

RICHMOND POLICE DEPARTMENT

RICHMOND TOWN CENTER

Bridge Street, P.O. Box 285 Richmond, VT 05477 (802) 434-2153 / FAX (802) 434-5570



March 8, 2021

TO: Town Manager and Richmond Select Board

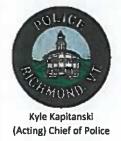
RE: Pilot program to evaluate the cost and effectiveness of purchasing Tesla police cruisers.

All,

I am writing this memo to request your consideration in granting the use of some unassigned funds in order to fund a pilot program to evaluate the cost and effectiveness of switching our fleet of police vehicles to Teslas. This program would begin with a single vehicle purchase, the ongoing expenses and return on investment of which would be evaluated for a period of no less than one (1) year. I have done limited research specific to Richmond because I wanted to make sure that this was a plausible request before I dedicated more time to it. I have included some bullet points below to present some facts and information which support my request.

• Purchase Price - My most recent look at the Tesla Model 3 showed that the purchase price is \$46,990 (I assume we are tax exempt on vehicles also??). This is for the extended range, all-wheel drive version of the car. For FY 21, I am budgeted for \$45,000 for the purchase of a police cruiser. That vehicle budget reflects the price of a Dodge Durango Pursuit (approximately \$36,000) as well as approximately \$9,000 to upfit the vehicle with police equipment and to apply the vinyl police decals. That said, the initial cost to purchase the Tesla ONLY is about \$1,990 over budget for police vehicles. It would still need to be upfitted with police equipment and vinyl police decals. Though I don't have an exact estimate for the cost of this equipment, I'm confident that \$5,000 is a decent, possibly even overcautious estimate. So, in theory, I would be looking to spend approximately \$7,000 over budget for the initial purchase and upfitting of this vehicle. I would be remiss if I didn't point out that we have significantly underspent our FY21 budget due to vacancy savings as well as under-spending on other line items.

POTENTIAL SAVINGS



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- Fuel and Maintenance costs Several police departments across the country have begun using Teslas as police vehicles. Among those departments is the Bargersville (IN) Police Department. That agency was using Dodge Chargers as police vehicles. They found that, over a 16-month period in 2019/2020, they recouped almost the entire difference in sticker price between the Tesla and the Charger through fuel and maintenance savings. They anticipate even greater long-term savings. In an article in the January 2021 issue of American Police Beat, the department is said to have paid \$7,580 in fuel for the Charger, and \$825 in electricity costs to charge the Tesla. Assuming that is in the same 16-month period, that equates to an approximate fuel and maintenance savings of \$422.19 per month. This is roughly an 89% savings in fuel and maintenance costs.
- Vehicle replacement cycle Based on the Town of Richmond's current capital plan, Richmond Police vehicles are on a four year replacement cycle. With a fleet of six cruisers, this requires us to alternate between purchasing one cruiser one year, and two cruisers the following year. In order to avoid large variances in our budget every other year, we currently budget every year to put approximately \$22,500 into capital reserve and approximately \$45,000 for the purchase of a new cruiser. Tesla's warranty on the battery and drive unit is 8 years or 120,000 miles, whichever comes first. Therefore it is feasible that our replacement cycle could become a six year cycle where we would only need to replace one car per year. On this replacement cycle, the vehicle is potentially never out of warranty and there would be no need to include the \$22,500 in capital reserve to keep up with the replacement cycle. If we consider the current vehicle budget for FY 22 as well as the capital reserve, the total amount per year to purchase and upfit a Dodge Durango is approximately \$67,000. Given the current purchase price of the Tesla Model 3, and using the same built-in upfitting cost estimates, we would need to budget for \$55,990 per year. This results in a net savings of approximately \$11,000 annually.

NON-MONETARY BENEFITS

- Movement toward net-zero goals Perhaps the most overt benefit to potentially
 converting our fleet to Tesla vehicles is that they are electric vehicles with zero
 emissions. Therefore, converting six town-owned vehicles to electric vehicles would
 obviously be beneficial to Richmond's net-zero goals.
- Level II charging station is already in place We are fortunate to have recently installed a level II charging station for electric vehicles at the town center. Though this wouldn't



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be sustainable for an entire fleet of cruisers, the existing level II charging station affords us with the benefit of being able to reasonably pilot this program without having to speculate on how things would work IF there was a charging station where the PD vehicles are parked. We could have fact based data to show the impact on recharging times here at the town center, while still leaving at least one charging spot open to the public at all times.

Recruitment and retention – I believe having a Tesla police vehicle will aid in officer recruitment and retention in a couple of different ways. First, I believe individuals who share Richmond's net-zero values will be attracted to a department that is making obvious strides to that end. I feel that because the Tesla has the warranty that it does, officers will feel confident in their equipment and therefore confident that they are being cared for by the Town. This will lead to a desire to stay where you are cared for and valued. Last, but not least, the Tesla is just a pretty cool car all the way around. My belief is that some officers will be attracted to Richmond PD because we are willing to try out cutting edge technology and equipment.

Windham County Sheriff Mark Anderson purchased a Tesla Model 3 last year. I have spoken with him and he has offered to answer any questions that anyone may have about his experience with using a Tesla as a police vehicle so far. Thank you for taking the time to read my proposal. If desired, I'm happy to leverage Connie's expertise to help me dive deeper into numbers specific to Richmond PD.

Kyle Kapitanski, Acting Chief of Police