Tires

Maintaining a Healthy Tire Inventory

Vehicle tires are very costly. For most fleets only labor and fuel are larger expenses in the operations budget.

Two ways to keep these costs down are to increase the life of tires and to decrease the price of replacing tires.

To increase tire life, proper tire inflation and tire mating are extremely important. Municipalities can decrease the cost of tires, while maintaining quality, through the use of retreads. Retread tire technology has changed significantly over the years making their use a viable alternative to purchasing new tires.

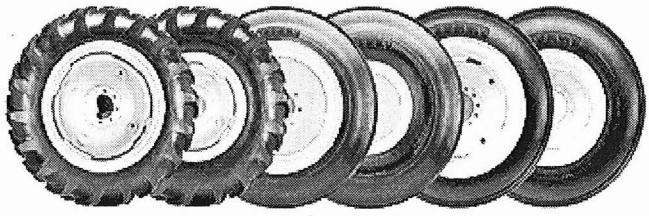
Getting the Most Out of Tires

To get the most out of tires, highway departments must ensure that tires wear evenly. Maintaining the proper air pressure in tires is a primary method to guarantee that tires wear evenly. Improperly inflated tires can reduce the life span of tires by up to 50%. Improperly inflation is also the biggest reason for enroute failures and most of the scrap rubber on the roads.

Proper mating means that the same size tires are run in tandem. Just because two tires are labeled the same does not ensure that they are indeed the same size. Operators can check the size of tires by mounting them on a rim and using a T-square to measure them. Hint: both tires must touch the T-square in the same place on both sides. Properly mated tires touch the pavement evenly so that one tire is not doing all of the work while the other does not touch the pavement.

Retreads

In the past, retreads have been blamed for the scrap rubber on the roads. If one takes a close look at the scrap, he or she will almost always see wire embedded in the rubber. Retreaders don't put wire in the rubber when they put on a tire casing. What has failed is the entire belt. Tire scrap indicates



that the tires were under inflated and the tire got so hot that it blew.

People often site safety and reliability as reasons for not using retreads. As for safety, federal law allows the use of retreads on all vehicles expect the steer axles of passenger vehicles (such as school buses). Many delivery companies consider retreads reliable.

Retread tires can save highway departments 30-50% of what new tires cost. To get the most "bang for your buck" recycle old casings. The value of a casing is $75-100. Virgin casings demand the highest prices. If municipalities use old casings they know what type of wear and care the casings have received. Otherwise, a purchaser might get a casing prone to failure.

If municipalities retread their own casings, they should use casings that have been properly inflated throughout the tire's life. Also, leave 4/32 of tread remaining. Ninety percent of all problems with tires occur within the last 4/32 of tread, this leaves more surface for retreading.

The quality of retreads has increased greatly. Ten to fifteen years ago, there were close to 10,000 retread shops, today there are around 1,350. The huge decrease can be attributed to the fact that many were not doing a good job.

Commercial shops can retread almost any tire. Even though it isn't economical to use retreads on an automobile, the use of retreads on trucks and heavy equipment can amount to huge savings for municipal departments.

Sources:
http://www.goodyear.com/nat/safety/q1-inflation.html
Thanks to Bill Baird of Bandag Tires.