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Toward Sound Management of End-of-Life Vehicles in New Zealand

A thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Economics

Massey University
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2004
Abstract

New Zealand has a problem with an increasing number of motor vehicles being abandoned at the end of their useful life. The environmental and associated social costs created by this problem are expected to increase with the rising number of vehicles entering the country. In addition, there are environmental concerns regarding some aspects of the legal disposal of end-of-life vehicles (ELVs). The exact magnitude of both problems is unknown and attempts made to address them have been ad hoc and success limited. This thesis sets out to quantify the problems and provide policy makers with tools to improve the overall management of motor vehicle disposal in New Zealand.

To assess the extent and cost of the abandoned vehicle problem, local authorities are surveyed. The legislation dealing with car ownership, transferral and disposal and its implementation are scrutinised for weaknesses that allow ELVs to be abandoned without penalty. The automobile recycling industry is surveyed to determine the environmental impact from the industry’s activities. Using semi-structured surveys, policies and practices used in other countries for the management of ELVs are investigated and assessed for effectiveness. Their application to the New Zealand situation is ascertained.

Of the vehicles which are deregistered each year, one in five is dumped. The direct cost to local authorities, to deal with the 25,500 vehicles abandoned each year, is more than six million dollars. In addition, practices and standards for the removal and disposal of hazardous substances from ELVs vary nationwide, adding to the environmental burden caused by vehicle disposal.

Recommendations for the improved management of ELVs target four areas, legislation, institutional practices, entry into the recycling system and dismantling operations. Minor changes to legislation and institutional practices combined with rigorous enforcement will close the data gaps and overcome free-rider problems. A disposal charge added to the registration fee of vehicles entering the country will allow ELV owners to dispose of their vehicles free-of-charge. Improved environmental performance by automotive dismantlers can be achieved through licensing and consistent monitoring from within the industry. Implementation of these recommendations will lead to better management of ELVs, through changed behaviour by private individuals and dismantling operations, and a reduction in the environmental costs associated with vehicle disposal.
Acknowledgements

I am indebted to a number of people for their help with this thesis. Firstly I wish to thank my supervisors Professor Anton Meister and Dr. John Holland for their commitment and advice, it has been much appreciated.

I am grateful to Toyota New Zealand Limited for their funding which enabled this research to take place. I wish to thank those in New Zealand's Land Transport Safety Authority, the automobile recycling industry, and the local and regional authorities for the information given. I also received invaluable information from contacts in the Netherlands, Germany, Sweden and the United Kingdom.

I am indebted to Dr. Leanne Smith, much more than a colleague, a friend whose encouragement and hours and hours of proof-reading I can never repay.

Finally, and most importantly, to my family, Ross, Matt and David for your understanding, encouragement and sacrifice throughout this PhD journey, thank-you doesn't seem enough.
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“Society has come to realise that the term ‘throwaway’ is misleading: in practice there is no ‘away’.”

Fishbein (1994, 4)

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