



Proposed Study Questions: Washington State Patrol Vehicle Replacement

State of Washington Joint Legislative Audit and Review Committee • September 2019

2019 Legislature directed JLARC to update its 1999 study of the Washington State Patrol’s vehicle life cycle cost model

The Washington State Patrol (WSP) uses a life cycle cost model to inform its decisions about when to replace its pursuit vehicles. The model is intended to determine the most cost-effective replacement cycle based on total capital and operating costs for the lifetime of the vehicle.



WSP updates the model every two years with current maintenance data and submits the results of its analysis to the Legislature in its biennial budget request. In its 2019-21 request, WSP reported that the optimal time to replace its vehicles was 110,000 miles. This is the same mileage replacement level that WSP has used since 1999.

WSP has changed its fleet of pursuit vehicles over time

The Ford Interceptor SUV is WSP’s primary pursuit vehicle, accounting for about 70% of its fleet. When JLARC first developed the life cycle cost model in 1999, the agency’s primary pursuit vehicle was the Ford Crown Victoria. Pursuit vehicles generally have specialized equipment and are designed to handle driving at high speeds. The current fleet includes SUVs, sedans, trucks, and motorcycles.

In 2018, the State Patrol began purchasing Interceptor SUVs with upgraded “EcoBoost” engines. This decision was made in response to issues with the exhaust system in the original Interceptor SUV that is the subject of ongoing litigation. The upgrade is expected to increase the base vehicle purchase price by 17% for the 2019-21 biennium.

This study will address the following questions

1. What are WSP’s current vehicle replacement practices?
 - a. How many vehicles does it replace each biennium?
 - b. What is the average mileage of those vehicles?
 - c. What funds are used to pay for new vehicles?
2. What is WSP’s pursuit vehicle life cycle cost model and how does WSP use the model to inform its decisions?
3. Does WSP’s life cycle cost model accurately identify the optimal vehicle replacement mileage for its current and future fleet?
4. How has WSP implemented the recommendations from two prior studies of its vehicle life cycle cost model (JLARC’s 1999 Audit of WSP and WSP’s 2004 report on its updated vehicle life cycle cost model)?

Study Timeframe

Preliminary Report: July 2020

Proposed Final Report: September 2020

Study Team

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JLARC Study Process

