

**Diesel Retrofit Fact Sheet**

**The Dilemma: Retrofit or Replace?**

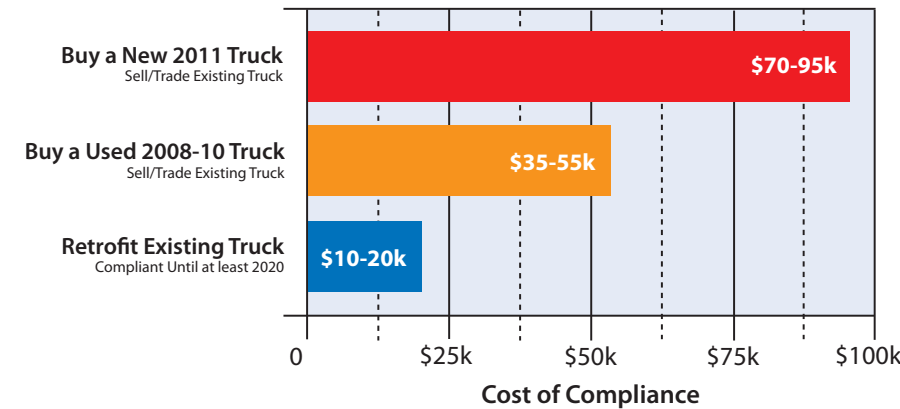


One of the great things about diesel engines, as well as the vehicles they power, is that they have a very long useful life, often 15-20 years. For many fleets, these older vehicles are great sources of income because they carry no debt and generate good cash flow. Unfortunately, new CARB regulations will impact the continued operation of these older, profitable vehicles.

Rather than simply replace these reliable "money makers" with expensive new equipment and more debt, many fleets are opting for diesel retrofits, the least costly approach to CARB compliance until at least 2020.

**The Economics: Do the Math...**

As an example, if I outright own a 2004 Class 8 truck, it's time to make some decisions. To meet CARB's newest emission standards, I've got the three choices:



- New trucks are not only expensive, but include very complex engines and emission controls that require DEF (diesel emission fluid).
- Without retrofits, used trucks may be difficult to sell in California, even at a lower value. Selling used trucks outside of California will likely be a headache.

Although there are many factors that should be considered, the costs outlined above are difficult to dispute. Retrofitting in-use diesels to comply with new CARB regulations makes good economic sense. Retrofits not only require less capital, but the DPF (diesel particulate filter) technology is proven and can help fleets capture the expected useful life of these productive assets.

**The Bottom Line? Retrofits are Worth a Serious Look!**

During challenging economics times, keeping these older, dependable "money makers" on the road can be good for the bottom line. Although buying new vehicles seems like an easy solution, the additional debt, costs and complex equipment should be carefully weighed against the benefits of retrofitting.

