

Accelerating the supply of safer vehicles through Government fleet

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Abstract

Vehicle safety technology has seen a dramatic development in the past decade with the focus being shifted from passive safety features aimed at protecting the occupant in a crash to active safety features intended at avoiding collisions altogether. To realise the full road safety benefits of these features, their uptake must be accelerated and one of the methods to achieve it may be through Government fleet policy. This study investigates strategies for the development of a vehicle purchasing policy for Government fleet ensures the purchase of the safest vehicles whilst balancing their needs of model availability and cost.

Background

Towards Zero 2016-2020 is the Victorian Government road safety strategy to significantly reduce road trauma by 2020. As part of the strategy, the Government will require its vehicle fleet to be equipped with the best safety features available through a fleet purchasing policy. It is acknowledged ex-government fleet vehicles flow through to the broader community at the end of their lease, resulting in an increased uptake of in-vehicle technologies in the broader fleet. It is also expected that manufacturers will react to a stricter purchasing policy by equipping their vehicle models with the latest safety features.

VicFleet is the agency responsible for managing the Victorian fleet and its purchasing policy. Currently, it requires that vehicle models must have a 5-star safety rating published by the Australasian New Car Assessment Program (ANCAP) to be placed on an Approved Vehicle List (AVL) from which all agencies and departments must select vehicles for purchase. Besides safety, VicFleet must consider other aspects such as the cost of purchasing and maintenance, vehicle's residual value, suitability (fit-for-purpose), diversity of models in each category and environmental aspects (emissions).

Method, Results & Discussion

In this study, a number of alternatives for a new vehicle purchasing policy will be analysed in terms of its potential to accelerate the uptake of emerging safety features and its suitability to balance the needs of VicFleet.

Firstly, the study will review the existing VicFleet and VicRoads vehicle purchasing policies and compare them with policies in all states and territories

Secondly, the study analyses the past and present ANCAP protocols to predict the future uptake of new safety features in 5-star rated vehicles. Then it will investigate the star rating most common vehicle models sold in Australia in each category and the safety features offered as standard, option or in the highest variants only.

Then, an in-depth study of the Victorian Fleet composition over the last 5 years will be conducted. The objective is to understand the prevalence of a selected number of safety features and its evolution over the last years. The result will serve as a baseline of the current fleet against which potential new purchasing policies can be compared with.

Lastly, the results will be taken into consideration to design a number of fleet purchasing policy strategies. The benefits and drawbacks of each alternative will be identified and placed in a decision matrix. The purchasing policy alternative that is expected to deliver the best safety outcomes whilst maintaining a balance with VicFleet's need will be put forward to VicFleet as a recommendation for a policy to be adopted.

The study also includes a methodology to evaluate the success and benefits of an improved policy which includes targets for the uptake of specific features and on-going monitoring of VicFleet's fleet.

References

- Australasian New Car Assessment Program (ANCAP) (2018). ANCAP vehicle model's safety ratings. Mawson, ACT.
- Mackenzie, J., Mongiardini, M., Ponte, G., Sommariva, M. (2018) VicRoads fleet purchasing policy review. Adelaide, SA.