



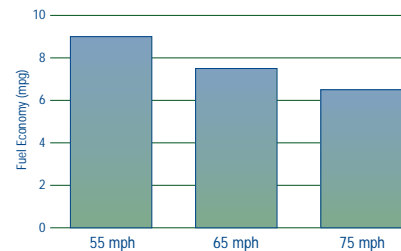
Green Transport Partnership

A Glance at Clean Freight Strategies: Reducing Highway Speed

Reducing the maximum speed of a (typical) long-haul truck from 70 mph to 65 mph would save over \$1,450 in annual fuel costs.

What is the challenge?

Truck fuel economy drops significantly as speeds rise above 55 mph. Higher speeds can also lead to higher engine maintenance costs because engine life is directly related to the amount of fuel burned over its lifetime.



What is the solution?

Trucks can improve fuel economy by reducing highway-driving speeds. Some motor carriers have adopted a maximum speed policy for their drivers as a way to save fuel costs and to promote safety. These policies can be implemented through electronic engine controls, driver-training programs, or incentive programs that monitor truck engine speed and reward drivers for staying within set limits. Nearly all new truck engines in use today are electronically controlled and the cost of changing the maximum speed settings on these engines is negligible.


The results are in...

The impact of vehicle speed on fuel economy depends on a range of factors, including vehicle aerodynamics and operating patterns. Thus the specific impact of speed reduction on fuel economy will vary significantly for each vehicle and speed range. The American Trucking Associations (ATA) has estimated that a combination truck driving 55 mph uses approximately 20-percent less fuel than a truck driving 65 mph.

Based on fuel economy data from the ATA and engine manufacturers:

- Reducing the maximum speed of a typical long-haul truck from 70 mph to 65 mph would save over \$1,450 in annual fuel costs.
- Reducing maximum speed further from 65 mph to 60 mph would save an additional \$1850 on fuel each year.

According to the ATA, the time between engine overhauls is directly related to the amount of fuel consumed. Holding maximum speeds at 60 mph rather than 70 mph, saves \$135 per year on maintenance costs for a typical combination truck. These lower speeds would eliminate more than 22 metric tonnes of carbon dioxide emissions in a year for each truck.



Reducing highway speed does mean longer travel times. A trucker driving at a maximum speed of 60 mph instead of 65 mph would spend about eight percent more time on the road. Because many drivers are paid by the mile or load, not by the hour, reducing speed often does not directly increase trucking company labor costs. It may reduce the productivity of trucking operations, however, because slower trucks are able to carry fewer loads. Still, a number of well-managed fleets have found that the benefits of speed reduction easily outweigh the costs.

Next steps

Trucking firms should examine the benefits of lower speeds and implement programs to encourage drivers to reduce highway speeds. In most cases, the reduction in fuel costs and maintenance far outweigh the increased delivery times. A number of well-managed truck fleets have programs in place to reduce highway speeds and promote safe driving by using driver training, incentive programs, and electronic engine controls. More information can be obtained from the following sources:

An Equipment Operating Costs Comparison. ATA Publication number T0006

Fleet Managers Guide to Fuel Economy, ATA Publication number T0013