Proposed Final Report

Washington State Patrol Pursuit Vehicle Replacement

Legislative Auditor's Conclusion: WSP continues to use a vehicle life cycle cost model, but it is not following best practices. Vehicle replacement decisions should be based on a revised analysis and also consider other important factors.

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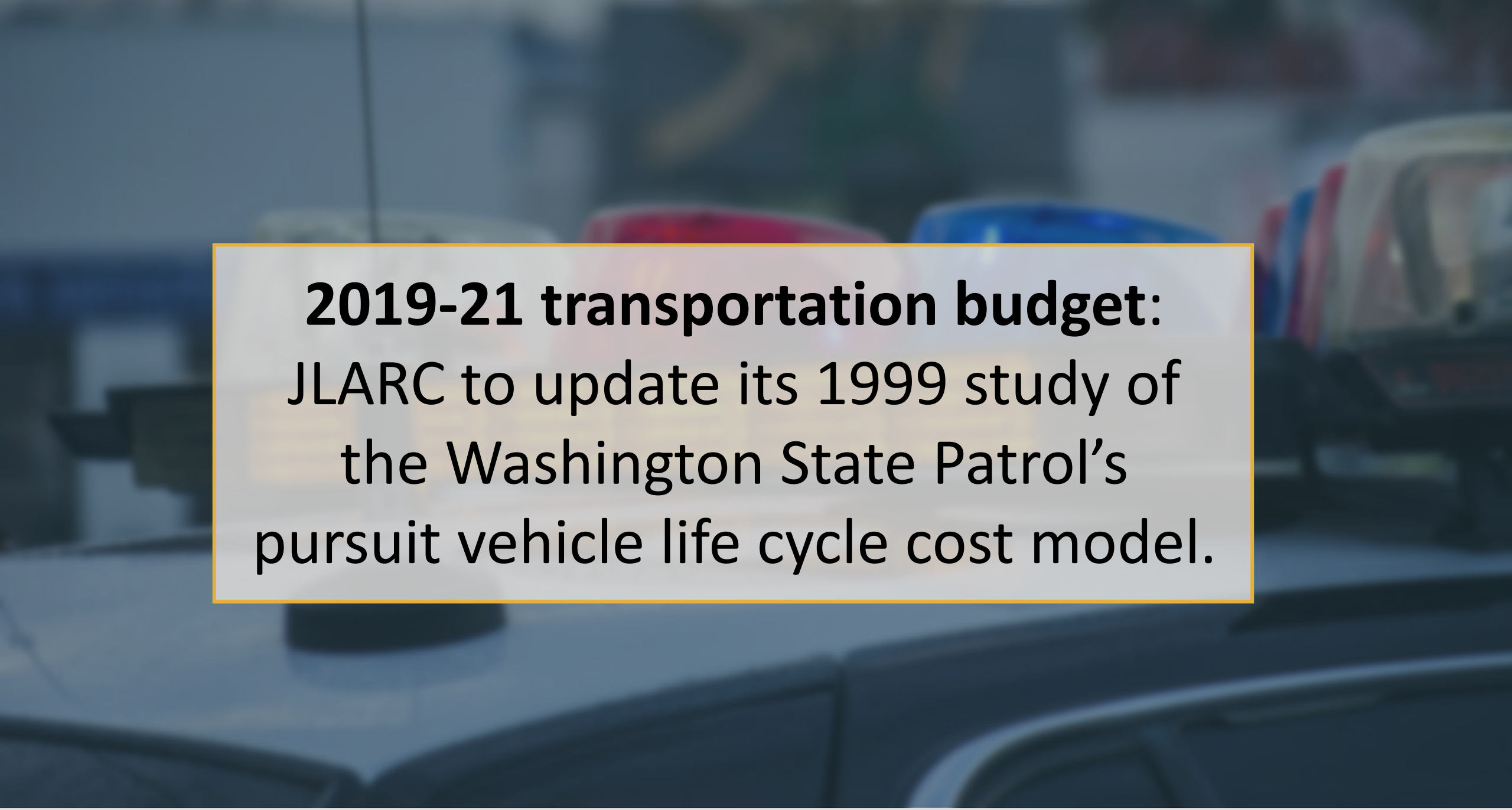
WASHINGTON JLARC

Legislative Auditor's Recommendations

1. The Washington State Patrol (WSP) should improve the procedures and data systems it uses to collect and track vehicle maintenance data.
2. WSP should establish and document procedures for conducting life cycle cost analysis each biennium.
3. WSP should provide the Legislature with additional information on its life cycle cost analysis and pursuit vehicle budget when it submits its biennial budget requests.

WSP and OFM Concur



2019-21 transportation budget: JLARC to update its 1999 study of the Washington State Patrol's pursuit vehicle life cycle cost model.

Presentation outline

1. Fleet budget and current practices for life cycle cost analysis
2. Updated JLARC model and new replacement target

WSP planned to purchase 240 pursuit vehicles in 2019-21

240 vehicles covers replacements, total losses, and the cadet class.

Acquisition costs include purchase price and upfitting costs.

Pursuit vehicle budget includes capital and operating costs.

2019-21 Interceptor EcoBoost Acquisition Cost: $55,000

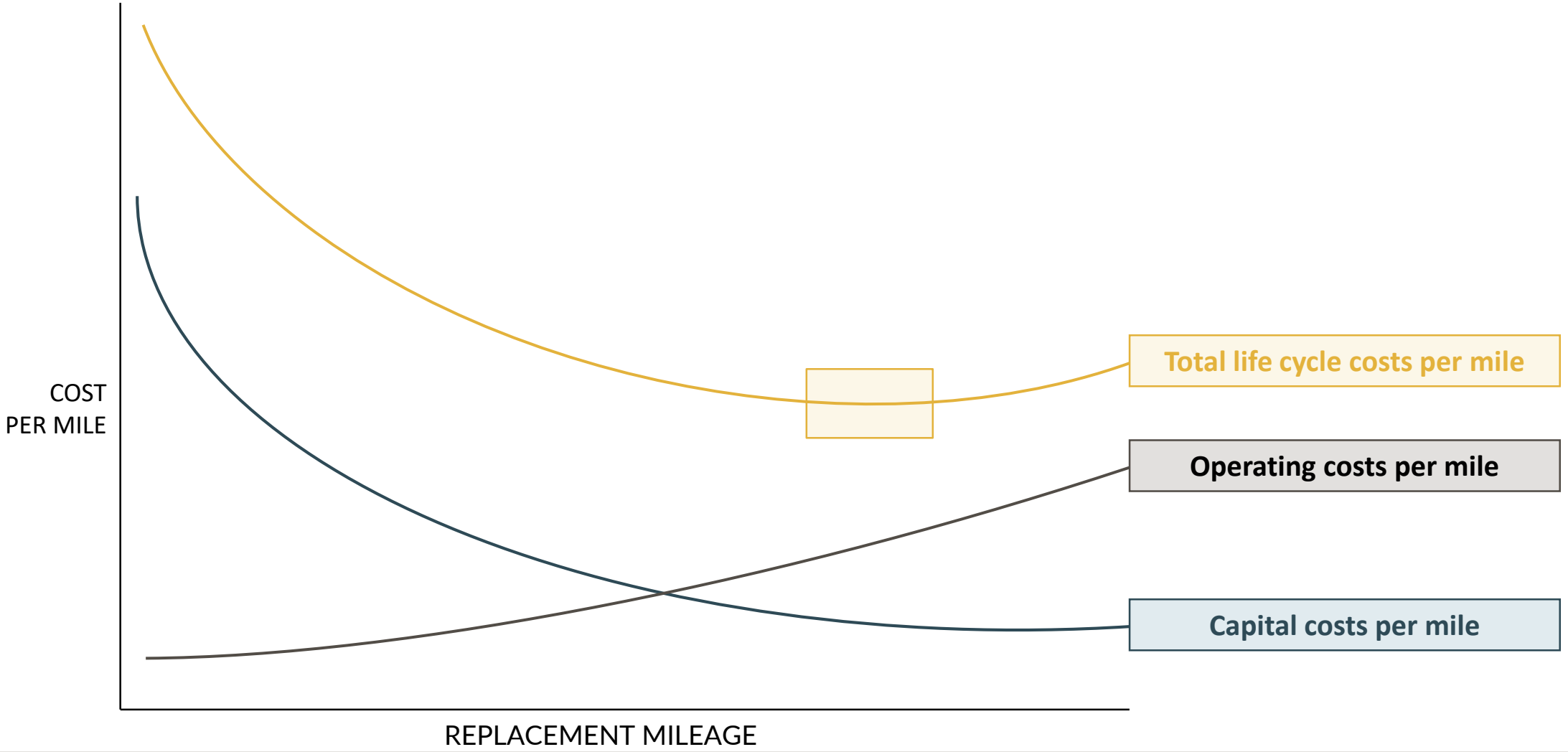
VEHICLE PURCHASES AND EQUIPMENT

$13.3M

VEHICLE MAINTENANCE AND OPERATIONS

$14.4M

WSP uses a life cycle cost model to set its replacement target



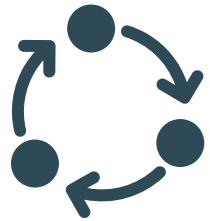
Average replacement mileage is above current target

- **2019-21 replacement target**: 110,000 miles
- **Current replacement average**: 118,000 miles
- Replacement targets for other vehicle types are not set from life cycle cost analysis.

WSP is not following best practices

JLARC staff identified four areas where WSP is not following best practices:

Data Reliability



Consistent Modeling

Documentation

Communication

Legislative Auditor's Recommendations

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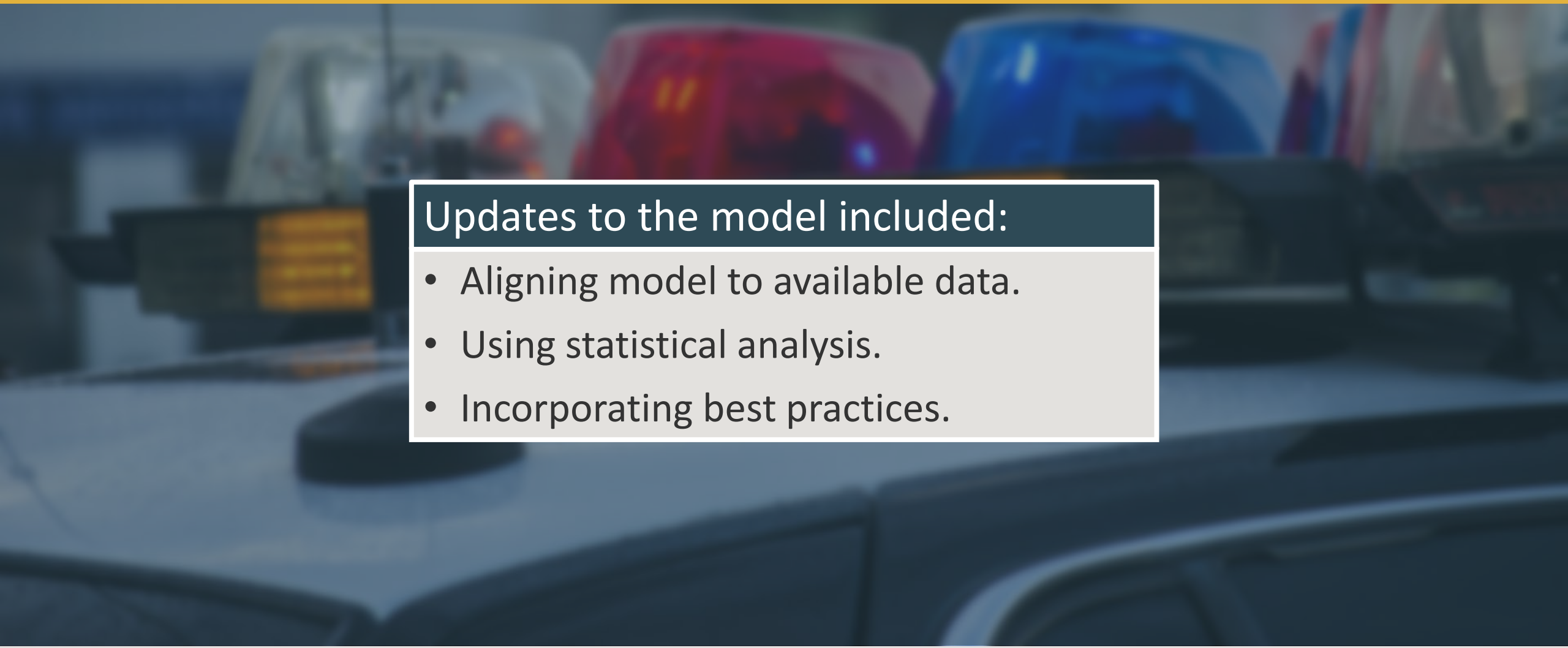
WSP and OFM Concur

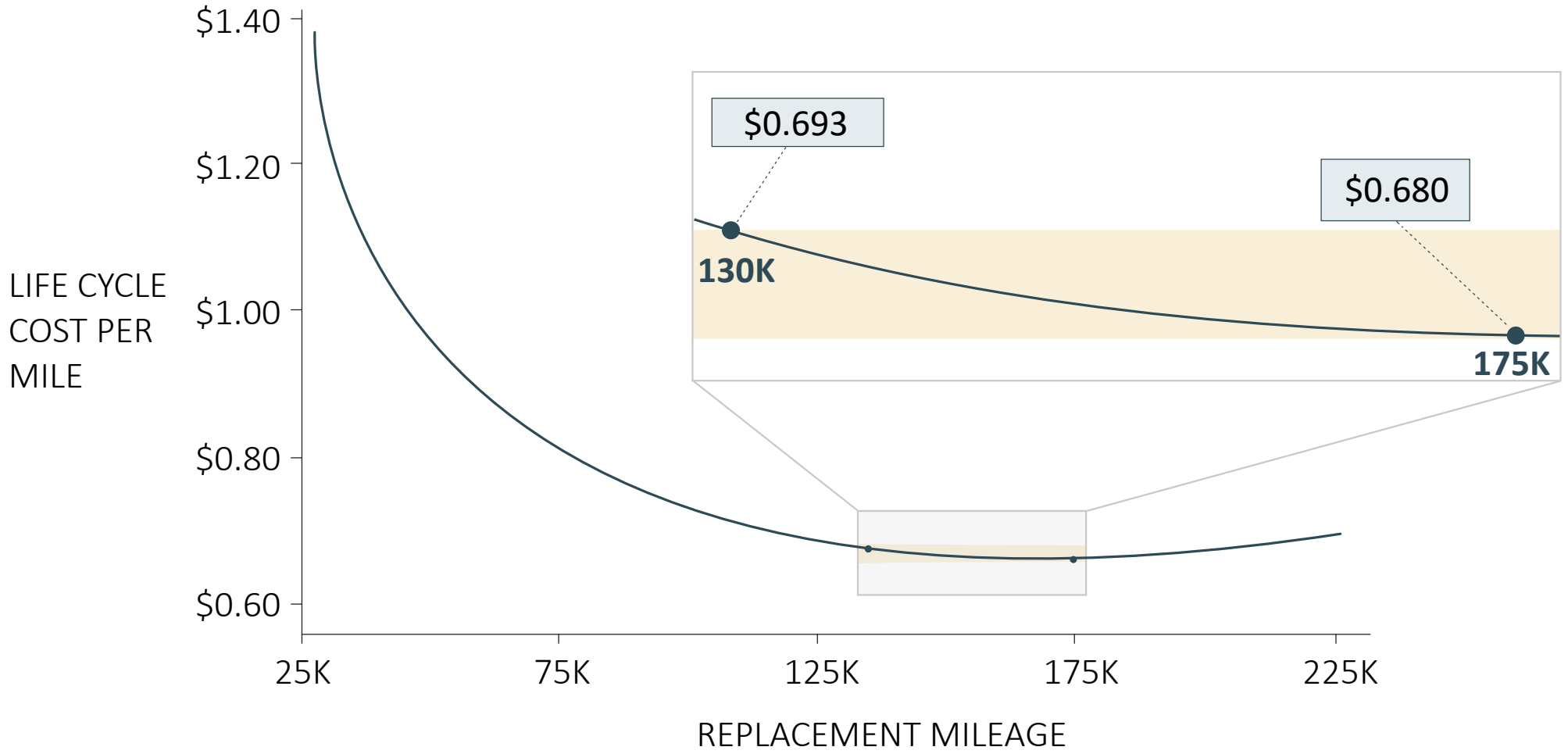
Updated JLARC model and identified new replacement target



Updates to the model included:

- Aligning model to available data.
- Using statistical analysis.
- Incorporating best practices.

Replacing vehicles from 130,000 miles to 175,000 miles have statistically equivalent costs



Changes to replacement targets have modest impact on annual fleet costs

Replacement Mileage	Annual Fleet Costs
110,000	$12.5 million
120,000	$12.3 million
130,000	$12.1 million
175,000	$11.9 million

Additional cost and non-cost factors should be considered

Cost Factors	Non-Cost Factors
More pool vehicles	Safety and emissions
Extra staff due to trooper downtime	Reliability
Unexpected maintenance needs	Agency image

These factors favor a lower replacement target within the optimal range.

JLARC staff identified an optimal replacement target of

130,000 miles

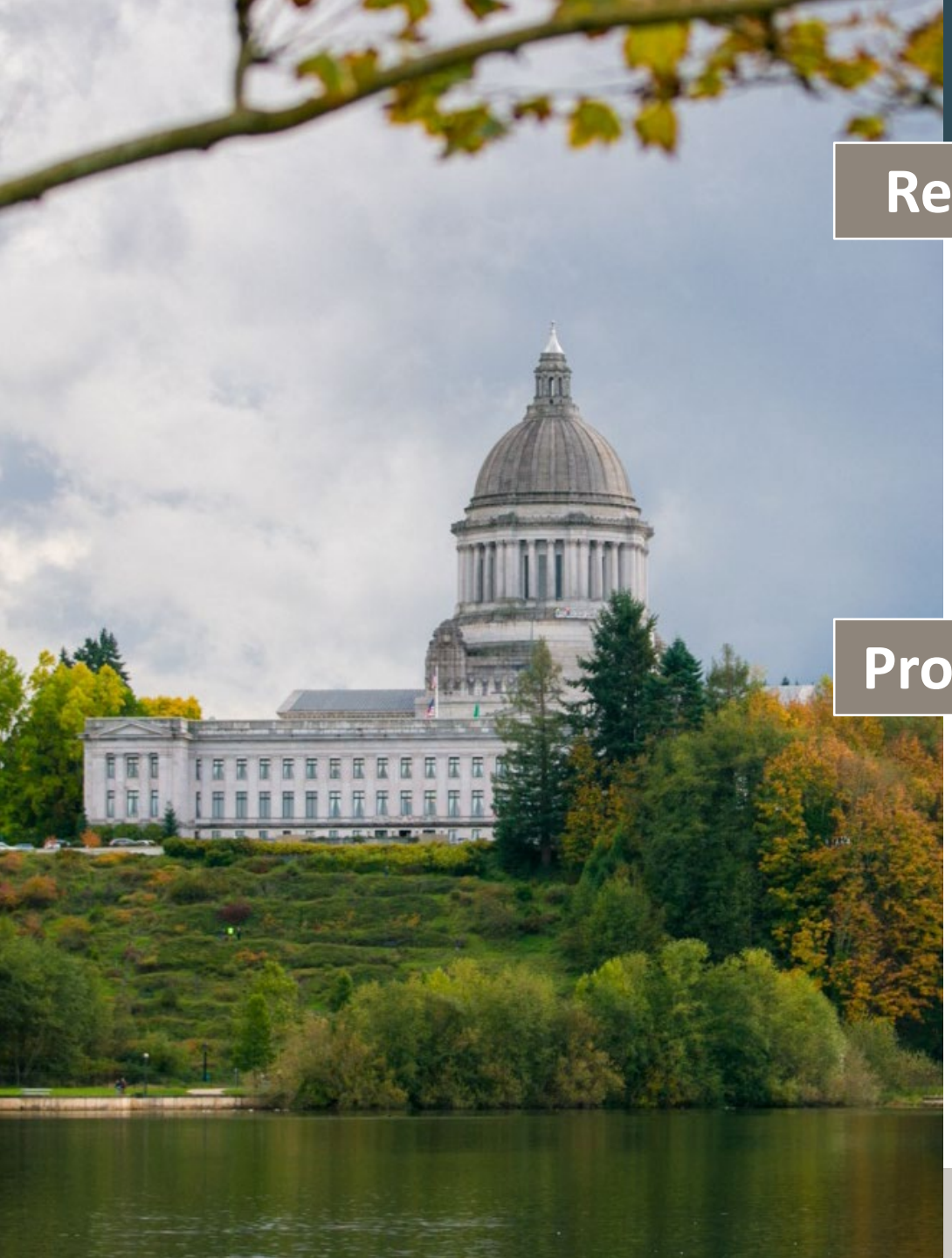
This target is based on:

- Equivalent costs from 130,000 to 175,000 miles.
- Using lowest mileage within the optimal range.

Future replacement targets are uncertain.

Full Report

leg.wa.gov/jlarc/AuditAndStudyReports



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