You may know that new cars, mini-vans and light trucks sold in the US beginning in 2008 have come with a tire pressure monitoring system. Many slightly older vehicles have these systems as well. A tire pressure monitoring system – called TPMS – consists of sensors on each wheel that measure tire pressure. If tire pressure drops 25 percent below the manufacturer’s recommended pressure, the sensor sends a signal to a monitoring unit that causes a warning to light up on the dashboard. When you see the warning light, you know it’s time to put some air in your tires.

There are many benefits to driving with properly inflated tires. First is cost savings. Running at the correct air pressure improves fuel economy. Driving on under-inflated tires is like driving through sand – it drags down your fuel economy. You’ll also see longer, more even tread wear so your tires will last longer. Another important benefit of properly inflated tires is increased safety. Under-inflated tires become hotter and that heat can actually lead to tire failure – possibly resulting in an accident. Your tires will perform better and more safely when proper tire pressure is maintained.

Law-makers and vehicle manufacturers advocate TPMS systems hoping that they will save lives, property damage and inconvenience. While you can’t put a value on saving a life, keep in mind that TPMS systems will carry a cost.

The systems themselves are added into the price of the car. The batteries in the sensors will fail and parts will break over time and need to be replaced. In colder climates around Western NY, ice and salt are frequent causes of TPMS failures. In addition, there are other behind-the-scenes costs to be aware of. Every time a tire is replaced, repaired, rotated or balanced, the tire technician has to deal with the TPMS system.

Your service center must purchase equipment used to scan and reactivate the TPMS system after every tire service. Because older tire change equipment can damage TPMS sensors, your service center may need to buy expensive, new tire changers. Since there is no uniformity among manufacturers, technicians need to be trained on several TPMS systems. These behind-the-scenes costs are very real to your service center. That’s why they are anxious for you to understand the financial impact of TPMS systems.

In the past, they’ve been able to quickly and cheaply provide tire services, and then pass the low cost on to you as an expression of their good will. But now even these simple jobs will take much longer. Sensors may need to be removed and reinstalled. Even a tire rotation may require that the monitor be reprogrammed to the new location of each tire. When a car battery is disconnected, the TPMS system may need to be reprogrammed. So when you start to see the cost of tire changes, flat repairs and rotations going up, please keep in mind that it’s because of this new safety equipment.

Taking the place of $1.49 rubber valve stems of the past is the tire pressure monitor sensor. The replacement of these sensors can cost from $79.95 – $149.95 per sensor. Over time, these sensors are subject to corrosion and may require replacement. Service kits are available as routine monitor maintenance or to repair leaky monitors if the monitor is able to be effectively serviced. These parts are subject to the harshest conditions on the vehicle. In some cases, normal tire service may uncover a sensor problem that will prevent proper tire repair and may require on-the-spot sensor replacement. Please do not ask your auto service professional to disable or not properly repair this Federally Mandated safety device. The liability issues can be staggering. It is important to remember that the TPMS warning light only comes on when a tire is severely under-inflated or when the system is malfunctioning. You’ll still want to check your tire pressure at least once a month. Here’s wishing you safe travels!