



Case Study County of Nevada



Year-over-year comparison of 300 vehicles driven nearly two-million miles by county employees.

Challenge

Located at the foothills of the Sierras, the County of Nevada spans nearly a thousand square miles of rural territory dotted with small towns. To support these communities, the County operates nearly 300 vehicles managed by the Fleet Services unit within the Department of Public Works.

Helmed by Scotty Borrer, Fleet Services Manager, the fleet relies primarily on Ford platforms for most of its operations, including F-series pick-ups for maintenance, Explorers for law enforcement, and a collection of C-Max and Taurus sedans for the day fleet. A handful each of Transit Connects and Toyota RAV4s perform other specialized missions.

County vehicles typically put on a larger number of miles, which means that both fuel and wear-and-tear are especially important costs. A tight budget also means that the County does not have extra money to administer driver behavior tracking and incentive programs.

“Responsible management of public funds is one of our highest priorities. We’re always on the lookout for ways to increase efficiencies without a large capital outlay or extensive training needs,” stated Borrer.

Goal: Improve mileage and reduce operating cost

To improve mileage, in June 2018 the County deployed SmartPedal to its Ford C-Max, Escape, Explorer, F-150 and Transit Connect vehicles as well as to its Toyota RAV4s.

A ruggedized computing device the size of an iPhone charger, SmartPedal monitors the up-and-down motion of the vehicle as it travels, determines the effect of this motion on the driver’s use of the accelerator pedal, and automatically corrects the pedal signal to eliminate unwanted changes in power demand. This multi-patented process repeats dozens of times per second and operates transparently to the driver and other vehicle systems.

SmartPedal also features a snap-fit install process that is fast, simple, and foolproof. After five minutes of training, two mechanics completed the installation in a day.

Overview

Fleet Size
300

Distance
1,994,307 mi.

Time
24 months

	MPG Gain
C-Max	9.0%
Escape	6.7%
Explorer	1.5%
F-150	16.8%
Trans Conn	6.7%
RAV4	2.7%
Taurus	5.9%

Result: mileage gain on all platforms

Mileage and consumption data were tracked through the existing telematics system for 365 days from June 16, 2018 to June 15, 2019.

During this period, the combined average mileage increased for each SmartPedal-upgraded platform versus the same period a year ago.

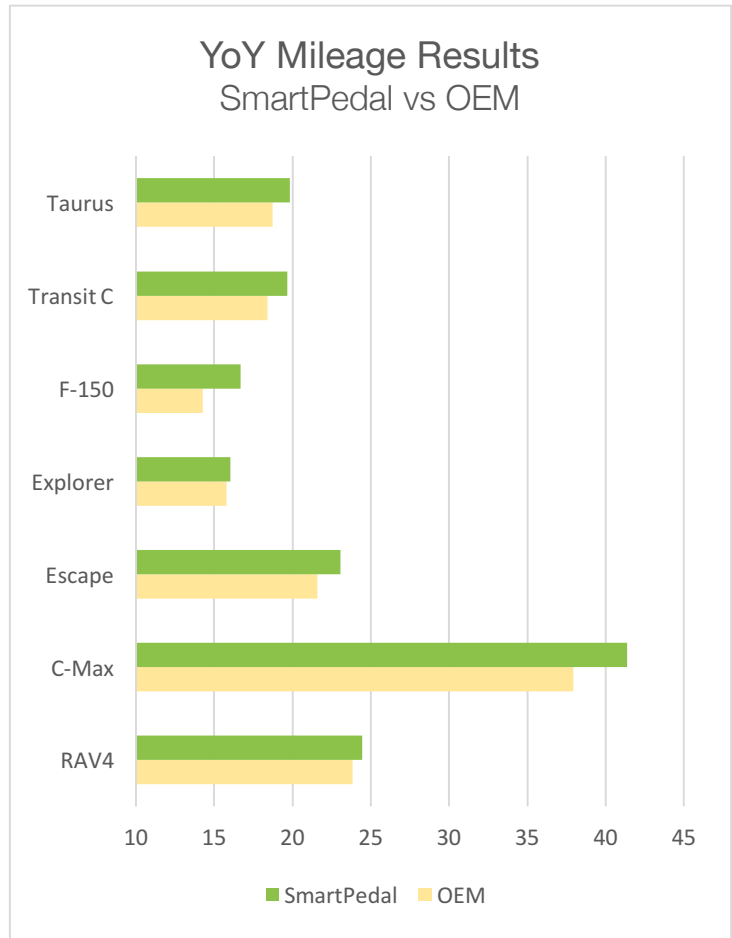
The average gain for most platforms was between 5.9% to 9.0%. The combined average increase for all platforms was 7.0%.

43% ROI from fuel savings

On a combined-average basis, each SmartPedal-upgraded vehicle saved 38 gallons of fuel versus the prior year.

At an average cost of \$3.50 a gallon, the estimated fuel savings were just over \$134 per vehicle annually.

When calculated against the \$299 acquisition cost, the yield is a 43% annual ROI—one of the highest in the industry.



Small investment yields 2-year payback

At \$299 per vehicle, SmartPedal offers one of the lowest entry points available for mileage-improving solutions.

This resulted in a quick 2.3-year payback for the full investment by the County of Nevada.

“SmartPedal generated a huge bang for the buck,” added Borrer. “We were very pleased with the results.”

Greenhouse Savings

The two-million-mile study also documented an average reduction in greenhouse-gas emissions of 752 pounds per vehicle annually.

For a 300 vehicle fleet, these savings translate into approximately 225,000 pounds annually—equivalent to the amount of carbon sequestered by 120 acres of forest.

Approved for Government Purchase

Leading municipalities and counties in California have added SmartPedal Labs as an approved vendor.

Please contact us for more information.