



Do Electric Vehicles Really Make Sense for Security Patrol Services?

Electric Vehicles (EVs) are making a significant step forward in today's car market. Whether your security patrol is ready for EVs or not, the newest EV trends are becoming mainstream.

For example, Ford has introduced a revolutionary all-electric F-150 that starts at \$39,999 with a range of 230 miles and standard 4X4. Being that the F-150 has been the best-selling truck for 39th straight years, the Ford Lightning is going to mainstream this once-obscure, niche product. Tesla has obviously done a tremendous job bringing EVs to the masses, but fleets have different priorities and driving patterns than the retail consumer.

As EVs relate to managing the vehicles in your security patrol, there are many different fleet analysis considerations that need to be made when compared to traditional fleet vehicle options. This article will cover the basics of those considerations so you can decide if an electric vehicle really makes sense for your security patrol services:

1 Sustainability, Environmental Impact, and Energy Costs

2 Fleet Vehicle Analysis

3 Charging

4 Purchase Price

5 Total Cost of Ownership of EVs

If you want more information on performing an in-depth fleet analysis for traditional fleet vehicles or EVs, contact [Driven Fleet Concepts](#).

1. Sustainability, Environmental Impact, and Energy Costs

Forgetting about the economics of if an EV is right for your security patrols, consider the sustainability and environmental impact it has. Because transportation accounts for nearly three-fourths of total U.S. petroleum consumption, using more energy-efficient vehicles can have a direct impact on our reliance on foreign oil.

While EVs do not emit pollutants from their tailpipe, the energy used to charge them does come at a price. Here is a good video that explains shifting the emissions from the gasoline vehicle tailpipe to the smokestack of the local energy source.



2. Fleet Vehicle Analysis

Using the F-150 Gas & F-150 Lightning as baseline vehicles for a vehicle analysis, what saving opportunities exist for your security vehicles? Let's start with the traditional F-150 that uses a gas engine. The operating costs (fuel, maintenance, repairs) for the traditional truck is going to be \$28,050 over 5 years/100,000 miles. Meanwhile, the F-150 Lightning is going to run \$13,506 over 5 years/100,000 miles. That is an operating **savings of \$0.145/mile**.

3. Charging

When it comes time to plan for charging EVs, there are 3 major options to choose from.

Level 3

These are the stations you may see on the highway or with Tesla branding. These fast-charge stations accomplish a full charge in a very short amount of time (approx. 30 minutes).

But high convenience and efficiency come at a price. These charging stations cost upwards of \$100,000 to install. One way to limit some of the cost with this option is to use a public fast charger, but keep in mind that you will still have to pay to use them, and driving to a 3rd party location might waste the time of an employee if not conveniently located.

Level 2

These are the most common chargers that meet most EV charging needs. These 240 volt chargers are great for overnight charging or office use being that full charge time is about 8 hours depending on the vehicle's battery size.

Level 1

These 120 Volt chargers are included with the purchase of your EV. And while there is no additional cost to obtaining these chargers and the energy costs are low, charge times are excessive and unrealistic for daily security patrol vehicle use (20+ hours).

4. Purchase Price

So are you wasting thousands of dollars by using gasoline vehicles for your security patrol services? Possibly. The cost advantages of an EV essentially level out due to the higher purchase price. That high purchase price is largely due to the costs associated with manufacturing the battery.

Using this F-150 example, the delivered fleet price of a traditional F-150 Crew Cab is roughly \$37,300 (depending on options). The F-150 Lightning is listed at \$39,999 - before a \$7,500 federal **tax incentive** and **any programs your state may run**.

Prior to the F-150 Lightning announcement, the most mainstream EV was the Tesla Model 3 - priced at \$41,190 - or the Model Y at \$54,190. Neither of these models had an EV Tax Credit available in 2021.

These facts make the F-150 Lightning announcement groundbreaking. We already know that the cost-per-mile of the F-150 Lightning is roughly \$0.145/mile less than the traditional F-150. With a similar price point for the initial sale, the cost-per-mile savings is more than justified.

**Check Out Our
Ultimate Guide to Buying Private Security Vehicles**



5. Factors that Influence Total-Cost-Ownership of using EVs for Security Patrol Services

So how can you ensure that the next time you order a replacement vehicle for your security patrol, you choose the right vehicle with the lowest Total-Cost-Ownership? Consider the following:

Dwell time

Is the vehicle parked long enough to reach a full charge for the next day or shift? This could affect which type of charging solution you need and therefore influence the total cost.

Average Daily Miles

Has the daily use of the vehicle historically stayed below the expected range of the considered EV? Or do you need a plan for a midday charge?

Climate/Battery Health

Be aware that extreme climates like harsh winters will limit the expected range. If you live in a region with more extreme weather conditions, using EVs for your security patrols might be unrealistic.

Cash flow

Can you afford the monthly payments of a potentially higher purchase price EV? Would you **qualify for available tax credits?**

When vehicles are leased, the owner is usually the leasing agency. Many lessors apply all or part of the credit to help lower the cost of the EV lease, but that's not required and not always possible depending on the leasing company. Be sure to have that conversation upfront to avoid any surprises.

Driver Trust/Technology

Consider that there needs to be a reliable plan to ensure the vehicle is plugged in overnight to achieve a full charge for the next day. Systems exist to ensure the vehicle is being charged when parked at a location though there needs to be trust and reliable employees to ensure charging is done.

It could be as simple as creating a security task as part of the guard tour to ensure this gets done, but it's obviously critical that EVs be charged in a timely manner.

Uptime/Total Miles

Lastly, if the above questions qualify you to add an EV into your fleet, be sure you actually use the EV in your security patrol service. The EV savings mostly come from lower operating costs. Therefore, the vehicle needs to be used to realize those savings. **Do not buy an EV to simply appease stakeholders.**

Check out this [Private Security Fleet Management webinar](#) to learn more about the huge benefits of maximizing the cost-per-mile of the vehicles used in your security patrols, whether they are gas-powered or EVs.



The graphic features the Thinkcurity logo with the tagline 'Rethinking Security Operations' in white and blue text on a dark blue background. Below the logo, it says 'Webinar' and 'Security Fleet Management Series'. On the right side, there is a circular portrait of a man in a suit, with a name tag that reads 'Korey McGuinness'.

Closing

There are obviously a lot of factors to consider when deciding whether or not EVs make for good **private security vehicles**. If you want to grow your company's sustainability mission or create a green image on-site for your clients, or simply want to lower your fleet's operating expenses, EVs are quickly becoming a viable option for security patrols in 2022 and beyond.

If you want more information on performing an in-depth fleet analysis, contact [Driven Fleet Concepts](#).



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Korey is a seasoned professional in business development and fleet management within the transportation sector. Recognized for developing innovative fleet strategies that drive business success, he has a verifiable history of contributing directly to company growth and expansion as well as demonstrating a natural aptitude for establishing lasting client relationships. Today he acts as a Fleet Consultant with Driven Fleet Concepts and under his leadership, he works directly with fleet owners to streamline their operations by allowing them to outsource their fleet management and use his expertise to lower their overall holding costs.