



THE NEW ZEALAND VERSION OF

**SAFE AND FUEL
EFFICIENT DRIVING**



CASE STUDY

You can teach old dogs new tricks

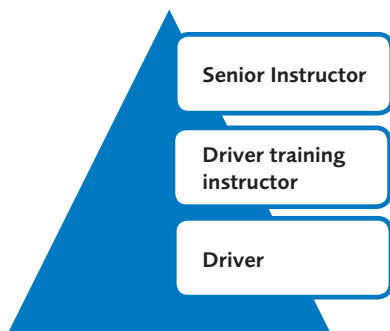
Safe and Fuel Efficient Driving New Zealand (SAFED NZ) is a driver development course for truck, bus and coach drivers. SAFED NZ helps organisations to reduce fuel and maintenance costs, reduce CO₂ emissions and improve safety.

This case study looks at the amount of fuel saved by the SAFED NZ senior instructors and instructors they have trained. It shows that even very experienced and knowledgeable drivers can still make fuel savings when applying SAFED techniques.

Background

SAFED NZ has been adapted from a successful scheme in the United Kingdom, which has been offered on a commercial basis for over six years, and has trained more than 20,000 drivers. In the UK, SAFED is regarded as the most successful driver development programme that the road transport industry has ever adopted.

The SAFED NZ course is offered to drivers by senior instructors and driver training instructors. Senior instructors are approved to train driver training instructors, as well as drivers.



There are nine senior instructors who offer SAFED NZ training across the country. These senior instructors were trained by John Boocock, who helped to design the SAFED course in the UK.

Results of senior instructor training

The nine senior instructors were trained in SAFED NZ techniques in March 2010 under the supervision of John Boocock. John also observed the senior instructors as they each trained two driver training instructors.



Some of the senior instructors with John Boocock, second from right.

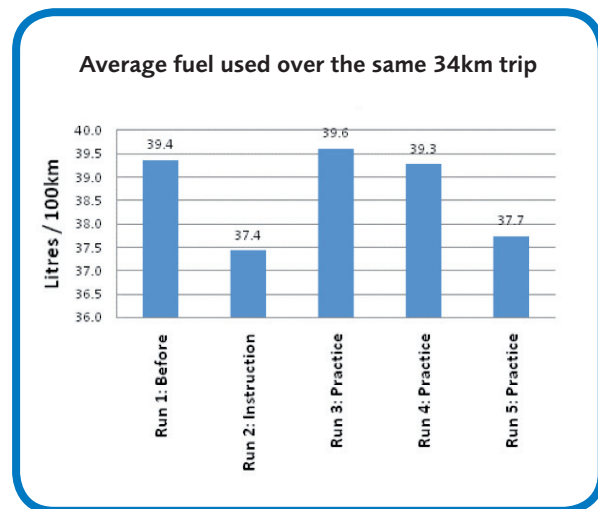
The training was carried out using a combination of classroom-based and practical learning. All instructors had to drive a specific route that was about 35-40 km long and included a mix of urban and rural roads and state highways, intersections, and different road terrains.

An important aspect of SAFED NZ is the measurement of before and after driver performance. This shows drivers (and trainee instructors) what a difference they can make in the amount of fuel they use, trip time, gear changes and other aspects of their driving performance. The following table shows the improvements made by the senior instructors and 15 driver training instructors.

	% Reduced trip duration	% Reduced fuel use	% Reduced brake use	% Reduced gear changes	% Reduction in braking distance	% Reduction in time spent braking	% Increased time in green band	% Reduced time above green band
Seniors	6.0%	4.9%	25.7%	48.2%	38.3%	49.8%	31.3%	50.8%
DTIs	4.3%	5.3%	23.8%	28.5%				
Seniors + DTIs	4.9%	5.1%	24.7%	36.0%				

This graph shows the senior instructors completed the same specific route five times. The first time the senior instructors were simply observed. Following a classroom-based session the senior instructors completed the same course while being instructed. They were then given the opportunity to practice the route three more times, and after the third practice they were performing as well as when they were being instructed.

Not only did these very experienced drivers save five percent of their fuel, they also saved time, reduced brake wear (including less brake applications and less time spent braking), and halved the amount of time spent running the engine above the green band.



Benefits

For a typical tractor-semi travelling 62,000 km per year, this level of savings would result in \$12,500 to \$15,000 increase in bottom line profit.

The repair and maintenance benefits from SAFED NZ training are from:

- reduced brake wear as the brakes were applied less often and for shorter periods of time by anticipating the situation ahead and using the engine brakes more
- less engine wear by running the engine in its most efficient range
- reduced tyre wear and other factors.

Based on UK experience, it is expected that most drivers will save about twice as much as the driver trainers because the trainers already had a good knowledge of safe and fuel efficient driving techniques before they received the SAFED NZ training.