



City of Seattle

New Seattle Police Department Patrol Vehicles June 2014

The Ford Crown Victoria had been the patrol car used by the Seattle Police Department (SPD) since 1995. Upon learning that the Ford Motor Company would be discontinuing production of the Crown Victoria in 2011, the Department of Finance and Administrative Services (FAS), which manages the City's vehicle fleet, purchased a surplus of the vehicles to ensure SPD would have cars for its operations until the City could evaluate alternative vehicles and select the City's next generation patrol car.

From July 2012 through February 2013, FAS and SPD conducted a pilot program to evaluate six different patrol cars. The effort – which included evaluations of ergonomics, instrumentation, vehicle controls, communication equipment placement, equipment storage and vehicle mechanics – involved 131 patrol officers, covering all police precincts. In addition, FAS performed a detailed analysis of fuel utilization and maintenance costs per mile to ensure that, in addition to selecting the safest model possible, the City would also select the most cost-effective and environmentally sound patrol car vehicle on the market. The preliminary recommendation from this initial phase of evaluation was for SPD to purchase the Ford Police Interceptor Utility vehicle.

During the summer and fall of 2013, FAS and SPD conducted a further assessment of fuel efficiency and, to address a concern raised by the monitor of the settlement agreement, evaluated which model provided the best back seat prisoner egress. FAS and SPD agreed to select the top four models from the previous evaluation period for this closer analysis. After the second evaluation concluded, FAS and SPD recommended the Ford Police Interceptor Utility vehicle to Mayor Murray based on the following benefits:

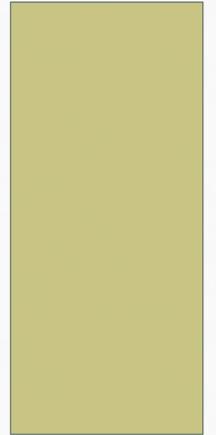
- At \$0.23/mile, lowest cost per mile of maintenance and ownership
- Fuel efficiency on par with the Ford sedan model and 1.5 MPG higher than the Crown Victorias going out of service
- Best back seat egress
- Most storage space for police equipment
- Safest vehicle – best ergonomic comfort, all-wheel-drive for best handling, and best line of sight

Mayor Murray accepted the recommendation and 120 vehicles were ordered in February 2014. The number of vehicles ordered was uncharacteristically high because the City had exhausted its surplus during the evaluation period.

The PowerPoint presentation on the following pages provides additional information regarding the patrol car replacement.

SPD PATROL CAR EVALUATION AND RECOMMENDATION

1/17/14



EVALUATION TIME LINE



EVALUATION OVERVIEW

- Phase 1
 - SPD/FMD evaluation committee
 - 6 test vehicles
 - 7.5 month testing period
 - 131 drivers
 - 7 category survey evaluation
 - Mayor McGinn requests a second phase
- Phase 2
 - Top 4 vehicles from Phase 1
 - Additional 3 month testing period

PHASE 1.0 OUTCOME

- Evaluation Phase 1 Survey of patrol officers:
 - Ergonomics
 - Instrumentation
 - Vehicle Controls
 - Communications Equipment Placement
 - Storage
 - Vehicle Mechanics
- Finding – Ford Interceptor Utility
 - Most storage space for equipment
 - Best line of sight of all models (officer sits slightly higher)
 - Best ergonomic comfort
 - AWD for safety and handling

PHASE 2.0 CRITERIA

- Consider results of first SPD Survey
- Two additional questions (SPD analysis)
 - IdleRight (increase fuel economy?)
 - DOJ (easy to get prisoners in/out of back of vehicle?)
- Cost and budget impacts (FMD analysis)
 - Fuel Economy
 - Maintenance
 - Capital Purchase

SPD ANALYSIS

- Evaluation Phase 1 Survey - Ford PIU #1 choice
 - Most storage space for equipment
 - Best line of sight of all models (sitting higher)
 - Best ergonomic comfort
 - AWD safety and handling
- DOJ Monitor question – rating back seat egress
 - All new models have smaller back door openings than Crown Victoria. Ford Utility & Chevy Tahoe have the largest door openings and easiest prisoner egress.
- IdleRight – Ease of use
 - Easy to use - just have to remember to turn it on! SPD created cheat sheet for operators.

IDLE RIGHT

- Did not impact fuel economy numbers as expected.
- Officers must turn key off and/or switch system on for IdleRight to work. Changing behavior takes time.
- When operating correctly, IdleRight can cut Idle time by 75% and realize significant fuel savings.
- All new patrol cars are being outfitted with this technology.

FMD ANALYSIS - FUEL ECONOMY

Vehicle	1 st Phase MPG	2 nd Phase MPG (after rotations)
Ford Sedan (PIS)	8.5	7.7
Ford Utility (PIU)	8.4	8.2
Chevy Caprice	6.2	6.5
Chevy Tahoe	6.7	6.8

Crown Victoria*	6.7
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*Crown Victoria LTD MPG is average of 200+ patrol cars currently in use.

FMD ANALYSIS - MAINTENANCE COST

Vehicle	LTD Cost*	LTD Mileage	Maint. Cost/Mile
Ford Sedan (PIS)	\$10,555.07	20,798	\$0.51
Ford Utility (PIU)	\$7,210.26	30,921	\$0.23
Chevy Caprice	\$19,682.50	26,184	\$0.75
Chevy Tahoe	\$10,727.81	26,817	\$0.40
Crown Victoria**	\$25,081.37	59,386	\$0.41

**LTD Maintenance cost includes PMs, breakdowns and repairs only.*

***Crown Victoria data is an average of 200+ active patrol cars.*

BUDGET IMPACT SUMMARY

Vehicle	Fuel	Maintenance	Capital Cost
Ford Sedan (PIS)	Under Budget	N/A	Under Budget
Ford Utility (PIU)	Under Budget	N/A	On Budget
Chevy Caprice	Under Budget	N/A	Under Budget
Chevy Tahoe	Over Budget	N/A	Over Budget

2013/14 Budget assumed \$48,000 for patrol car capital cost. The PIU acquisition cost is on target to meet this projection.

2013/14 Budget assumed fuel consumption at Crown Vic levels.

FMD/SPD RECOMMENDATION

Ford Police Interceptor Utility

- SPD – meets business need
- FMD – meets fleet best management practice evaluation

PATROL CAR INVENTORY

- 21 Crown Victorias
- 20 Ford Interceptor Utility and Sedan
- Over 150 patrol cars due or past due for replacement
- Vehicles take 5-7 months from point of purchase to in-service