Law enforcement case study

Top Florida law enforcement fleet sees significant fuel savings and reduces their carbon footprint with Derive's software upgrades

This case study summarizes how Derive installed vehicle optimization software for Port St. Lucie, Florida Police Department, resulting in tangible cost savings across its 300-vehicle fleet.

1. OVERVIEW

On average, police vehicles idle up to 65% in a 12-hour shift. Port St. Lucie's fleet exceeded this, idling 76% in each shift. Consequently, the department's unnecessary fuel usage during idle was higher than normal. With this problem in mind, their Police Chief John Bolduc approached Derive with the following goals:

- Gain significant fuel cost savings by reducing idle fuel consumption without impacting the fleet's performance
- Maintain their strict emission standards

2. ACTIONS

Port St. Lucie started with a pilot to test the software upgrades. Derive installed its technology in a sample set of the fleet that included sedans, SUVs and a K-9 unit. As part of the validation Derive established a baseline, then used that data to create a refined solution as defined below:

- Gauged the current fuel consumption rates during both drive-time and idle to develop a baseline
- Created and installed an optimized engine software designed to the exact specifications of the department as determined during the baseline phase
- Derive's optimization software tailored idle RPM and shift points specifically based upon the driving profile of Port St. Lucie PD's officers

3. RESULTS

After a two-month evaluation period, Port St. Lucie's PD fleet saw a meaningful reduction in the amount of fuel that fleet was consuming:

- Savings of $40 per vehicle per month in fuel costs
- 12% reduction in idle fuel consumption
- 11% reduction in total fuel spend
- 200 lb. reduction in carbon footprint per vehicle per month

The results were so compelling that Port St. Lucie Police Department installed Derive software in an additional 77 vehicles and plans to install it in their entire 300-vehicle fleet. Through the fuel cost savings, the vehicle upgrade from Derive is expected to pay for itself in less than a year.

> "THE INSTALLATION PROCESS IS SIMPLE. IT WALKS YOU STEP-BY-STEP AND TAKES VERY LITTLE TIME. MANY OF OUR OFFICERS DON'T EVEN KNOW WE INSTALLED A TECHNOLOGY IN THEIR CAR. THEY JUST GET IN AND SEE THE DIFFERENCE FOR THEMSELVES. AFTER THIS TEST, THIS IS A NO-BRAINER FOR US."
>
> – BILL MAY, POLICE ADMINISTRATOR
> PORT ST. LUCIE

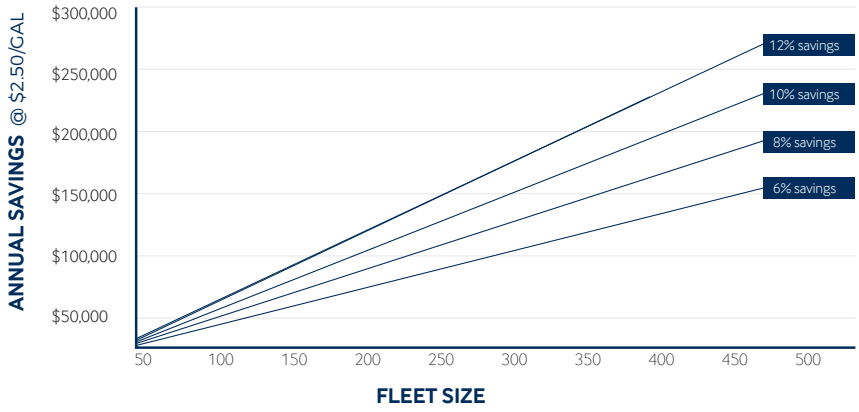
Port St. Lucie Police Department expects a minimum **fuel savings of $40 per vehicle per month.**

On a fleet of 300 vehicles, the department is estimated to **save at least $140,000 a year in total fuel costs.**

SEE MORE AT:

derivesystems.com/enterprise/testimonials

PROJECTED SAVINGS BY FLEET SIZE



QUICK & EASY INSTALLATION

Derive's handheld programmer is plugged into a vehicle's on-board diagnostic port (OBD-II). During installation, the device walks through a set of basic inputs, such as type of fuel used and the top speed permitted. The programmer then optimizes the engine control module (ECM) settings with Derive's proprietary software in order to achieve the customer's desired results. The entire process takes about 15-20 minutes per vehicle.

The software does not affect the manufacturer's warranty, and it utilizes settings already available in the vehicle's computer system.

Derive Systems is a leading automotive technology company with over 2 million software installations powering upgraded experiences for drivers on the road today. Derive connects vehicles and their engines to the digital world, enabling individuals and enterprise fleets to take control and optimize their vehicles for performance, fuel efficiency, safety, and more.

The Derive Systems platform leverages added on-board intelligence, powerful cloud data integration, enhanced sensors, and further technologies to personalize every automotive experience. We transform vehicle experiences from one-size-fits-all to smart, dynamically adaptable, and mission-specific.

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