

The effectiveness of immobilisers in preventing vehicle theft in Australia

CARS Brief Report

April 2007

In 2001, Potter and Thomas evaluated the effectiveness of immobilisers in preventing motor vehicle thefts in Australia by comparing theft rates of vehicles with different types of immobilisers. The paper considered Western Australia (WA) separately to the rest of Australia because legislation requiring immobiliser fitment on change of vehicle ownership was in place in that State, but no such scheme existed for the rest of the country. For Australia (excluding WA), Potter and Thomas (2001) found that passenger and light commercial vehicles with Australian Standard (AS) immobilisers had far lower theft rates (29.1 per 10,000 registrations) than those with non-AS immobilisers (55.5) and those with no immobiliser (140.1). For vehicles aged less than 10 years the rates were 29.0 per 10,000 for vehicles with AS immobilisers, 52.8 for non-AS immobilisers and 47.8 for those with no immobiliser.

Since that time, immobilisers have become a compulsory feature on all new cars sold in Australia (from July 2001). This brief report replicates the 2001 study using police data from all states and territories of Australia for the calendar year 2006 and a snapshot of registration data from all jurisdictions at 30th June 2006. This study takes into account after-market immobilisers fitted under the compulsory Western Australian scheme, but does not take into account any other after-market immobilisers. It should be noted that due to some methodological differences, theft rates presented here are not directly comparable to those from the earlier study.

FINDINGS

- Between 2000 and 2006, registrations of passenger and light commercial vehicles in Australia increased by 22% from 10.8 million to 13.2 million. AS immobilised vehicles increased from 14% of registrations in 2000 to 51% in 2006.
- During this period, passenger and light commercial vehicle thefts dropped by 50% from 127,141 thefts in 2000 to 64,050 in 2006.
- Table 1 shows a strong protective effect for vehicles fitted with an AS immobiliser among vehicles stolen in Australia in 2006. Vehicles fitted with AS immobilisers accounted for 51% of registrations but only 23% of thefts. These vehicles also showed the lowest theft rate by far; 21.8 thefts per 10,000 registrations, compared to 43.0 for vehicles with a non-AS immobiliser, and 83.0 for vehicles with no immobiliser.
- Among vehicles aged less than 10 years, AS immobilised vehicles showed the lowest theft rate (20.5 per 10,000 registrations), but the observed protective effect was not as strong as among all vehicles.
- Engine immobilisers have contributed to the significant reduction in vehicle theft that has occurred since 2000. Other factors not outlined here have also played a role in lowering theft numbers.

Table 1: Thefts and registrations by immobiliser presence, passenger/light commercial vehicles, Australia, 2006

| | Vehicles manufactured in all years | | | Vehicles manufactured less than 10 years ago | | |
|-----------------------|------------------------------------|-------------------------------------|-------------------------------------|--|------------------------------------|-------------------------------------|
| | % of thefts <i>N</i> = 64,050 | % of fleet <i>N</i> = 13,167,554 | Theft rate per 10,000 registered | % of thefts <i>N</i> = 16,657 | % of fleet <i>N</i> = 7,388,033 | Theft rate per 10,000 registered |
| Immobilised - AS | 22.9 | 51.1 | 21.8 | 75.9 | 83.6 | 20.5 |
| Immobilised - Non AS | 6.8 | 7.7 | 43.0 | 6.5 | 4.2 | 34.8 |
| No Immobiliser Fitted | 70.3 | 41.2 | 83.0 | 17.6 | 12.2 | 32.5 |
| Total | 100.0 | 100.0 | 48.6 | 100.0 | 100.0 | 22.5 |

*Registration snapshot as at 30th June 2006. 'Immobilised - AS' indicates immobilisers that meets the Australian Standard AS/NZS 4601:1999 and 'Immobilised - Non-AS' indicates immobilisers that do not meet the Australian Standard.