to identify which tire has the overall lowest cost/mile.

With an evaluation of 30 trucks, the tires should all be mounted within a 30-day period to minimize variables associated with weather. In the hottest months, tires will have a faster wear rate and also tend to pick up more puncturing objects. You will need to record vehicle odometers and brand or barcode tires with a unique number. Tire pressures should be checked on a regular basis (with a high quality gauge) as low tire pressures will adversely affect fuel economy, mileage and retreadability. When test tires come out of service, the reason must be identified and final miles recorded. When the casing is sent for retreading, confirm that the casing survived the retread process and confirm which tread design (drive or trailer) was cured onto the casing.

The most difficult issue associated with tracking tires over time is the need to keep detailed records of the test tires. Important data includes the history of mounting, dismounting, repairs, retreading, rotation and final casing removal analysis. Your maintenance associates must be dedicated to the process. It is certainly impossible to track every tire in your fleet but a statistically valid sample size will produce the same results.

Always work with your local tire professionals to help design a tire evaluation program to help you choose the best overall tire combination which makes sense for your specific fleet service vocations.

### Q&A PSI ANSWERS YOUR QUESTIONS

**Q.** My fleet uses tire inflation and relies on the driver to manually report when the warning light is illuminated. Can the tire inflation system be linked into our trailer telematics?

**A.** In most cases, yes. There are a plethora of telematics providers and you will need to work with your vendor to ensure compatibility.

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