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**THE SEARCH FOR A ROBUST MEASURE OF ROAD SAFETY
ADVERTISING EFFECTIVENESS**

**A thesis presented in partial fulfilment of the requirements for the
degree of**

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ABSTRACT

Loss of life resulting from road accidents incurs an immeasurable social and financial cost on society every year. Fortunately, the number of road injuries and fatalities has been reducing in most industrialised countries for the past three decades due to the ongoing improvement of the engineering of roadways, the safety of vehicles and the changing attitudes and behaviour of drivers. Governments are constantly developing innovative tactics to further reduce the number of road accidents.

One such initiative has been the adoption of marketing theory and specifically, advertising, by transport agencies in Australia and New Zealand into their road safety strategies. The Governments of both countries have proclaimed the campaigns to have been a success. However, the two road safety advertising campaigns have been studied by a number of researchers with conflicting results and conclusions about their efficacy. The studies have varied in form, estimation, outcomes, and data, making the comparison of their claims often very difficult. Policymakers and the public rely on the research of road safety experts when deciding on the best actions to undertake. However, the experts have each in turn argued that their approach was the most appropriate and that other researchers had done something wrong to reach their conclusions.

The objective of this research was to identify a robust measure of road safety advertising effectiveness to take the confusion out of the ongoing debate.

Using a single set of data and a range of advertising forms and road safety outcomes, previous evaluations of the New Zealand campaign were replicated and extended to discover which approach provided the best explanation of the value of road safety advertising. A further refinement was then made that addressed a potential problem with the original methods. Therefore, the research exhausted all the appropriate single and multiple equation approaches to the econometric evaluation of the effectiveness on road safety advertising using non-experimental data.

The research shows that using one data source and a range of road safety outcomes, a robust and consistent measure of advertising effectiveness could not be identified among the approaches investigated. Furthermore, there is no objective way of knowing which of the models tested best reflects the actual situation. Therefore, it is claimed that a viable solution to this dilemma is to implement an experimental approach to identify the true effect of road safety advertising on driver behaviour.

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CONTENTS

LIST OF TABLES.....	XI
LIST OF FIGURES	XII
LIST OF EQUATIONS	XIII
CHAPTER 1. INTRODUCTION	1
CHAPTER 2. LITERATURE REVIEW	5
2.1 BACKGROUND.....	5
2.2 THE VICTORIAN EXPERIENCE	6
2.2.1 <i>The Transport Accident Commission Campaign</i>	6
2.2.2 <i>The MUARC Evaluation of the TAC Television Advertising</i>	8
2.2.3 <i>Some Criticisms of the MUARC Evaluation of the TAC Television Advertising Campaign</i>	9
2.2.3.1 <i>The Effect of the Economy on Victorian Crash Statistics</i>	9
2.2.3.2 <i>Potential Confounding Effect of Underlying Global Trend</i>	10
2.2.3.3 <i>Collinearity of Advertising and Enforcement</i>	11
2.2.3.4 <i>The Quantitative Assumption</i>	12
2.2.3.5 <i>Redefinition of the Dependent Variable</i>	12
2.3 THE NEW ZEALAND ADOPTION OF THE VICTORIAN BLUEPRINT.....	13
2.3.1 <i>The Supplementary Road Safety Package (SRSP)</i>	13
2.3.2 <i>The Outcomes</i>	14
2.3.3 <i>Independent Evaluation</i>	15
2.4 MACPHERSON (1996), MACPHERSON AND LEWIS (1996) AND MACPHERSON AND LEWIS (1998)	17
2.4.1 <i>The M & L Models</i>	17
2.4.2 <i>Criticisms of the M & L Models</i>	20
2.4.2.1 <i>Suitability of Positive Evidential Breath Tests (EBTs)</i>	20
2.4.2.2 <i>Model Specification Problems</i>	22
2.4.2.3 <i>Problems with Autocorrelation</i>	22
2.4.3 <i>Conclusions and Implications of the M & L Models</i>	23
2.5 CAMERON AND VULCAN (1998).	23
2.5.1 <i>The First Two Years of the SRSP</i>	23
2.5.2 <i>Criticisms of Cameron and Vulcan (1998)</i>	25
2.5.3. <i>Conclusions and Implications of Cameron and Vulcan's Models</i>	27
2.6 WHITE, WALKER, GLONEK, & BURN'S (2000A) RE-EVALUATION OF THE SRSP	27
2.6.1 <i>The Inclusion of the Trend Variable</i>	27
2.6.2 <i>Criticisms of White et al's (2000a) Re-Evaluation of the SRSP</i>	29
2.6.3. <i>Conclusions and Implications of White et al's (2000a) Models</i>	30
2.7 TAY'S (1999) EVALUATION OF THE SRSP CAMPAIGN	30
2.7.1 <i>The Tay (1999) Approach</i>	30
2.7.2 <i>Criticisms of Tay's (1999) Models</i>	33
2.7.3. <i>Conclusions and Implications of Tay's (1999) Models</i>	34
2.8 TAY'S (2001) RE-EVALUATION OF THE SRSP.	35
2.8.1 <i>Another Modeling Approach from Tay</i>	35
2.8.2 <i>Criticisms of Tay's (2001) Re-Evaluation of the SRSP</i>	36
2.8.3. <i>Conclusions and Implications of Tay's (2001) Models</i>	38
2.9 GURIA AND LEUNG'S (2004) SRSP EVALUATION	38
2.9.1 <i>The Guria and Leung (2004) Modeling Approach</i>	38
2.9.2 <i>The Guria and Leung (2004) Results</i>	40
2.9.2.1 <i>The 29 Year Annual Models</i>	40

2.9.2.2 The 10 Year Annual Models	42
2.9.2.3 The 10 Year Quarterly Models	43
2.9.3 Conclusions and Implications of Guria and Leung's (2004) Models	44
2.10 CONCLUSIONS OF LITERATURE REVIEW	45
CHAPTER 3. THE REPLICATION AND EXTENSION OF COMPETING MODELS OF ROAD SAFETY ADVERTISING	47
3.1 INTRODUCTION	47
3.2 METHODOLOGY.....	47
3.2.1 Procedure.....	47
3.2.2 Data Characteristics	48
3.2.2.1 Positive Evidential Breath Tests (EBTs).....	48
3.2.2.2 Drink-Drive Convictions.....	50
3.2.2.3 Serious Casualty Crashes	51
3.2.2.4 Fatalities.....	52
3.2.2.5 High Alcohol Hour Serious Crashes.....	54
3.3 THE REPLICATION OF MACPHERSON AND LEWIS'S (1998) MODELS	56
3.3.1 Introduction	56
3.3.2 Positive Evidential Breath Tests (EBTs).....	57
3.3.3 Drink-Drive Convictions	59
3.3.4 Serious Crashes	61
3.3.5 Fatalities	62
3.3.6 High Alcohol Hour Serious Crashes.....	64
3.3.7 Summary of Replications of Macpherson and Lewis (1998) Models.....	65
3.4 THE REPLICATION OF CAMERON AND VULCAN'S (1998) AND WHITE ET AL'S (2000A) EVALUATION OF THE SRSP CAMPAIGN	66
3.4.1 Introduction	66
3.4.2 Specification of Replication Models.....	67
3.4.3 Serious Crashes.....	68
3.4.4 Positive Evidential Breath Tests (EBTs).....	70
3.4.5 Drink-drive Convictions	71
3.4.6 Fatalities – Models 9(a) to 9(d).....	72
3.4.7 High Alcohol Hour Serious Crashes.....	73
3.4.8 Summary of Models 6(a) to 10(d)	74
3.5 REPLICATION OF TAY'S (1999) EVALUATION OF THE SRSP ROAD SAFETY ADVERTISING	76
3.5.1 Introduction	76
3.5.1.1 A General Measure of Advertising	76
3.5.1.2 Tay's Basic Model Re-specification	77
3.5.1.3 Tay's Test of the Functional Form	77
3.5.1.4 Tay's Use of First-order Autoregression	78
3.5.1.5 Tay's Test for a Structural Change	79
3.5.2 Overview of the Tay (1999) Replications	79
3.5.3 Replications of Tay's (1999) Basic Model	80
3.5.4 Replications of Tay's (1999) Autoregressive Model.....	81
3.5.5 Replications of Tay's (1999) Structural Change Model	83
3.5.6 Summary of the Replications of Tay (1999).....	84
3.6 REPLICATION OF TAY'S (2001) EVALUATION OF THE SRSP ROAD SAFETY ADVERTISING	87
3.6.1 Introduction	87
3.6.2 Specification of Replication Models.....	87
3.6.3 Discussion of Replication Models.....	88
3.6.4 Summary of Replication of Tay (2001)	89
3.7 SUMMARY OF THE REPLICATIONS.....	90
3.7.1 Positive Evidential Breath Tests (EBTs) and Drink-Drive Convictions.....	91
3.7.2 Fatalities	91
3.7.3 Serious Crashes and High Alcohol Hour Crashes	91

3.7.4 Replicated Advertising Models.....	92
3.7.4.1 Macpherson and Lewis.....	92
3.7.4.2 Cameron and Vulcan and White et al.....	92
3.7.4.3 Tay (1999)	93
3.7.4.4 Tay (2001)	93
3.7.5 Conclusions	93
CHAPTER 4. TWO STAGE LEAST SQUARES (2SLS)	95
4.1 INTRODUCTION	95
4.2 RATIONALE	95
4.3 SINGLE EQUATION BIAS AND 2SLS.....	97
4.4. APPLICATION OF 2SLS	99
4.5 2SLS VARIABLE DEFINITIONS	100
4.4 CONCLUSION.....	101
CHAPTER 5. 2SLS MODELS FOR ROAD SAFETY ADVERTISING	102
5.1 INTRODUCTION	102
5.2 DATA FOR 2SLS MODELS - RATIONALE AND CHARACTERISTICS	102
5.2.1 Endogenous Dependent Variables.....	103
5.2.1.1 Alcohol-Related Serious Crashes (Y_{1f}).....	103
5.2.1.2 Alcohol-Related Fatalities (Y_{1g}).....	105
5.2.1.3 List of Endogenous Dependent Variables	107
5.2.2 Endogenous Explanatory Variables.....	107
5.2.2.1 Separation of SRSP Advertising and Enforcement	107
5.2.2.2 Adstock versus TARPs.....	108
5.2.2.3 Advertising Represented by a Step Function	108
5.2.2.4 Summary of Endogenous Advertising and Enforcement Variables.....	109
5.2.3 Exogenous Explanatory Variables.....	110
5.2.3.1 Unemployment (x_4)	110
5.2.3.2 New Car Registrations (x_5)	110
5.2.3.3 Seasonal Factors (x_{7-17}).....	111
5.2.3.4 Trend (x_6).....	111
5.2.4 Instrumental Variables (z_i).....	112
5.2.4.1 Lagged Advertising	113
5.2.4.2 Lagged Enforcement.....	113
5.2.4.3 Lagged Road Safety Outcomes	113
5.2.4.4 Fit of Instrumental Variables.....	115
5.2.5 Functional Form of 2SLS Models	115
5.3 PROCEDURE FOR 2SLS MODELS.....	117
5.4 2SLS WITH POSITIVE EVIDENTIAL BREATH TESTS (EBTs) – MODEL 16 SERIES	118
5.5 2SLS WITH DRINK-DRIVE CONVICTIONS – MODEL SERIES 17	120
5.6 2SLS WITH SERIOUS CRASHES – MODEL SERIES 18	121
5.7 2SLS WITH FATALITIES – MODEL SERIES 19	123
5.8 2SLS WITH HIGH ALCOHOL HOUR SERIOUS CRASHES – MODEL SERIES 20.....	125
5.9 2SLS WITH ALCOHOL-RELATED SERIOUS CRASHES – MODEL SERIES 21	127
5.10 2SLS WITH ALCOHOL-RELATED FATALITIES – MODEL SERIES 22	128
5.11 SUMMARY OF 2SLS MODELS	130
CHAPTER 6. CONCLUSIONS.....	132
6.1 INTRODUCTION	132

6.2 CONCLUSIONS	133
6.3 RESEARCH LIMITATIONS	134
6.4 FUTURE RESEARCH.....	135
6.5 CONTRIBUTION	136
REFERENCES.....	137
GLOSSARY OF TERMS.....	146
APPENDIX 1. DATA CHARACTERISTICS OF QUANTITATIVE VARIABLES.....	150
ADSTOCK.....	150
<i>Calculation of Adstock.....</i>	<i>150</i>
<i>Half-Life for Advertising</i>	<i>151</i>
<i>Base Level Awareness</i>	<i>152</i>
ALL-THEME ROAD SAFETY ADVERTISING	152
DRINK-DRIVE ROAD SAFETY ADVERTISING.....	153
COMPULSORY BREATH TESTS (CBTs)	154
ECONOMIC INDICATORS.....	155
UNEMPLOYMENT	157
NEW CAR REGISTRATIONS	157
APPENDIX 2. OUTPUT FOR CHAPTER 3.....	159
<i>Model 1(a). Macpherson & Lewis Replication – EBTs & All-Theme Adstock.....</i>	<i>159</i>
<i>Model 1(b). Macpherson & Lewis Replication – EBTs & Drink-Drive Adstock</i>	<i>160</i>
<i>Model 2(a). Macpherson & Lewis Replication – Drink-Drive Convictions & All-Theme Adstock</i>	<i>161</i>
<i>Model 2(b). Macpherson & Lewis Replication – Drink-Drive Convictions & Drink-Drive Adstock</i>	<i>162</i>
<i>Model 3(a). Macpherson & Lewis Replication – Serious Casualties & All-Theme Adstock</i>	<i>163</i>
<i>Model 3(b). Macpherson & Lewis Replication – Serious Casualties & Drink-Drive Adstock</i>	<i>164</i>
<i>Model 4(a). Macpherson & Lewis Replication – Fatalities & All-Theme Adstock</i>	<i>165</i>
<i>Model 4(b). Macpherson & Lewis Replication – Fatalities & Drink-Drive Adstock</i>	<i>166</i>
<i>Model 5(a). Macpherson & Lewis Replication – High Alcohol Hour Serious Crashes & All-Theme Adstock</i>	<i>167</i>
<i>Model 5(b). Macpherson & Lewis Replication – High Alcohol Hour Serious Crashes & Drink-Drive Adstock.....</i>	<i>168</i>
<i>Model 6(a). Replication of Cameron & Vulcan (1998) – Serious Crashes & New Cars .</i>	<i>169</i>
<i>Model 6(b). Replication of Cameron & Vulcan (1998) – Serious Crashes & Unemployment.....</i>	<i>170</i>
<i>Model 6(c). Replication of White et al (2000a) – Serious Crashes, New Cars & Trend</i>	<i>171</i>
<i>Model 6(d). Replication of White et al (2000a) – Serious Crashes, Unemployment & Trend</i>	<i>172</i>
<i>Model 7(a). Replication of Cameron & Vulcan (1998) – EBTs & New Cars</i>	<i>173</i>
<i>Model 7(b). Replication of Cameron & Vulcan (1998) – EBTs & Unemployment.....</i>	<i>174</i>
<i>Model 7(c). Replication of White et al (2000a) – EBTs, New Cars & Trend</i>	<i>175</i>
<i>Model 7(d). Replication of White et al (2000a) – EBTs, Unemployment & Trend.....</i>	<i>176</i>
<i>Model 8(a). Replication of Cameron & Vulcan (1998) - Drink-Drive Convictions & New Cars</i>	<i>177</i>
<i>Model 8(b). Replication of Cameron & Vulcan (1998) - Drink-Drive Convictions & Unemployment.....</i>	<i>178</i>

<i>Model 8(c). Replication of White et al (2000a) – Drink-Drive Convictions, New Cars & Trend</i>	<i>179</i>
<i>Model 8(d). Replication of White et al (2000a) – Drink-Drive Convictions, Unemployment & Trend.....</i>	<i>180</i>
<i>Model 9(a). Replication of Cameron & Vulcan (1998) – Fatalities & New Cars.....</i>	<i>181</i>
<i>Model 9(b). Replication of Cameron & Vulcan (1998) – Fatalities & Unemployment ...</i>	<i>182</i>
<i>Model 9(c). Replication of White et al (2000a) – Fatalities, New Cars & Trend.....</i>	<i>183</i>
<i>Model 9(d). Replication of White et al (2000a) – Fatalities, Unemployment & Trend..</i>	<i>184</i>
<i>Model 10(a). Replication of Cameron & Vulcan (1998) – High Alcohol Hour Serious Crashes & New Cars</i>	<i>185</i>
<i>Model 10(b). Replication of Cameron & Vulcan (1998) – High Alcohol Hour Serious Crashes & Unemployment.....</i>	<i>186</i>
<i>Model 10(c). Replication of White et al (2000a) – High Alcohol Hour Serious Crashes, New Cars & Trend.....</i>	<i>187</i>
<i>Model 10(d). Replication of White et al (2000a) – High Alcohol Hour Serious Crashes, Unemployment & Trend.....</i>	<i>188</i>
<i>Model 11(a) – (12a). Replication of Tay (1999) – EBTs (Double-Log)</i>	<i>189</i>
<i>Model 11(b). Replication of Tay (1999) – EBTs (Linear-Log)</i>	<i>190</i>
<i>Model 11(c). Replication of Tay (1999) – EBTs (Log-Linear).....</i>	<i>191</i>
<i>Model 11(d). Replication of Tay (1999) – EBTs (Linear).....</i>	<i>192</i>
<i>Model 12(b). Replication of Tay (1999) – Drink-Drive Convictions.....</i>	<i>193</i>
<i>Model 12(c). Replication of Tay (1999) – Serious Crashes.....</i>	<i>194</i>
<i>Model 12(d). Replication of Tay (1999) – Fatalities.....</i>	<i>195</i>
<i>Model 12(e). Replication of Tay (1999) – High Alcohol Hour Serious Crashes</i>	<i>196</i>
<i>Model 13(a). Replication of Tay (1999) – Autoregressive Model (EBTs).....</i>	<i>197</i>
<i>Model 13(b). Replication of Tay (1999) – Autoregressive Model (Drink-Drive Convictions)</i>	<i>198</i>
<i>Model 13(c). Replication of Tay (1999) – Autoregressive Model (Serious Crashes).....</i>	<i>199</i>
<i>Model 13(d). Replication of Tay (1999) – Autoregressive Model (Fatalities).....</i>	<i>200</i>
<i>Model 13(e). Replication of Tay (1999) – Autoregressive Model (High Alcohol Hour Serious Crashes)</i>	<i>201</i>
<i>Model 14(a). Replication of Tay (1999) – Structural Change Model (EBTs).....</i>	<i>202</i>
<i>Model 14(b). Replication of Tay (1999) – Structural Change Model (Drink-Drive Convictions).....</i>	<i>203</i>
<i>Model 14(c). Replication of Tay (1999) – Structural Change Model (Serious Crashes)</i>	<i>204</i>
<i>Model 14(d). Replication of Tay (1999) – Structural Change Model (Fatalities).....</i>	<i>205</i>
<i>Model 14(e). Replication of Tay (1999) – Structural Change Model (High Alcohol Hour Serious Crashes)</i>	<i>206</i>
<i>Model 15(a). Replication of Tay (2001) Model (EBTs)</i>	<i>207</i>
<i>Model 15(b). Replication of Tay (2001) Model (Drink-Drive Convictions).....</i>	<i>208</i>
<i>Model 15(c). Replication of Tay (2001) Model (Serious Crashes)</i>	<i>209</i>
<i>Model 15(d). Replication of Tay (2001) Model (Fatalities)</i>	<i>210</i>
<i>Model 15(e). Replication of Tay (2001) Model (High Alcohol Hour Serious Crashes)...</i>	<i>211</i>

APPENDIX 3. OUTPUT FOR CHAPTER 5 – THE 2SLS MODELLING PROCESS..... 212

2SLS MODEL SPECIFICATIONS 212

2SLS MODEL OUTPUT 219

<i>Model 16(a). 2SLS – EBTs by All-Theme TARPs.....</i>	<i>219</i>
<i>Model 16(b). 2SLS –EBTs by All-Theme Adstock.....</i>	<i>220</i>
<i>Model 16(c). 2SLS – EBTs by Drink-Drive TARPs</i>	<i>221</i>
<i>Model 16(d). 2SLS – EBTs by Drink-Drive Adstock.....</i>	<i>222</i>
<i>Model 17(a). 2SLS – Drink-Drive Convictions by All-Theme Adstock.....</i>	<i>223</i>
<i>Model 17(b). 2SLS – Drink-Drive Convictions by All-Theme TARPs.....</i>	<i>224</i>
<i>Model 17(c). 2SLS – Drink-Drive Convictions by Drink-Drive Adstock</i>	<i>225</i>
<i>Model 17(d). 2SLS – Drink-Drive Convictions by Drink-Drive TARPs</i>	<i>226</i>
<i>Model 18(a). 2SLS – Serious Crashes by All-Theme Adstock.....</i>	<i>227</i>

<i>Model 18(b). 2SLS – Serious Crashes by All-Theme TARPs.....</i>	<i>228</i>
<i>Model 18(c). 2SLS – Serious Crashes by Drink-Drive Adstock</i>	<i>229</i>
<i>Model 18(d). 2SLS – Serious Crashes by Drink-Drive TARPs.....</i>	<i>230</i>
<i>Model 19(a). 2SLS – Fatalities by All-Theme TARPs</i>	<i>231</i>
<i>Model 19(b). 2SLS – Fatalities by All-Theme Adstock.....</i>	<i>232</i>
<i>Model 19(c). 2SLS – Fatalities by Drink-Drive TARPs.....</i>	<i>233</i>
<i>Model 19(d). 2SLS – Fatalities by Drink-Drive Adstock</i>	<i>234</i>
<i>Model 20(a). 2SLS – High Alcohol Hour Serious Crashes by All-Theme TARPs</i>	<i>235</i>
<i>Model 20(b). 2SLS – High Alcohol Hour Serious Crashes by All-Theme TARPs</i>	<i>236</i>
<i>Model 20(c). 2SLS – High Alcohol Hour Serious Crashes by All-Theme TARPs.....</i>	<i>237</i>
<i>Model 20(d). 2SLS – High Alcohol Hour Serious Crashes by All-Theme TARPs</i>	<i>238</i>
<i>Model 21(a). 2SLS – Alcohol-Related Serious Crashes by All-Theme Adstock.....</i>	<i>239</i>
<i>Model 21(b). 2SLS – Alcohol-Related Serious Crashes by All-Theme TARPs.....</i>	<i>240</i>
<i>Model 21(c). 2SLS – Alcohol-Related Serious Crashes by Drink-Drive Adstock</i>	<i>241</i>
<i>Model 21(d). 2SLS – Alcohol-Related Serious Crashes by Drink-Drive TARPs</i>	<i>242</i>
<i>Model 22(a). 2SLS – Alcohol-Related Fatalities by All-Theme TARPs</i>	<i>243</i>
<i>Model 22(b). 2SLS – Alcohol-Related Fatalities by All-Theme Adstock</i>	<i>244</i>
<i>Model 22(c). 2SLS – Alcohol-Related Fatalities by Drink-Drive TARPs.....</i>	<i>245</i>
<i>Model 22(d). 2SLS –Alcohol-Related Fatalities by Drink-Drive Adstock</i>	<i>246</i>

LIST OF TABLES

Table 1. Cameron and Vulcan’s Model using New Cars as the Economic Indicator	25
Table 2. Cameron and Vulcan’s Model using Unemployment as the Economic Indicator	25
Table 3. White et al’s Re-Evaluation of the SRSP with New Cars and the Trend	28
Table 4. White’s Re-Evaluation of the SRSP with Unemployment and the Trend	29
Table 5. Summary of Advertising Evaluation Models	46
Table 6. Macpherson & Lewis (1998) Replication – EBTs and All-Theme	58
Table 7. Macpherson & Lewis (1998) Replication – EBTs and Drink-Drive	59
Table 8. EBTs and Drink-Drive Convictions	60
Table 9. EBTs and Serious Crashes	61
Table 10. EBTs and Fatalities	63
Table 11. EBTs and High Alcohol Hour Serious Crashes	64
Table 12. Summary of Estimated Effects from Replications of Macpherson & Lewis	65
Table 13. Replications of Cameron and Vulcan’s Evaluation & White’s Re-Evaluation of the NZ SRSP – Serious Crashes	69
Table 14. Replications of Cameron et al’s Evaluation & White’s Re-Evaluation of the NZ SRSP – EBTs	70
Table 15. Replications of Cameron and Vulcan’s Evaluation & White’s Re-Evaluation of the NZ SRSP – Drink-Drive Convictions	71
Table 16. Replications of Cameron and Vulcan’s Evaluation & White’s Re-Evaluation of the NZ SRSP – Fatalities	73
Table 17. Replications of Cameron and Vulcan’s Evaluation & White’s Re-Evaluation of the NZ SRSP – High Alcohol Hour Serious Crashes	73
Table 18. Summary of Estimated Effects from Replications of Cameron & Vulcan	74
Table 19. Summary of Estimated Effects from Replications of White et al	75
Table 20. Tay’s Different Functional Forms using EBTs as the Outcome	78
Table 21. Tay’s (1999) Basic Model using Different Road Safety Statistics	80
Table 22. Tay’s (1999) Autoregressive Model using Different Outcomes	82
Table 23. Tay’s (1999) Structural Change Model using Different Outcomes	83
Table 24. Summary of Estimated Effects from Replications of Tay’s (1999) Basic Model and Autoregression Model	85
Table 25. Summary of Estimated Effects from Replications of Tay’s (1999) Structural Change Model	85
Table 26. Tay’s (2001) Model using Different Outcomes	89
Table 27. Summary of Advertising Effects across the Replications and Outcomes	90
Table 28. Complete List of Variables for 2SLS Models.	116
Table 29. 2SLS Models using EBTs	118
Table 30. 2SLS Models using Drink-Drive Convictions	120
Table 31. 2SLS Models using Serious Crashes	122
Table 32. 2SLS Models using Fatalities	124
Table 33. 2SLS Models using High Alcohol Hour Serious Crashes	125
Table 34. 2SLS Models using Alcohol-Related Serious Crashes	127
Table 35. 2SLS Models using Alcohol-Related Fatalities	129
Table 36. Comparison of Advertising Estimates across the Road Safety Statistics	130
Table 37. 2SLS Model Specifications –Model 16 Series	212
Table 38. 2SLS Model Specifications –Model 17 Series	213
Table 39. 2SLS Model Specifications –Model 18 Series	214
Table 40. 2SLS Model Specifications –Model 19 Series	215
Table 41. 2SLS Model Specifications – Model 20 Series	216
Table 42. 2SLS Model Specifications –Model 21 Series	217
Table 43. 2SLS Model Specifications –Model 22 Series	218

LIST OF FIGURES

Figure 1. Annual Road Fatalities in New Zealand	15
Figure 2. Monthly EBTs as a proportion of CBTs.....	34
Figure 3. Positive Evidential Breath Test (EBTs) October 1993 to December 1998	49
Figure 4. Drink-drive Convictions – October 1993 to December 1998	50
Figure 5. Serious Crashes – January 1990 to December 1998	51
Figure 6. Serious Crashes – October 1993 to December 1998.....	52
Figure 7. Monthly Road Fatalities January 1990 to December 1998	53
Figure 8. Monthly Road Fatalities – October 1993 to December 1998	53
Figure 9. High Alcohol Hour Serious Crashes – January 1990 to December 1998.....	55
Figure 10. High Alcohol Hour Serious Crashes – October 1993 to December 1998.....	55
Figure 11. Comparison of Drink-Drive TARPs and Fatalities.....	96
Figure 12. Comparison of CBTs and Fatalities	96
Figure 13. Alcohol-Related Serious Crashes – January 1990 to December 1998.....	104
Figure 14. Alcohol-Related Serious Crashes –October 1993 to December 1998	105
Figure 15. Alcohol-Related Fatalities – January 1990 to December 1998.....	106
Figure 16. Monthly Alcohol-Related Fatalities – October 1993 to December 1998	106
Figure 17. Monthly All-theme TARPs and Adstock – Oct 1993 to Dec 1998	153
Figure 18. Monthly Drink-drive TARPs and Adstock – Oct 1993 to Dec 1998	154
Figure 19. Monthly Compulsory Breath Tests (CBTs) – Oct 1993 to Dec 1998	155
Figure 20. Monthly Level of Unemployment	157
Figure 21. Monthly New Car Registrations	158

LIST OF EQUATIONS

Equation 1	31
Equation 2	31
Equation 3	31
Equation 4	31
Equation 5	56
Equation 6	97
Equation 7	97
Equation 8	98
Equation 9	98
Equation 10	98
Equation 11	98