Australian Government
Department of Infrastructure and Transport
Bureau of Infrastructure, Transport and Regional Economics

RESEARCH REPORT 127

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Road

Traffic Growth in Australia

Bureau of Infrastructure, Transport and Regional Economics

Traffic Growth in Australia

Report 127

Department of Infrastructure and Transport
Canberra, Australia

ISSN: 1440-9569
ISBN 978-1-921769-54-2
March 2012 / INFRA1259

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An appropriate citation for this report is:

Bureau of Infrastructure, Transport and Regional Economics (BITRE), 2012, *Traffic Growth in Australia*, Report 127, Canberra ACT.

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Published by

Bureau of Infrastructure, Transport and Regional Economics

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Foreword

In Australia, as in other countries around the world, traffic growth has been a feature of the post World War Two experience. The automobile and commercial vehicles have multiplied, as living has increasingly been intertwined with mobility.

This report describes an overview of the different patterns of traffic growth in Australia's states and capital cities and their determinants. Understanding the determinants of past and likely future traffic growth is important for understanding the needs for infrastructure investment, for congestion amelioration, for the road safety task and for many other trends that concern governments and citizens.

This project was undertaken by Dr. David Gargett.

Gary Dolman
Head of Bureau
Bureau of Infrastructure, Transport and Regional Economics
March 2012

At a glance

This report examines the trends in the growth of road traffic (vehicle kilometres travelled or vkt) in eight Australian states/territories and their eight capital cities.

Much of the report is technical in nature, dealing with the sources of data, and details of variable construction and modelling. For example, quarterly data back to 1965 for eight states/territories has been assembled for vehicle kilometres travelled, population, consumer price indices and retail petrol prices.

The main result of all this data preparation has been the ability to document the consistent and yet varied patterns over time in vehicle kilometres per person in Australia. After rapid growth in the seventies, growth in traffic (all vehicle types) per capita has consistently slowed, with many of the states at or approaching saturation.

The other main results of the study are models of vkt per capita as a function of petrol prices, fluctuations in the economy and of a saturating effect of time. Each state/territory is different, but the patterns of the models are amazingly similar. The models explain the common finding of a fairly linear trend in total vkt over the past four decades – exponential growth in population has been balanced by an exponentially declining rate of growth in traffic per person. Lately, there has been a significant effect of the global financial crisis in lowering traffic levels per capita.

The models can be used to provide base-case forecasts of future trends in traffic growth in Australian states and capital cities. These are useful in a variety of contexts, for instance, in forecasting road fatalities from fatality rates, forecasting traffic growth in cities and needs for infrastructure investment.

Executive Summary

Background

Road transport is the dominant mode of transportation around the world and a vital link that brings people and goods together. Understanding the demands for mobility and their impact on traffic growth is crucial for transport authorities everywhere.

This report describes an approach for modelling traffic growth for each of the eight states and territories in Australia, and their capital cities.

The models constructed allow an understanding of the forces underlying traffic growth in each of the jurisdictions covered, and also allow forecasts of future trends in traffic growth.

Patterns of Traffic Growth in Australia

In Australia, the eight states/territories have shown similarities and differences in their traffic growth patterns.

The framework developed in this report is basically:

*TRAFFIC = Traffic per person * population*

As documented, all jurisdictions are at or close to saturation in the amount of vehicle traffic (all types) *per capita*. Only Queensland, Western Australia and the Australian Capital Territory (ACT) are not quite at saturation, but all are within a few years of reaching it.

This means that the future *long-term trend of aggregate* traffic growth in all Australian states/territories and capital cities will depend only on the growth rate of population.

But in the *short-term*, other influences are important. Traffic in all jurisdictions over the last 40 years is shown in the report to have depended also on fuel prices (negatively) and on the unemployment rate (again negatively). Traffic in all states/territories has also been negatively affected by the global financial crisis (over and above the associated higher rates of unemployment).

The report shows how the models can be used to generate forecasts of traffic growth for each of the jurisdictions over the years ahead.

Sensitivity tests on the forecasts show that levels of traffic per person in 2020 are lower if a major rise in unemployment is posited, or if petrol prices rise substantially. The biggest fall in forecast traffic per person would arise if the effects of the Global Financial Crisis persist unchanged to 2020. But although all scenarios reduce the recovery in traffic per person, the growth in population to 2020 means that the aggregate traffic forecasts still grow fairly strongly.

Policy Implications and Conclusion

An understanding of the factors underlying traffic growth forms a crucial underpinning for efforts to cope with growing road traffic, especially in our cities. For example, the modelling suggests that the recent trend of low growth in traffic in our cities will give way to renewed growth in the years ahead, with consequences for congestion and needed infrastructure investment.

Estimates and forecasts of traffic such as contained in this report are also necessary for planning, as input to measuring the effects of road safety efforts, and in many other areas.

In summary, the current research shows that the most likely long-term path for traffic is for it to grow at the same rate as population. But in the short term there will be moderating influences associated with fuel prices, unemployment, and recovery from the effects of the global financial crisis.

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CHAPTER 1

Modelling Trends in Traffic

Road transport is the dominant mode of transportation in Australia and around the world and it is a vital link that brings people and goods together.

In the last 40 years, there has been an enormous expansion in vehicle fleets around the world. Even with limited change in the distance travelled per vehicle, this translates to a corresponding huge growth in traffic levels (vehicle kilometres travelled), according to the following formula:

Traffic Volume (VKT) = Number of Vehicles × Distance Travelled

VKT measures the total distance travelled by all vehicles and treats a kilometre travelled by a car in the same way as a kilometre travelled by a heavy truck. It is the best available general measure of traffic volume.

Measuring and understanding traffic growth (VKT) underpins transport planning in the areas of allocating resources, estimating vehicle emissions, computing energy consumption and assessing traffic impact. The estimation of VKT by states and territories has been required for planning purposes, environmental monitoring, accident analysis, highway fund allocation, and estimation of vehicle emissions. VKT is the best available measure of exposure with which to transform fatalities into a *rate* (e.g. the number of deaths per billion vehicle kilometres driven). In addition, VKT is a widely used international proxy for the pressures of road transport on the environment and human health (NZ Ministry for the Environment 2009). In addition, VKT estimates can also contribute information necessary to inform infrastructure investment decisions and road safety policy.

Due to its high impact on policy decisions, it is critical to be able to measure, model and forecast traffic growth, as represented by VKT.

For Australian states/territories and their capital cities, there are quarterly measurements (estimates) of traffic levels (VKT). These are presented in the current report (see Appendix 2).

But to model (and then forecast) traffic growth, a methodology is necessary.

In the present study this is provided by another formula:

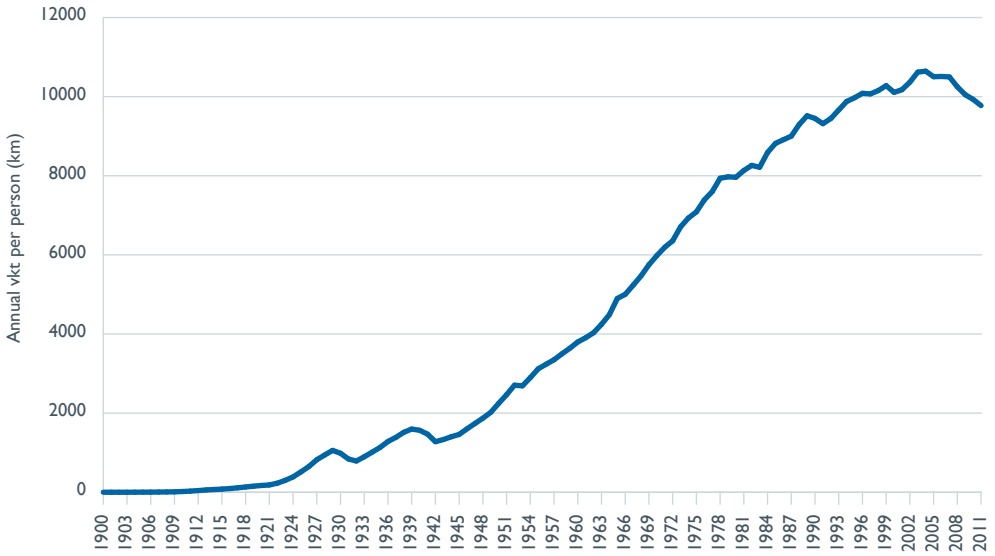
*Traffic Volume (VKT) = VKT per person * number of people*

Demographers can provide an understanding of the dynamics of the population (number of people).

That leaves VKT per person, which is much more tractable to model than aggregate traffic growth. There are common patterns in VKT per person around Australia. In the extremely long

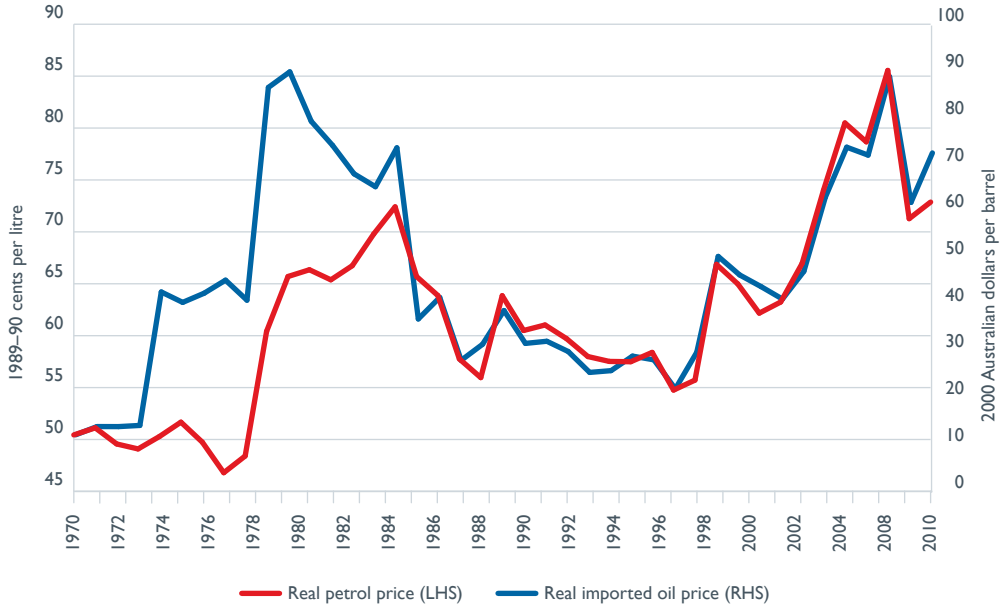
term, VKT per person in Australia has followed a traditional S-shaped adoption curve, as can be seen in Figure 1.1 (David Cosgrove, personal communication). Interruptions to the curve have been as a result of depression, war, recessions, oil crises and, lately, the Global Financial Crisis.

Figure 1.1 Australian trend in vehicle kilometres travelled per person



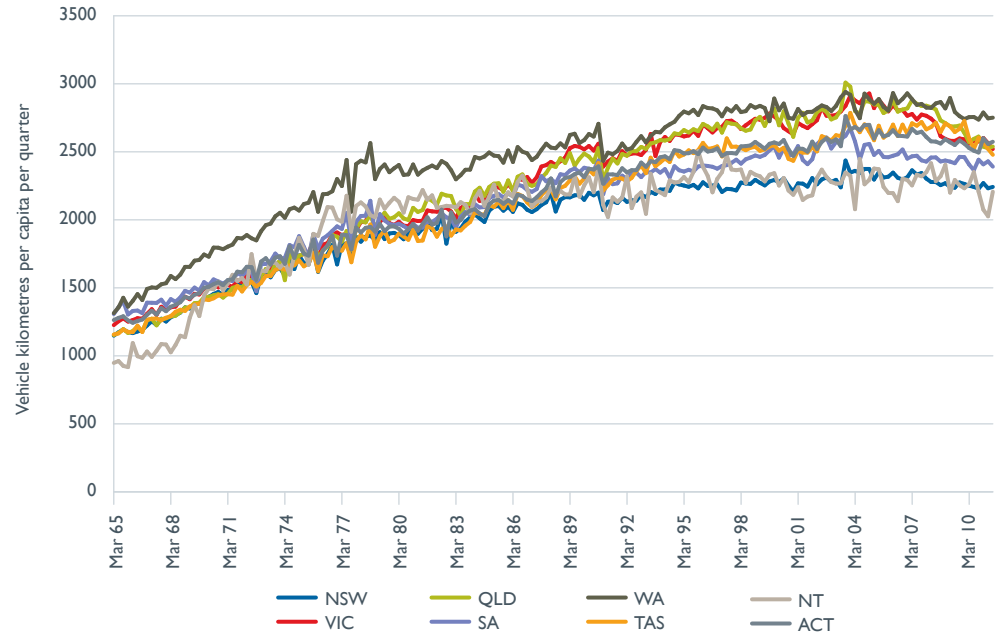
There are several distinct parts to such a curve. First, there is the exponentially increasing phase, in Australia lasting until 1978. Then follows the phase of constant slowing toward saturation, in Australia lasting from 1978 to saturation about 2009. The marked break between the two phases in Australia came at the same time that domestic petrol prices caught up to world oil prices with the first phase of deregulation of prices for domestically produced oil. As can be seen from Figure 1.2, that process was completed by about 1985, and from then on Australian prices have been predictable from real world oil prices times a real Australian dollar exchange rate.

Figure 1.2 Australian real petrol price and real import equivalent oil price



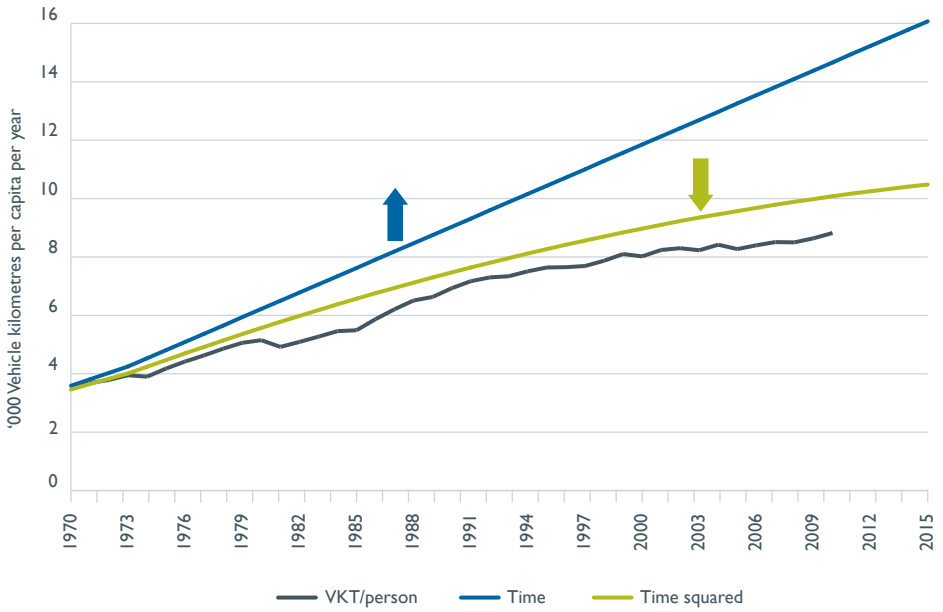
The implications of the sharp transition between exponentially growing and exponentially slowing means that, in the Australian state and city modelling that follows, a separate time trend will be necessary from 1965 to 1978. Looking at the patterns of VKT per person from the eight Australian states/territories (see Figure 1.3), it can be seen that there has been a common trend toward saturation in per person travel.

Figure 1.3 VKT per person in Australian states/territories



So, the first strategy in modelling VKT, is to use 'time' and time squared' as variables to generate an approximate fit to the saturation trend apparent in a jurisdiction/country. Figure 1.4 shows schematically how this is done. The positive increase from 'time' is progressively offset by the increasingly negative effect of 'time squared'. When saturation is reached, the time trends are turned off (by holding them constant) and the trend level of traffic per person remains constant.

Figure 1.4 Using time and time squared to approximate saturation

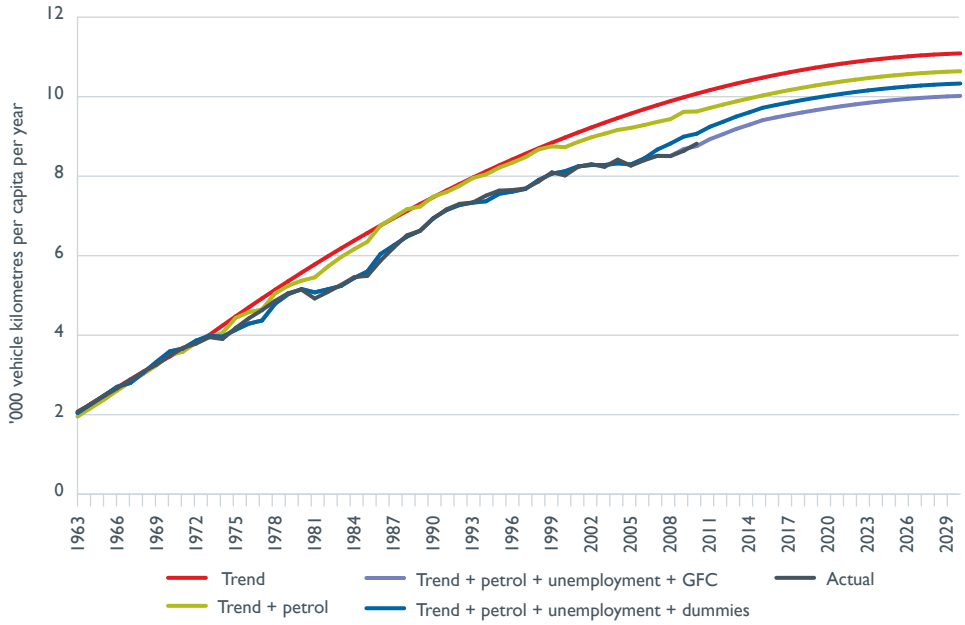


The other two common influences on traffic per person over the last forty-five years are 1) petrol prices (negative - higher petrol prices equal lower traffic per person), and 2) unemployment rates (negative – higher levels of unemployment equal lower traffic per person and any jump in unemployment has an additional temporary negative effect – which is especially apparent in the quarterly Australian models).

Finally, common across all states/territories, is a negative effect of the global financial crisis on per person traffic (in addition to the negative effect of the associated higher levels of unemployment).

The effect of adding petrol prices and unemployment to a saturation effect is shown schematically in Figure 1.5.

Figure 1.5 Effects of petrol prices, unemployment and financial crisis



In the following chapters of the report, this framework is used to fit models to data on traffic per person in Australia.

We begin with the eight Australian states/territories in Chapter 2.

CHAPTER 2

Models of Traffic per Person in the Eight Australian States/Territories

Summary

This chapter presents models of traffic growth in each of the eight Australian states/territories and an aggregate national model.

The commonalities outweigh the differences in traffic per person patterns. Effects of saturation trends, petrol prices, unemployment and the global financial crisis were apparent in each jurisdiction. Differences in *aggregate* traffic growth patterns were largely due to background differences in population growth rates.

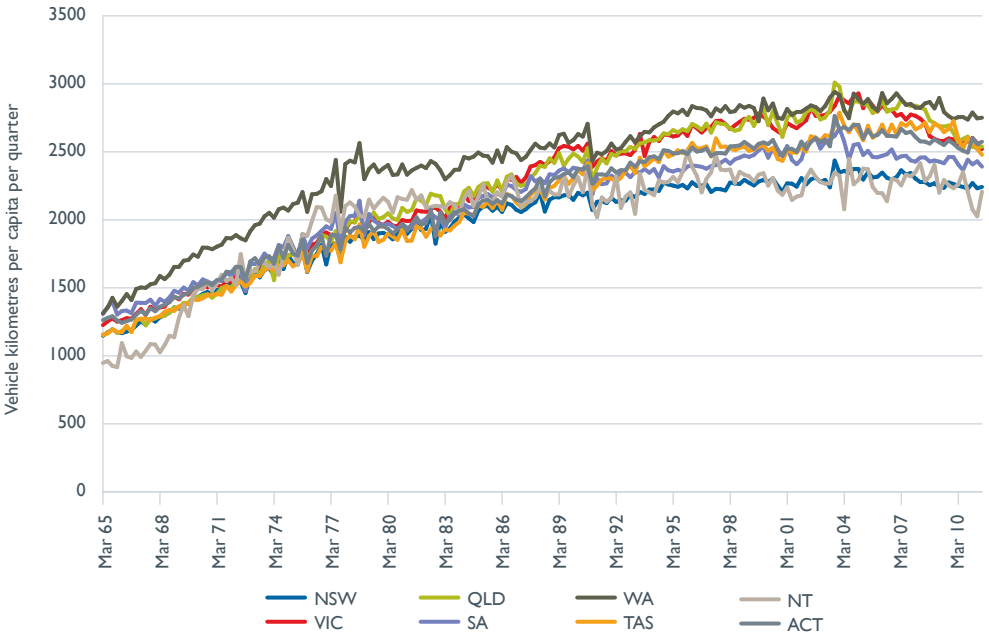
2.1 Background

This chapter presents models of quarterly traffic growth in each of the eight Australian states/territories.

Traffic per person in the eight jurisdictions over the last 45 years is shown in Figure 2.1. The quarterly VKT estimates underlying Figure 2.1 were derived in earlier work (see BITRE 2011).

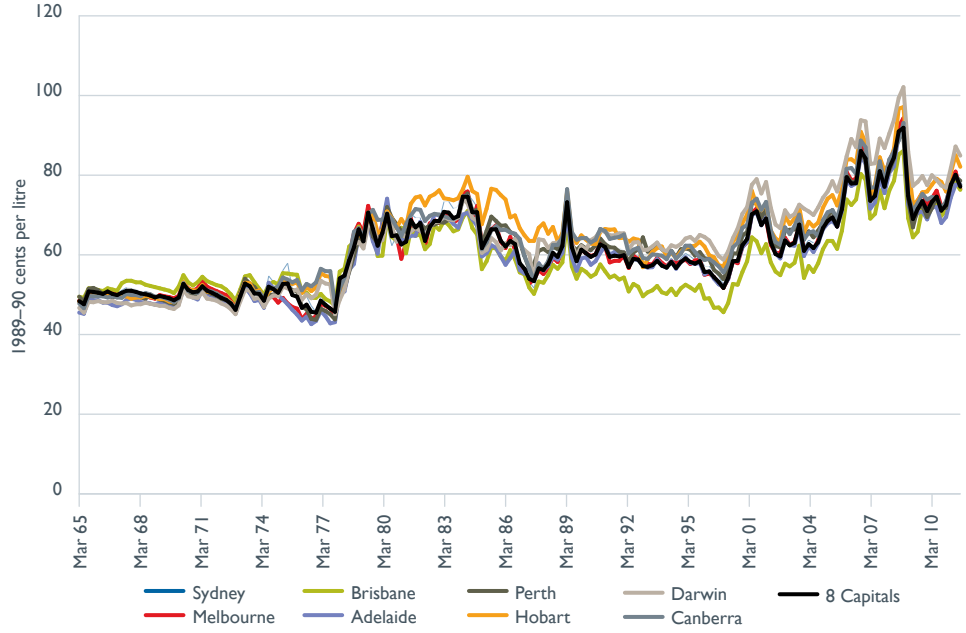
Fairly common to all states/territories is a period of faster growth in traffic up to 1978. This has been taken into account in the analyses by including an additional 'time' trend that applies up to 1978 and then turns off (by being held constant). There is also a short period from 1965 to 1966 when higher levels of traffic per person briefly hold in most states/territories. A dummy variable for this period is used in the analyses, and is important in allowing the 'time, time squared' trend to concentrate unhindered on the important period 1967 to 2011.

Figure 2.1 Patterns of traffic per person in Australia



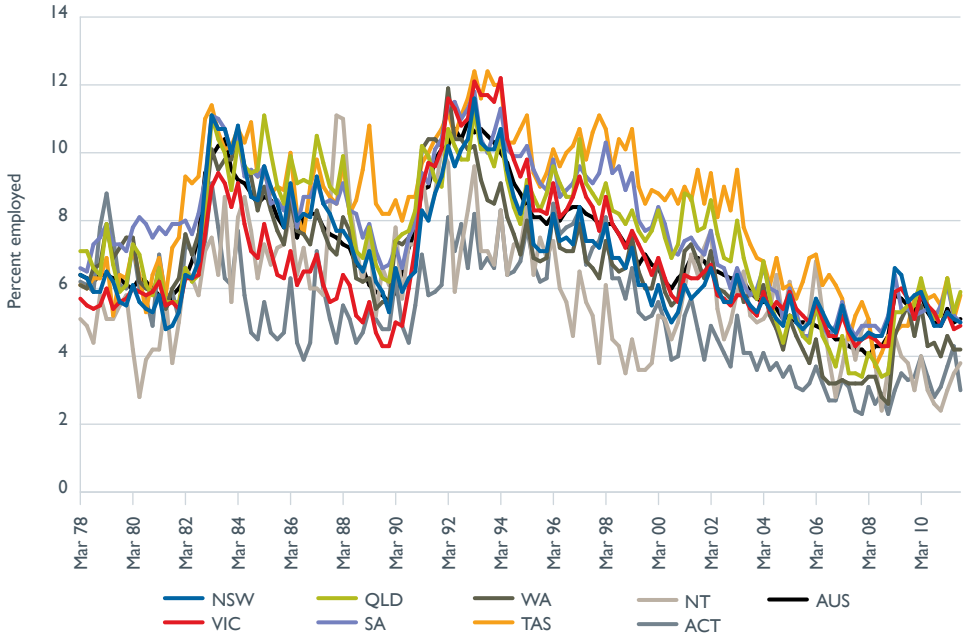
As can be seen from Figure 2.2, real petrol prices in the various states/territories have been generally similar in level and, given the huge swings in world oil prices, have had similar large swings over time (see Gargett 2010 for an explanation of the fuel-price-setting mechanism in Australia). The level of fuel tax is an important influence on moderating the influence of swings in world oil prices on domestic fuel prices. Excise has been much the same across the states, and so differences do not show up in the Australian analyses. But the effect is much greater across different countries, where European countries, with their high fuel taxes, are paradoxically more sheltered in percentage change terms from swings in world oil prices.

Figure 2.2 Real petrol prices, Australian states/territories



Unemployment trends have also had similar trends in each state/territory over the period. Figure 2.3 shows the different rates of unemployment after 1978, when separate state data became available. In the analyses, the national level of unemployment was used as a proxy for each jurisdiction prior to 1978.

Figure 2.3 Unemployment rates, Australian states/territories

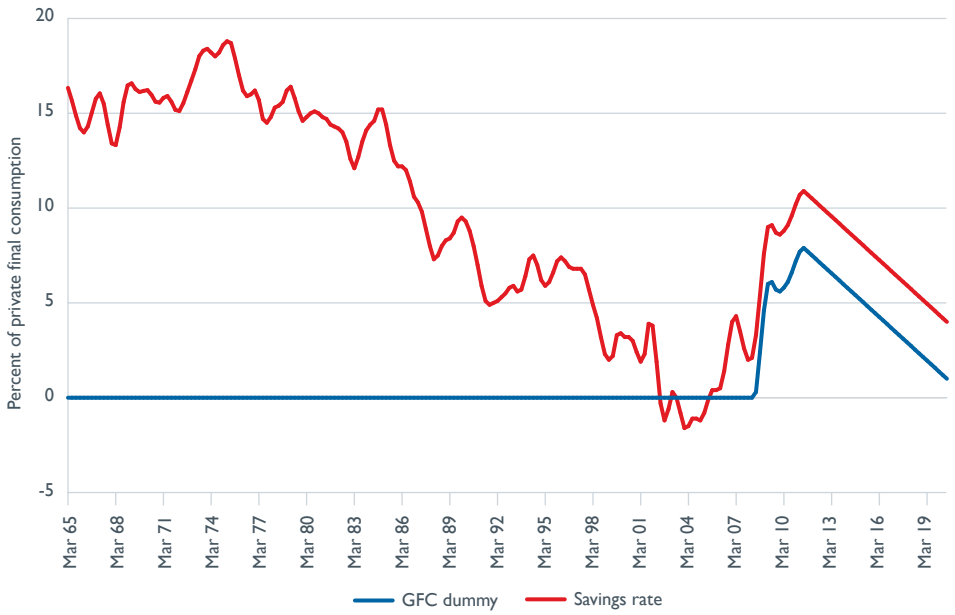


The effect of the global financial crisis (GFC) on traffic levels is apparent in most states/territories (refer back to Figure 2.1). This effect is independent of the effect of associated increased levels of unemployment, and has been modelled by a variable derived from the rise in the national consumer savings rate above the 3 per cent level (from late 2008, early 2009 - taken to represent consumers suddenly switching to economising, including on driving).

After having briefly stabilised around 9 per cent, the savings rate has recently risen to around 11 per cent, indicating consumers are still fearful. The higher the savings rate/GFC effect is, the lower per person traffic levels are.

The GFC dummy is shown in Figure 2.4. Data on the savings rate is available from ABS(2011a).

Figure 2.4 Australian savings rate and the GFC dummy



Finally, the results presented below also include forecasts of traffic growth based on the models fitted. To do this, world oil prices are assumed to remain constant, unemployment is assumed to decrease, and the step change downward in traffic levels per person due to the global financial crisis is assumed to gradually abate over the decade (see Figure 2.4). These assumptions will be varied when scenario testing is done later in the analysis.

2.2 Australia

The growth in traffic per person in Australia over the last 45 years is shown in Figure 2.5, together with the saturating trend fitted. The trend is quite smooth, and saturation in per person traffic was reached at the national level in about 2009.

A model was fit to the data, as detailed in Table 2.1 and the fit is illustrated in Figure 2.6.

Figure 2.7 shows the components of the Australia-level traffic prediction/forecast.

Several features are apparent. The first is the 1965 to 1966 blip. The second is a higher growth trend to 1978. Third is the effect of the global financial crisis. Unemployment (level and change) is a significant influence, causing dips below trend in the 1983 and early 1990's recessions. Also important is the rise in petrol prices from 1979 to the mid 1980s and lately.

Table 2.1 Regression results for predicting Australian traffic per person

Regression Statistics	
Multiple R	0.997485522
R Square	0.994977366
Adjusted R Square	0.994750354
Standard Error	31.4695907
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	34724591.12	4340573.89	4382.934341	4.1466E-199
Residual	177	175289.3196	990.3351391		
Total	185	34899880.44			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	1191.746928	20.29061297	58.73390465	5.2148E-118	1151.704272	1231.789583
pre78 time	10.30798289	2.476985984	4.16150231	4.92663E-05	5.419757167	15.19620862
time	65.92977764	2.95295975	22.3266767	2.33005E-53	60.10223808	71.75731721
time squared	-0.730099658	0.055305439	-13.20122702	3.8305E-28	-0.839242573	-0.620956743
petrol price	-1.990014811	0.359079838	-5.541984266	1.07E-07	-2.698643488	-1.281386134
unemployment	-5.6609241	2.533108746	-2.234773421	0.026683225	-10.65990569	-0.661942504
unemployment change	-36.86063669	7.220688507	-5.104864537	8.49081E-07	-51.11035613	-22.61091725
GFC-savings rate	-22.34906729	2.385076086	-9.370379176	3.38138E-17	-27.05591278	-17.64222181
Dummy 1965-66	82.30211885	19.79860237	4.156966098	5.01652E-05	43.23042522	121.3738125

Using the predicted/forecast traffic per person and multiplying by a series estimating the Australian population, a series predicting and forecasting *aggregate* national traffic levels is derived. This is shown in Figure 2.8. The fit is good, and the forecast is for a resumption of growth in traffic on Australian roads, in the order of 1.7 per cent per year to 2020, assuming the GFC effect wears off.

Also shown in Figure 2.8 is a prediction derived by aggregating predictions from all state/territory models for comparison (the two predictions are roughly similar).

It is to these state/territory models that we now turn, starting with New South Wales.

Figure 2.5 Traffic per person in Australia, 1965 to June 2011

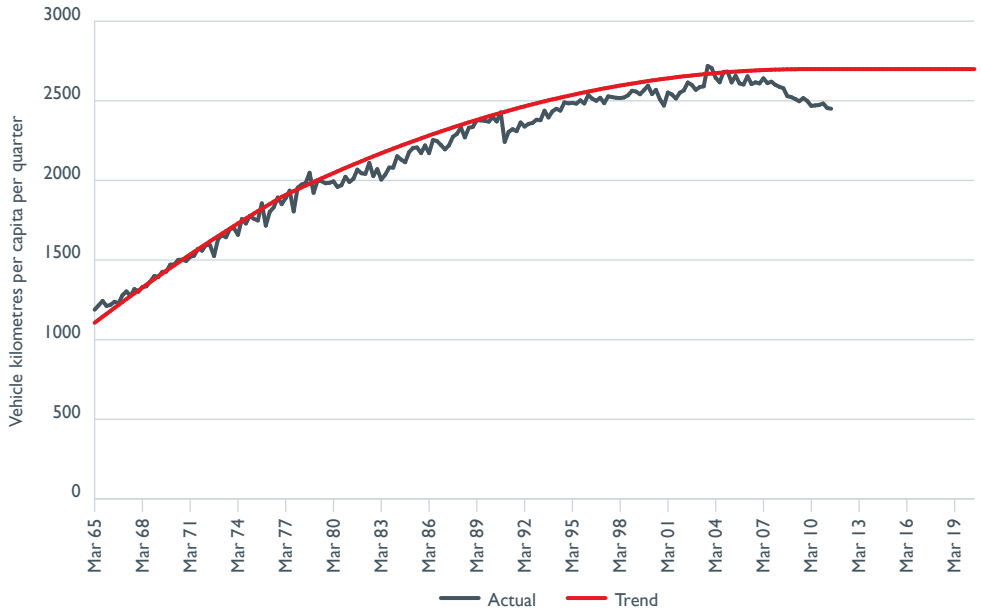


Figure 2.6 Actual and predicted levels of traffic per person in Australia

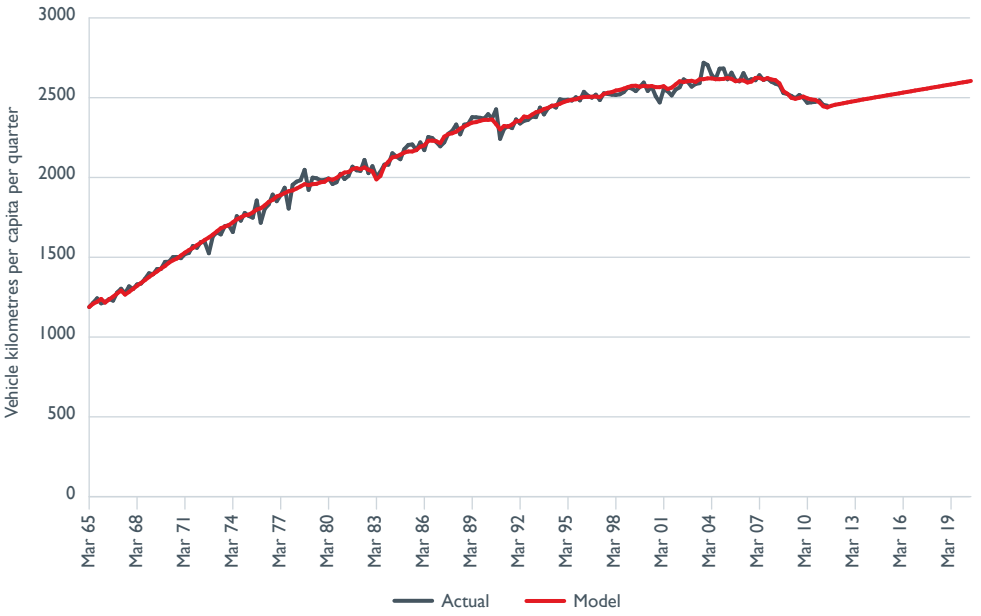


Figure 2.7 Components of predicted levels of traffic per person in Australia

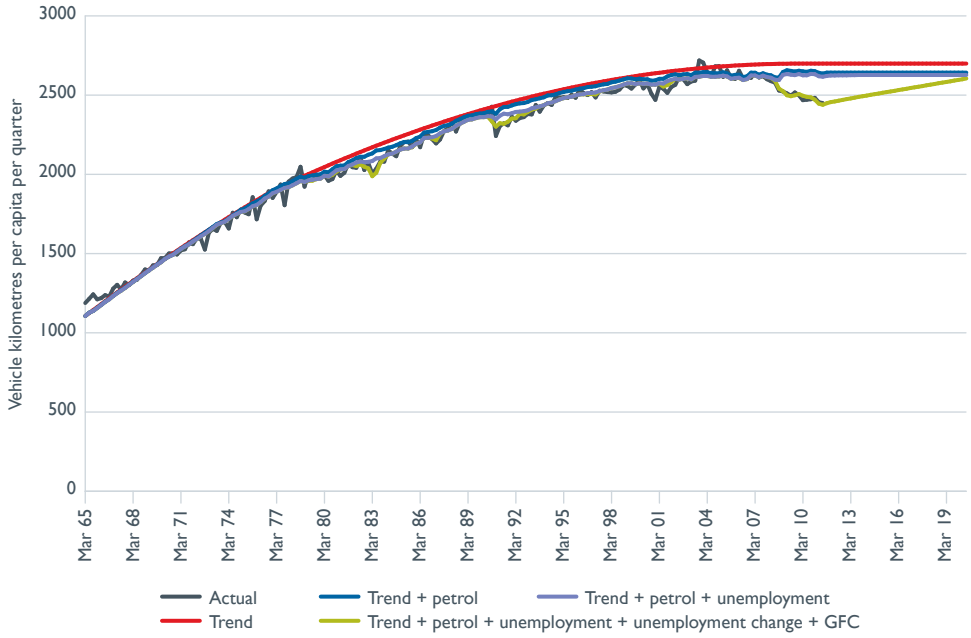
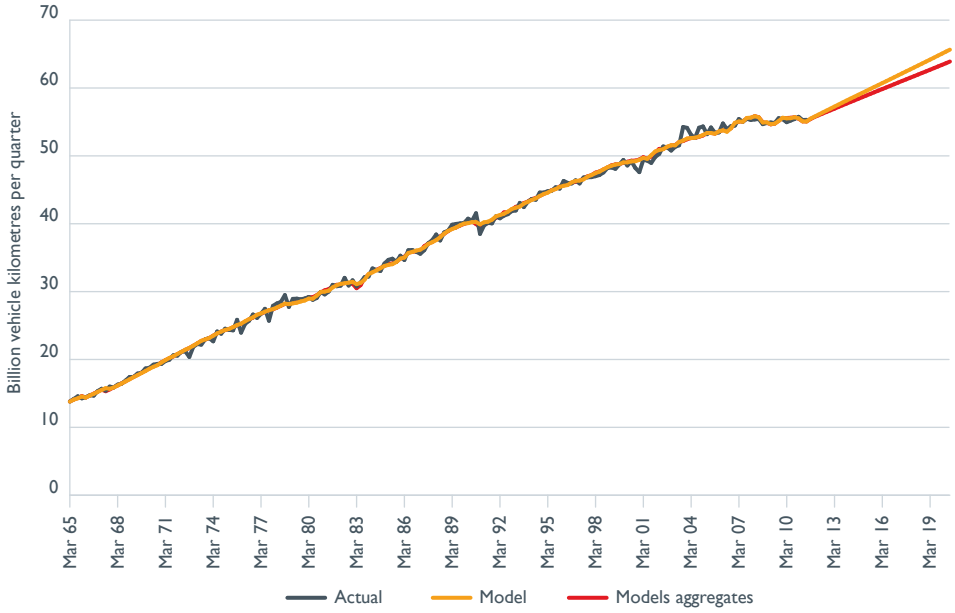


Figure 2.8 Aggregate traffic levels in Australia



2.3 New South Wales

The growth in traffic per person in New South Wales over the last 45 years is shown in Figure 2.9, together with the saturating trend fitted.

Using all the variables, a model was fit to the data, as detailed in Table 2.2 and illustrated in Figure 2.10. All variables are included in the estimation, even though some fail to reach significance. Basically, once the trend is determined, there is little left to explain in New South Wales.

Several features are apparent which are similar to the national trend. The first is the 1965 to 1966 blip. The second is the higher growth trend to 1978. Third is the gradual trend toward saturation, which was reached in 2005. Fourth is the effect of the global financial crisis from December 2008 on. Finally, change in unemployment is the only significant other influence. In the 1983 and early 1990's recessions, the sudden jumps in unemployment had temporary negative effects on traffic levels. Figure 2.11 shows the components of the prediction/forecast. New South Wales traffic is mostly accounted for by the trend variables.

Table 2.2 Regression results for predicting NSW traffic per person

Regression Statistics	
Multiple R	0.994455538
R Square	0.988941818
Adjusted R Square	0.988442013
Standard Error	37.46644822
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	22220064.15	2777508.019	1978.655892	8.7787E-169
Residual	177	248461.0494	1403.734743		
Total	185	22468525.2			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	1089.935506	23.55837344	46.26531236	8.6323E-101	1043.444065	1136.426947
pre78 time	15.85402103	3.089057768	5.132316137	7.48022E-07	9.757897857	21.9501442
time	50.52092808	3.505708941	14.41104465	1.18481E-31	43.60256167	57.4392945
time squared	-0.610377063	0.067060461	-9.10189185	1.83663E-16	-0.742718009	-0.478036116
petrol price	-0.144835903	0.405750713	-0.356957851	0.721548565	-0.945567553	0.655895748
unemployment	-0.124632886	2.745648166	-0.045392883	0.963845326	-5.543051922	5.29378615
unemployment change	-29.33284416	8.144583415	-3.601515592	0.000410769	-45.40583062	-13.2598577
GFC-savings rate	-10.09625067	2.125562397	-4.749919686	4.18961E-06	-14.29095701	-5.90154434
Dummy 1965-66	36.51993943	23.80752218	1.533966414	0.126823419	-10.4631857	83.50306456

Using the predicted/forecast traffic per person and multiplying by a series estimating the New South Wales population, a series predicting/forecasting *aggregate* traffic levels in the state is derived. This is shown in Figure 2.12. The fit is good, and the forecast is for a resumption of growth in traffic on New South Wales roads, in the order of 1.1 per cent per year to 2020, assuming the GFC effect begins to wear off.

Figure 2.9 Traffic per person in New South Wales, 1965 to June 2011

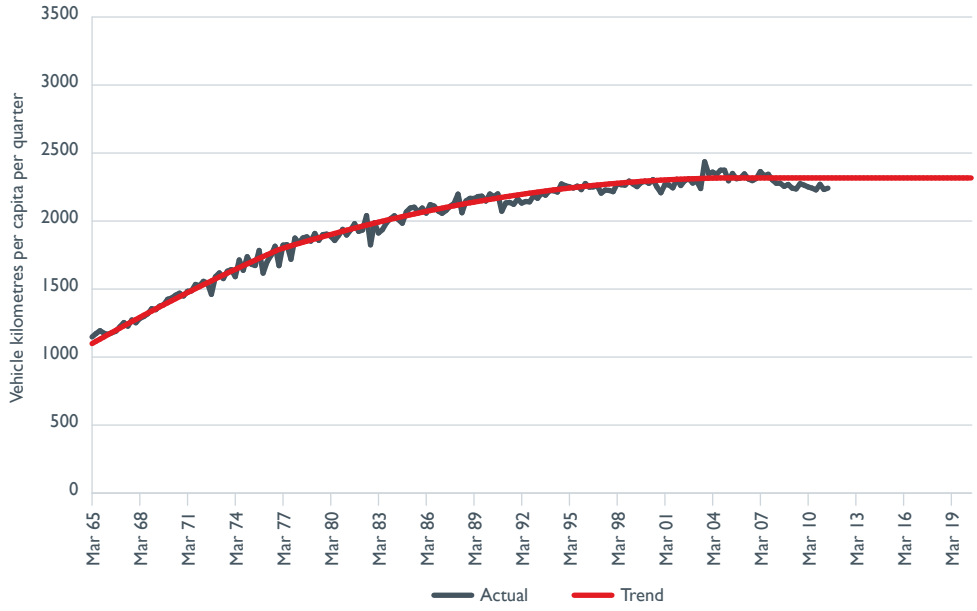


Figure 2.10 Actual and predicted levels of NSW traffic per person

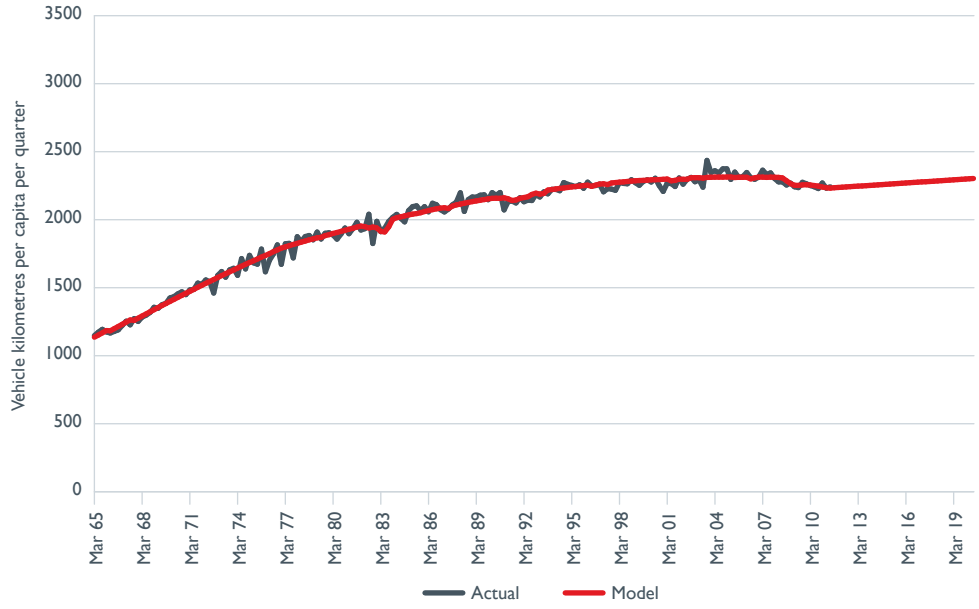


Figure 2.11 Components of predicted levels of NSW traffic per person

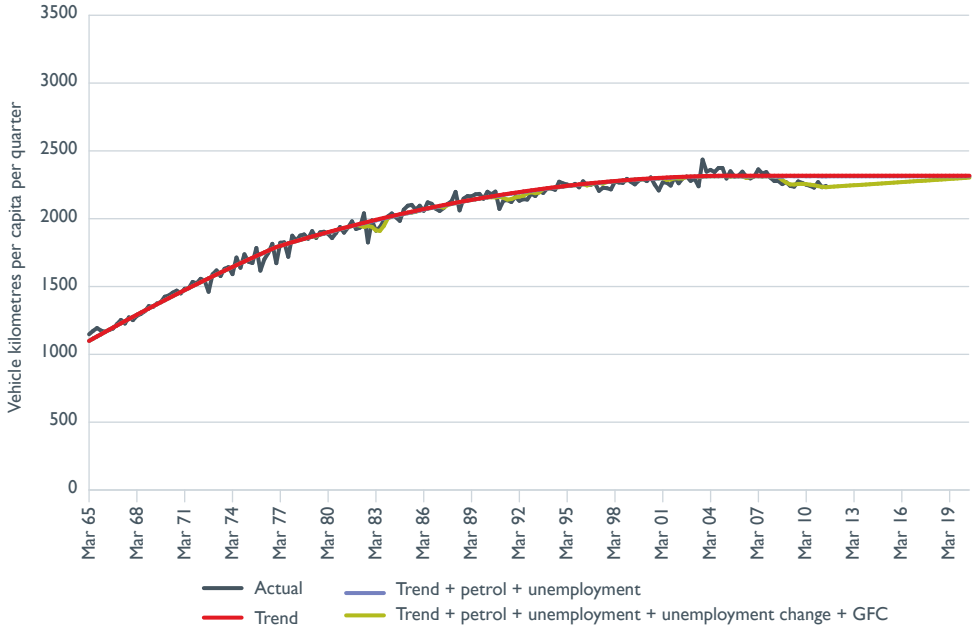
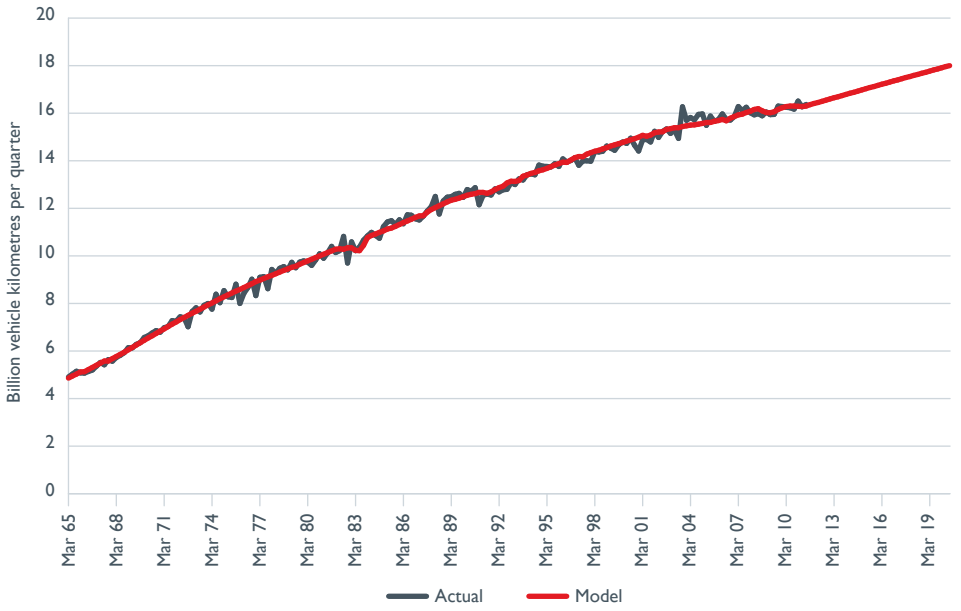


Figure 2.12 Aggregate traffic levels in New South Wales



2.4 Victoria

The growth in traffic per person in Victoria over the last 45 years is shown in Figure 2.13, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 2.3 and illustrated in Figure 2.14.

Unlike New South Wales, Victorian traffic per person shows major deviations from its saturating trend. Among all the states, Victoria has one of the highest levels of response to price and economic activity variables.

The Victorian data shows the 1965 to 1966 blip, the higher growth trend to 1978 and the gradual trend toward saturation, which was reached in 2009. The important effect of the global financial crisis from December 2008 on is apparent. Unemployment and change in unemployment are significant influences, causing traffic per person to dip below trend in the 1983 and early 1990's recessions. Also important is the rise in petrol prices that followed the lifting of price controls on domestic oil production from 1979 and recent price rises. Figure 2.15 shows the components of the Victorian prediction/forecast.

Table 2.3 Regression results for predicting Victorian traffic per person

Regression Statistics	
Multiple R	0.996828433
R Square	0.993666925
Adjusted R Square	0.993380684
Standard Error	40.41283125
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	45356339.31	5669542.413	3471.438325	3.3609E-190
Residual	177	289075.8565	1633.196929		
Total	185	45645415.16			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	1346.876977	24.79685108	54.31645225	2.5898E-112	1297.941454	1395.812501
pre78 time	-12.51376846	3.189039858	-3.92399249	0.000124512	-18.807202	-6.22033491
time	87.79620952	3.183912185	27.57494693	5.66774E-66	81.51289522	94.07952382
time squared	-0.967289776	0.058315594	-16.58715457	6.88922E-38	-1.082373103	-0.852206449
petrol price	-4.336175988	0.428908341	-10.10979637	2.96809E-19	-5.182608225	-3.489743751
unemployment	-9.94705192	2.451038093	-4.058301643	7.4071E-05	-14.7840706	-5.110033243
unemployment change	-20.9726058	8.660753177	-2.421568352	0.016463138	-38.06423118	-3.880980422
GFC-savings rate	-36.69627819	2.848903797	-12.88084147	3.26549E-27	-42.31846779	-31.07408859
Dummy 1965-66	88.43695215	25.06981568	3.52762674	0.000534165	38.96274487	137.9111594

Using the predicted/forecast traffic per person and multiplying by a series estimating the Victorian population, a series predicting and forecasting *aggregate* traffic levels in the state is derived. This is shown in Figure 2.16. The fit is good, and the forecast is for a resumption of growth in traffic on Victoria roads, in the order of 2.7 per cent per year to 2020, assuming the GFC effect starts to wear off.

Figure 2.13 Traffic per person in Victoria, 1965 to June 2011

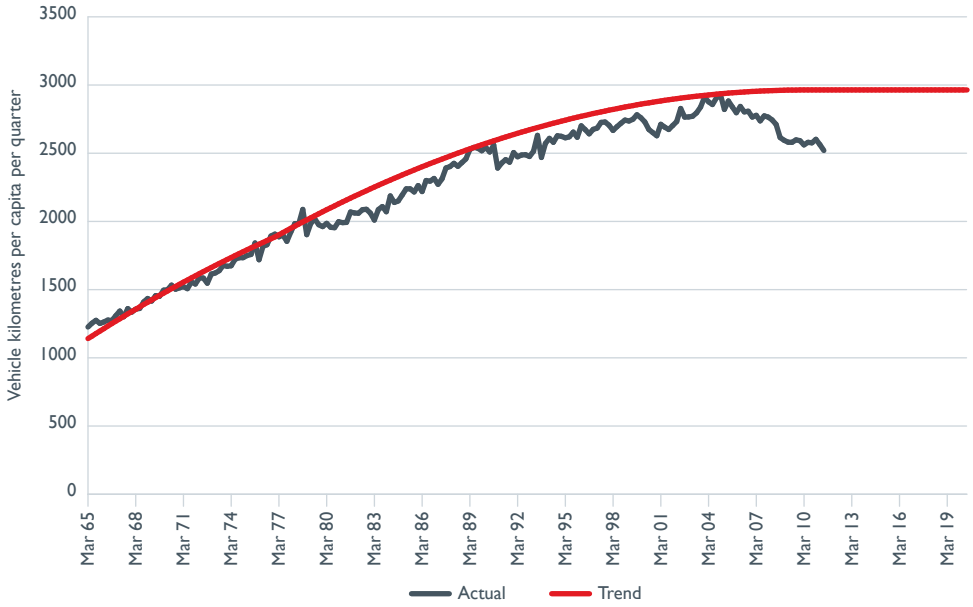


Figure 2.14 Actual and predicted levels of Victorian traffic per person

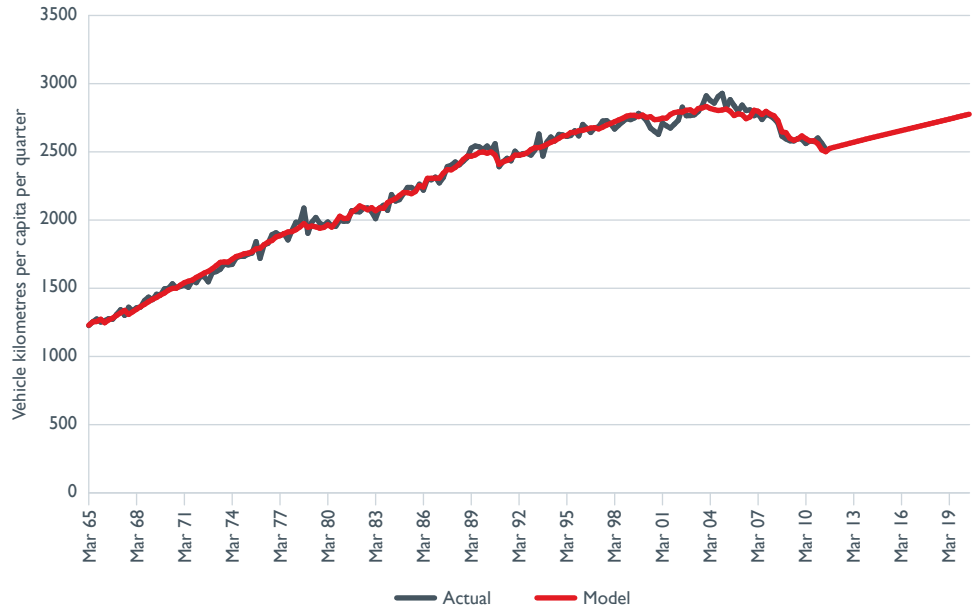


Figure 2.15 Components of predicted levels of Victorian traffic per person

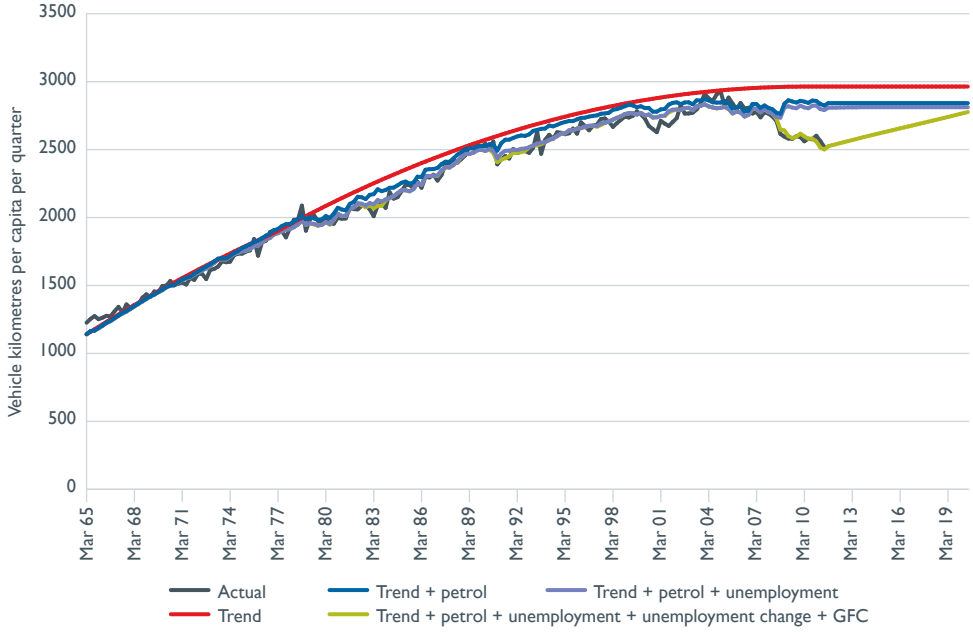
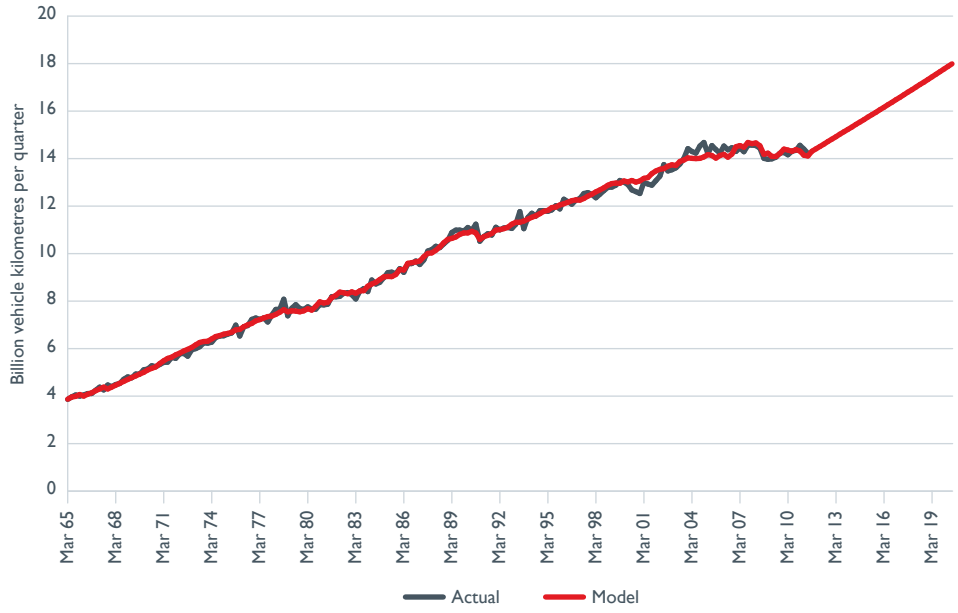


Figure 2.16 Aggregate traffic levels in Victoria



2.5 Queensland

The growth in traffic per person in Queensland over the last 45 years is shown in Figure 2.17, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 2.4 and illustrated in Figure 2.18.

The Queensland data shows the 1965 to 1966 blip and the higher growth trend to 1978. There is a gradual trend toward saturation, which will only be reached by 2013. While Queensland is similar to New South Wales in not deviating much from this trend up to 2008, it is similar to Victoria in the important effect of the global financial crisis from December 2008 on. Unemployment *change* is a significant though not very important influence, as is the rise in petrol prices from 1979 to the mid 1980s and lately. Figure 2.19 shows the components of the prediction/forecast.

Table 2.4 Regression results for predicting QLD traffic per person

Regression Statistics	
Multiple R	0.99625759
R Square	0.992529186
Adjusted R Square	0.992191522
Standard Error	46.11726707
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	50012178.1	6251522.263	2939.399773	7.5014E-184
Residual	177	376444.011	2126.802322		
Total	185	50388622.11			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	1130.153659	32.08428609	35.22452256	6.83213E-82	1066.836695	1193.470623
pre78 time	8.689272764	3.928043095	2.212112381	0.02823872	0.93744799	16.44109754
time	74.09843589	4.704201609	15.75154342	1.64331E-35	64.81489554	83.38197625
time squared	-0.746924466	0.088079526	-8.480114468	8.64381E-15	-0.920745638	-0.573103294
petrol price	-2.250351604	0.546102827	-4.120747031	5.79265E-05	-3.328062139	-1.172641069
unemployment	-5.589116859	3.470590336	-1.610422527	0.109087561	-12.43817821	1.259944492
unemployment change	-29.09066826	10.10617252	-2.878505014	0.004488147	-49.03476679	-9.146569738
GFC-savings rate	-40.02927982	3.627815268	-11.03399067	7.07653E-22	-47.18861784	-32.86994181
Dummy 1965-66	116.8291268	30.4485231	3.836939033	0.000173143	56.74027081	176.9179827

Using the predicted/forecast traffic per person and multiplying by a series estimating the Queensland population, a series predicting and forecasting *aggregate* traffic levels in the state is derived. This is shown in Figure 2.20. The fit is good, and the forecast is for a resumption of growth in traffic on Queensland roads, in the order of 2.8 per cent per year to 2020, assuming the GFC effect starts to wear off.

Figure 2.17 Traffic per person in Queensland, 1965 to June 2011

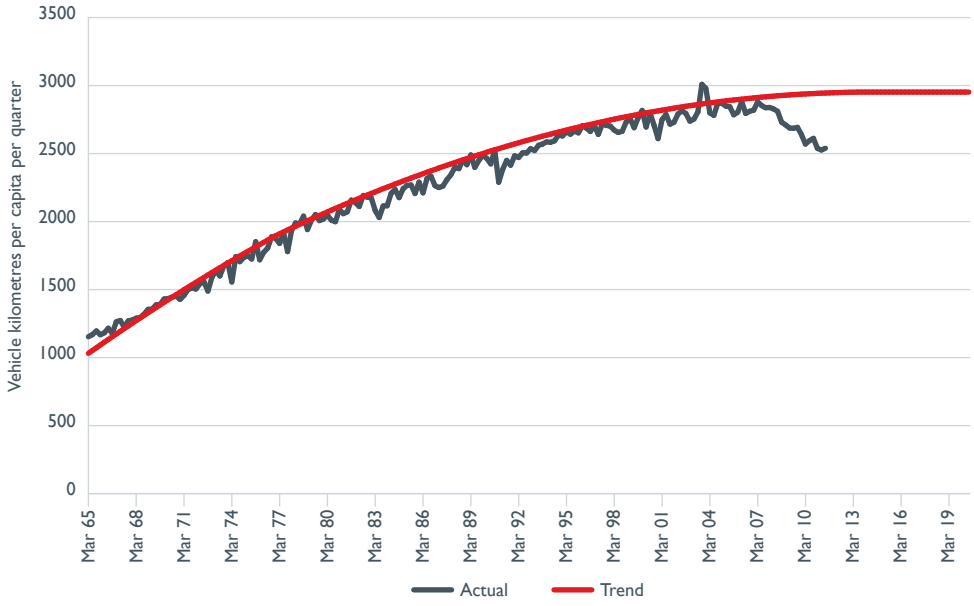


Figure 2.18 Actual and predicted levels of QLD traffic per person

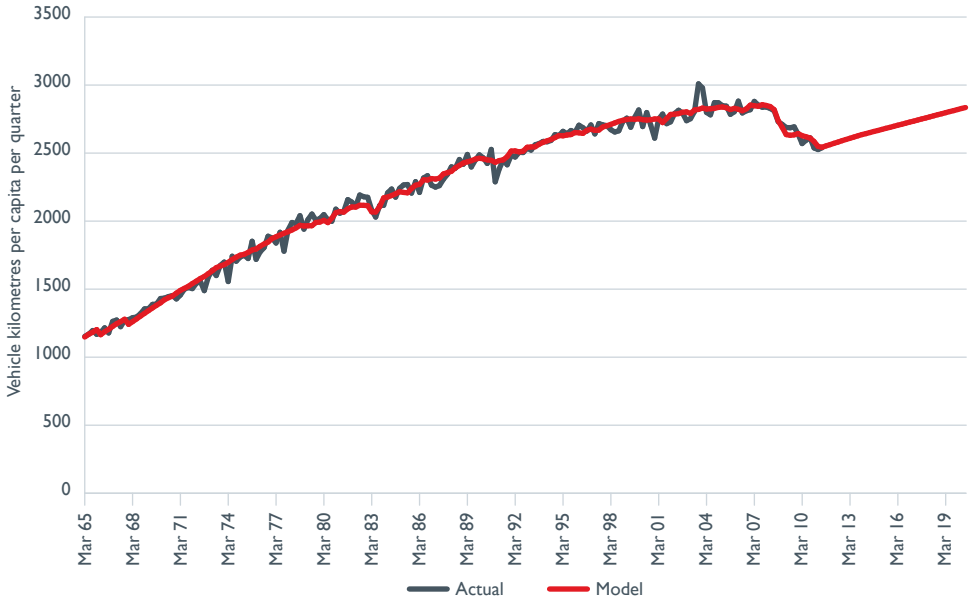


Figure 2.19 Components of predicted levels of QLD traffic per person

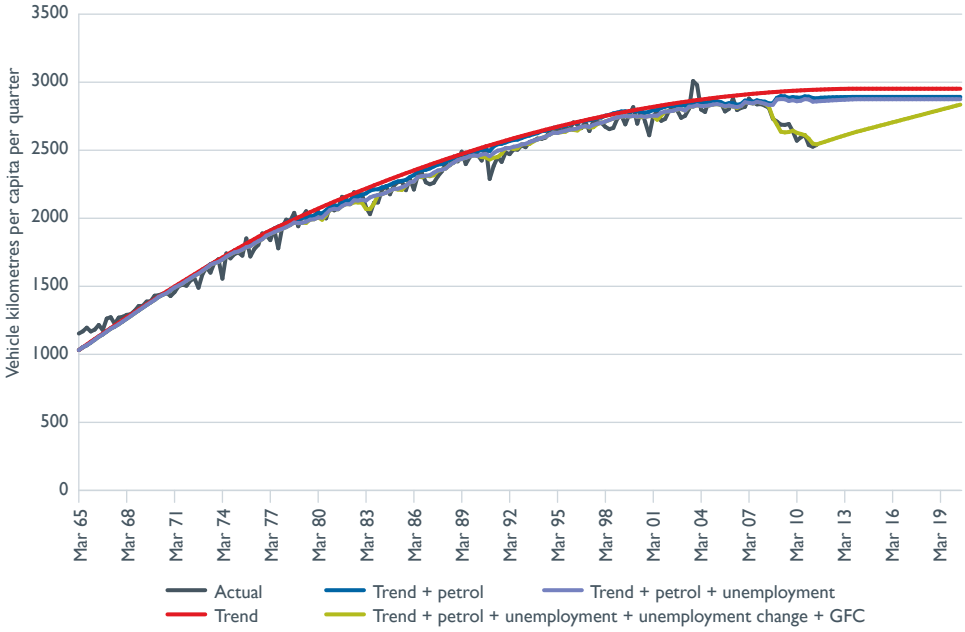
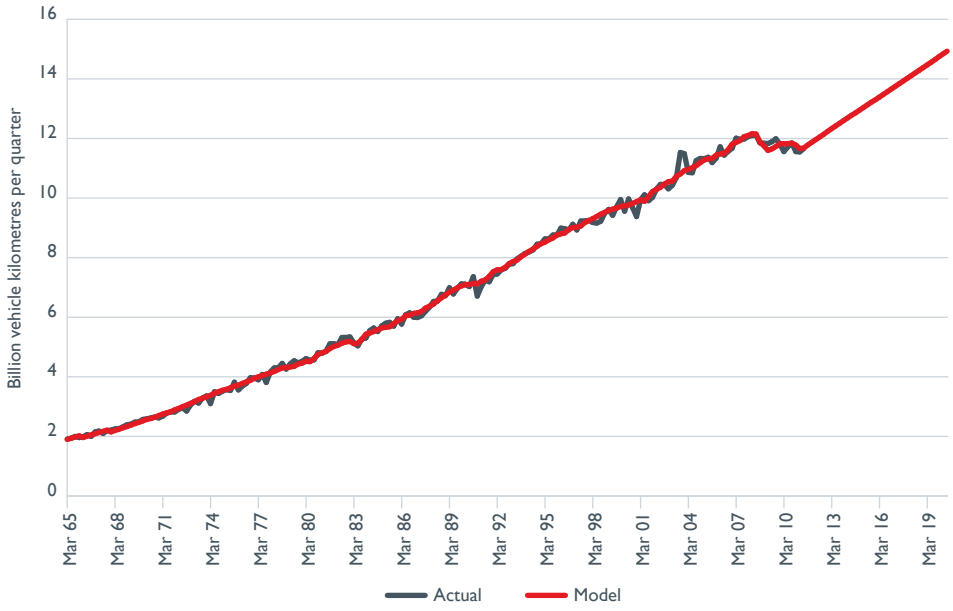


Figure 2.20 Aggregate traffic levels in Queensland



2.6 South Australia

The growth in traffic per person in South Australia over the last 45 years is shown in Figure 2.21, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 2.5 and illustrated in Figure 2.22.

Several features are again apparent, consistent with national trends. The first is the 1965 to 1966 blip. The second is the higher growth trend to 1978. Third is the gradual trend toward saturation, which was reached in 2004. Fourth is the effect of the global financial crisis from December 2008 on. Finally, unemployment is a significant influence, causing traffic per person to dip below trend during the 1980s and 1990s. Also important is the rise in petrol prices from 1979 to the mid 1980s and lately. Figure 2.23 shows the components of the prediction/forecast.

Table 2.5 Regression results for predicting SA traffic per person

Regression Statistics	
Multiple R	0.992227208
R Square	0.984514832
Adjusted R Square	0.983814938
Standard Error	47.7478855
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	25655938.18	3206992.273	1406.661581	7.5717E-156
Residual	177	403535.3208	2279.86057		
Total	185	26059473.5			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	1341.701064	29.56786851	45.37699644	2.0473E-99	1283.350142	1400.051986
pre78 time	11.24159962	4.055176701	2.772160241	0.006164504	3.238882122	19.24431712
time	68.11674204	5.374433096	12.674219	1.30002E-26	57.51052856	78.72295552
time squared	-0.836659795	0.10219305	-8.187051821	5.11677E-14	-1.038333401	-0.634986189
petrol price	-3.985417995	0.520657205	-7.654591078	1.20713E-12	-5.012912685	-2.957923306
unemployment	-13.05345683	3.674197423	-3.552736918	0.000488773	-20.30432805	-5.802585615
unemployment change	-21.04336157	9.475780476	-2.22075233	0.027636602	-39.74340841	-2.343314732
GFC-savings rate	-12.95049366	2.664621013	-4.860163452	2.57374E-06	-18.20900908	-7.691978242
Dummy 1965-66	162.2391316	31.26085825	5.189848925	5.72698E-07	100.547167	223.9310961

Using the predicted/forecast traffic per person and multiplying by a series estimating the South Australian population, a series predicting and forecasting *aggregate* traffic levels in the state is derived. This is shown in Figure 2.24. The fit is good, and the forecast is for a resumption of growth in traffic on South Australian roads, in the order of 0.8 per cent per year to 2020, assuming the GFC effect lessens.

Figure 2.21 Traffic per person in South Australia, 1965 to June 2011

Figure 2.22 Actual and predicted levels of SA traffic per person

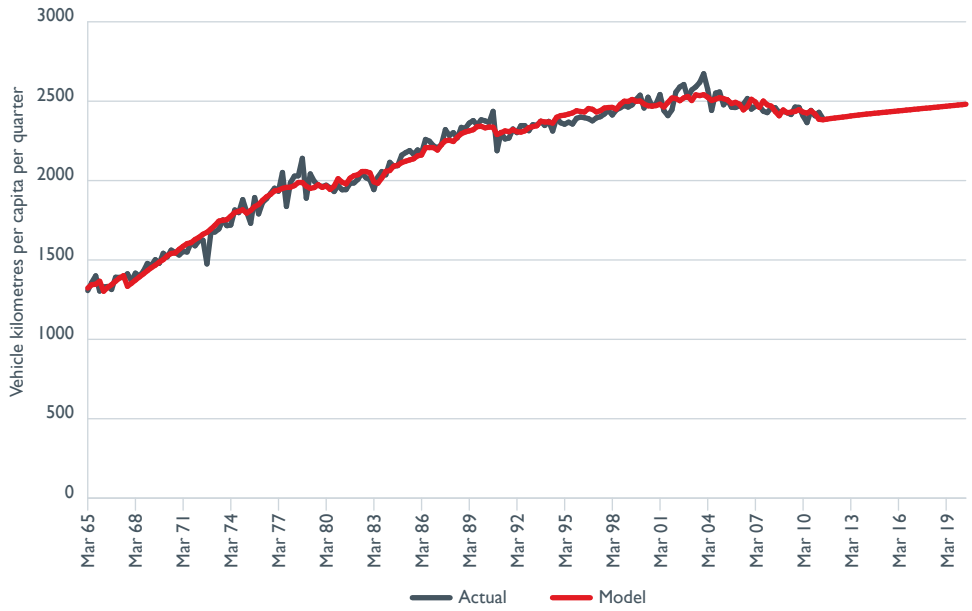


Figure 2.23 Components of predicted levels of SA traffic per person

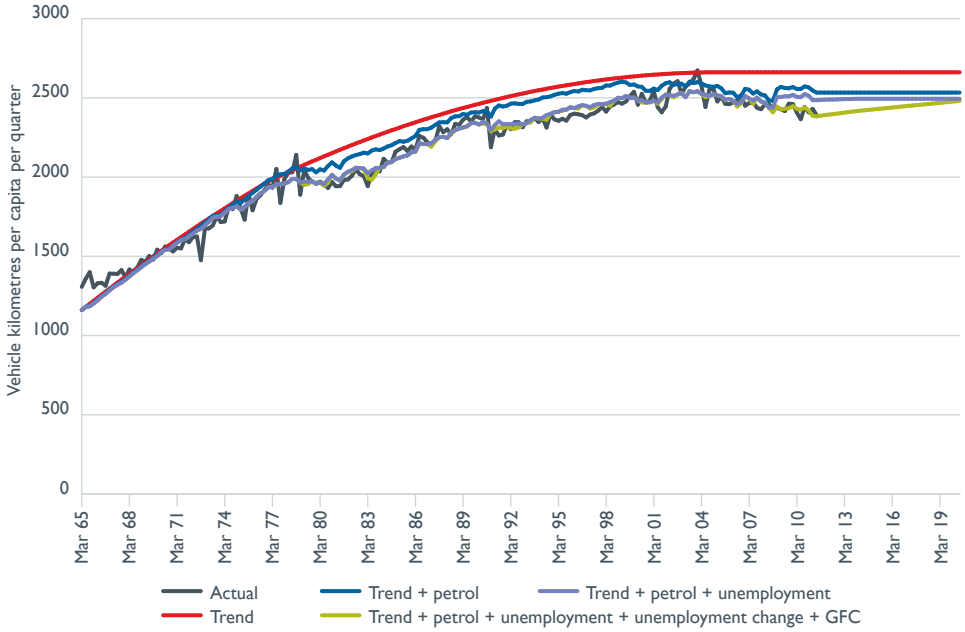
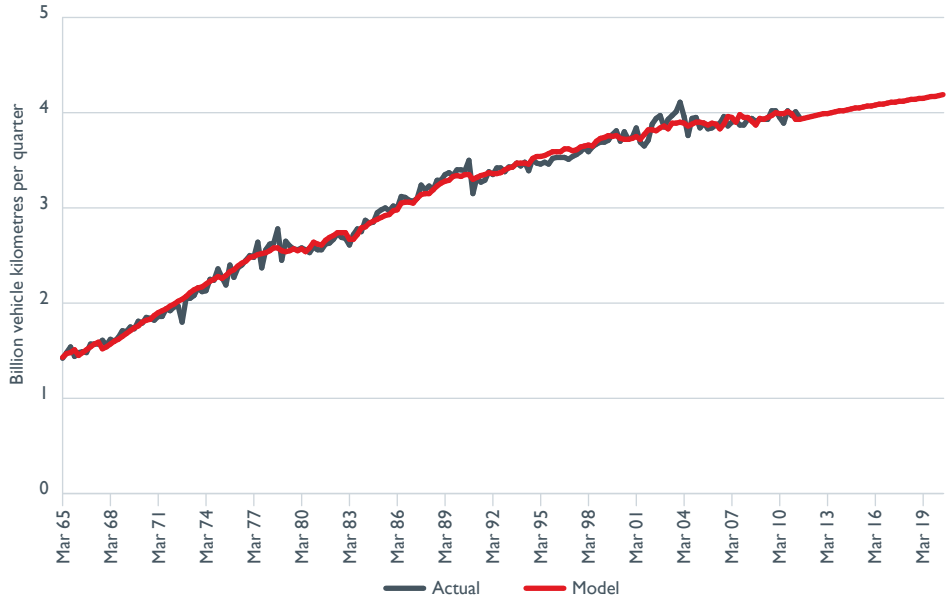


Figure 2.24 Aggregate traffic levels in South Australia



2.7 Western Australia

The growth in traffic per person in Western Australia over the last 45 years is shown in Figure 2.25, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 2.6 and illustrated in Figure 2.26.

The Western Australia data is marked by a much higher growth trend to 1978, after which there is a marked slowing in trend growth. The post 1978 trend is marked by a very gradual slowing toward saturation, which will only be reached in 2016.

Also apparent in the data are the 1965 to 1966 blip, and the effect of the global financial crisis from December 2008 on. Finally, unemployment is a significant influence, causing traffic per person to dip below trend in the 1980s and 1990's. Also important is the rise in petrol prices from 1979 to the mid 1980s and lately. Figure 2.27 shows the effect of the components of the prediction/forecast.

Table 2.6 Regression results for predicting WA traffic per person

Regression Statistics	
Multiple R	0.992191706
R Square	0.984444381
Adjusted R Square	0.983741302
Standard Error	55.02793532
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	33919043.61	4239880.451	1400.190656	1.1313E-155
Residual	177	535969.0388	3028.073666		
Total	185	34455012.65			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	1436.547599	36.41176158	39.45284537	1.26103E-89	1364.690548	1508.404651
pre78 time	48.5113921	4.236357126	11.45120457	4.49061E-23	40.15112279	56.8716614
time	47.09822738	4.880714126	9.649863966	5.71453E-18	37.46634713	56.73010762
time squared	-0.458048011	0.09290597	-4.930232265	1.8807E-06	-0.641393963	-0.274702059
petrol price	-3.535815689	0.65251418	-5.418756862	1.94051E-07	-4.82352447	-2.248106908
unemployment	-11.04500618	4.21850282	-2.618228943	0.009604625	-19.37004078	-2.719971579
unemployment change	-33.42631424	13.75274584	-2.430519303	0.016075142	-60.56676901	-6.285859473
GFC-savings rate	-19.75755495	4.243677966	-4.655762079	6.31254E-06	-28.13227162	-11.38283828
Dummy 1965-66	69.8131877	35.44063458	1.969862801	0.050414209	-0.127386399	139.7537618

Using the predicted/forecast traffic per person and multiplying by a series estimating the Western Australian population, a series predicting and forecasting *aggregate* traffic levels in the state is derived. This is shown in Figure 2.28. The fit is good, and the forecast is for a resumption of growth in traffic on Western Australian roads, in the order of 1.9 per cent per year to 2020, assuming the GFC effect weakens.

Figure 2.25 Traffic per person in Western Australia, 1965 to June 2011

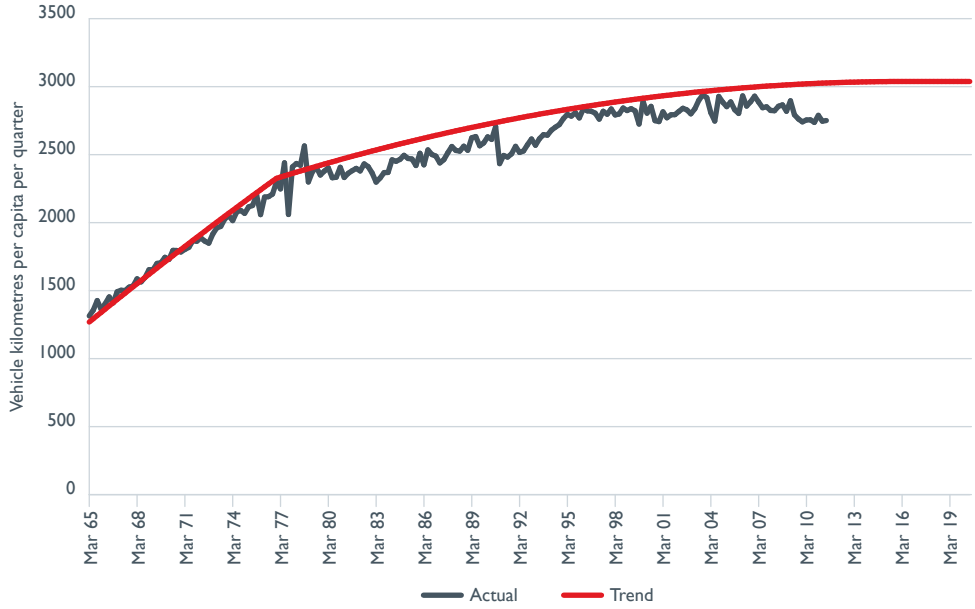


Figure 2.26 Actual and predicted levels of WA traffic per person

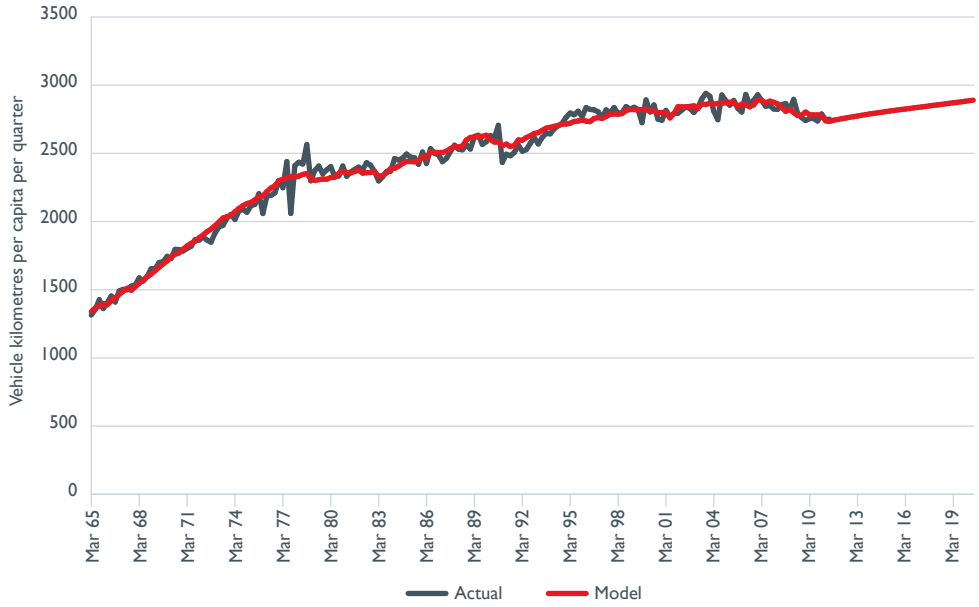


Figure 2.27 Components of predicted levels of WA traffic per person

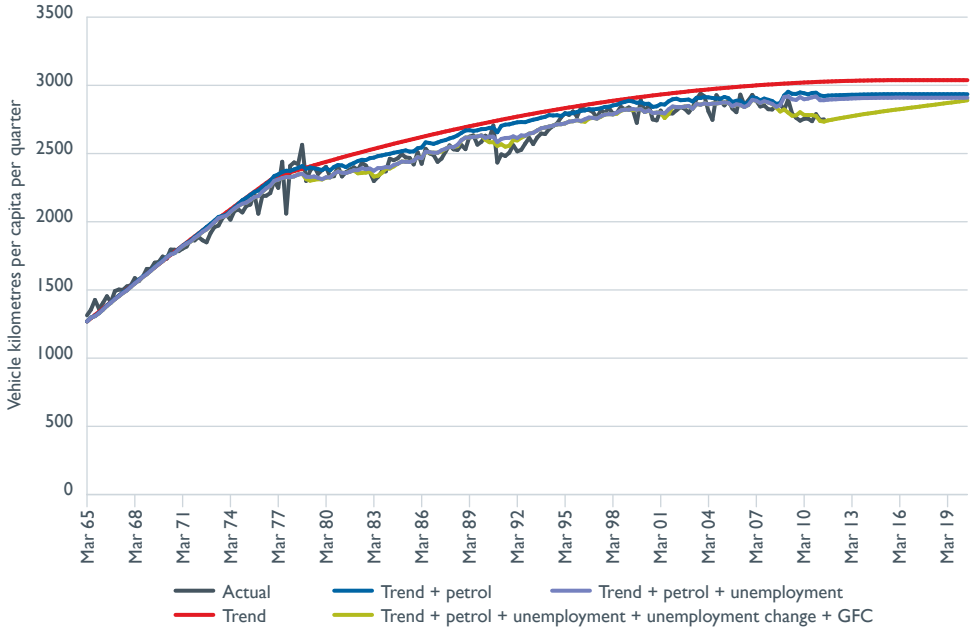
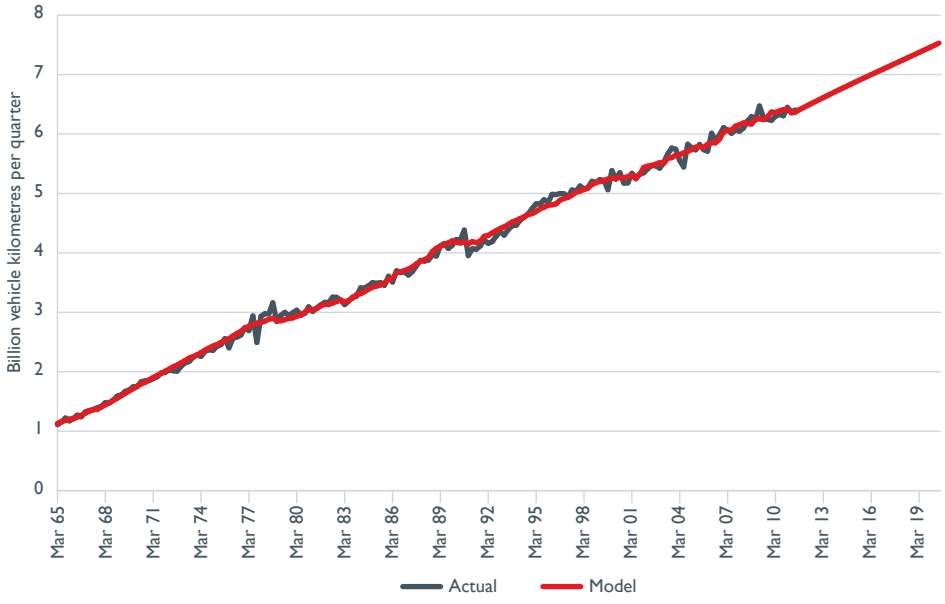


Figure 2.28 Aggregate traffic levels in Western Australia



2.8 Tasmania

The growth in traffic per person in Tasmania over the last 45 years is shown in Figure 2.29, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 2.7 and illustrated in Figure 2.30.

Most of the usual features are again apparent, consistent with national trends. The first is the 1965 to 1966 blip. Secondly, there is a suggestion (though not statistically significant) of a slightly lower growth trend to 1978. The third feature is the gradual trend toward saturation, which will only be reached in 2012. Fourth is the effect of the global financial crisis from December 2008 on. Finally, unemployment is a significant influence, causing traffic per person to dip below trend in the 1980s and 1990's. Also important is the rise in petrol prices from 1979 to the mid 1980s and lately. Figure 2.31 shows the components of the prediction/forecast.

Table 2.7 Regression results for predicting TAS traffic per person

Regression Statistics	
Multiple R	0.995614032
R Square	0.9912473
Adjusted R Square	0.990851698
Standard Error	44.93438956
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	40473516.87	5059189.609	2505.666485	9.1198E-178
Residual	177	357380.5876	2019.099365		
Total	185	40830897.46			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	1218.781295	26.8400574	45.40904204	1.8247E-99	1165.813591	1271.748998
pre78 time	-4.210362336	3.73930016	-1.125976027	0.261700026	-11.58971102	3.168986342
time	74.55130537	5.068990789	14.70732706	1.64907E-32	64.5478692	84.55474154
time squared	-0.774448791	0.090090701	-8.596323336	4.24095E-15	-0.952238929	-0.596658653
petrol price	-2.759529914	0.486594971	-5.671102413	5.68154E-08	-3.719804243	-1.799255584
unemployment	-8.783610793	3.703564441	-2.371664091	0.018782134	-16.09243656	-1.474785026
unemployment change	-31.51815177	14.8308823	-2.12517038	0.034959799	-60.78626265	-2.250040898
GFC	-129.8494996	21.65204401	-5.997101222	1.10318E-08	-172.5788809	-87.1201183
Dummy 1965-66	62.79758372	29.2414824	2.147551306	0.033109672	5.090770881	120.5043966

Using the predicted/forecast traffic per person and multiplying by a series estimating the Tasmanian population, a series predicting and forecasting *aggregate* traffic levels in the state is derived. This is shown in Figure 2.32. The fit is good, and the forecast is for a resumption of growth in traffic on Tasmanian roads, in the order of 1.1 per cent per year to 2020, assuming the GFC effect wears off.

Figure 2.29 Traffic per person in Tasmania, 1965 to June 2011

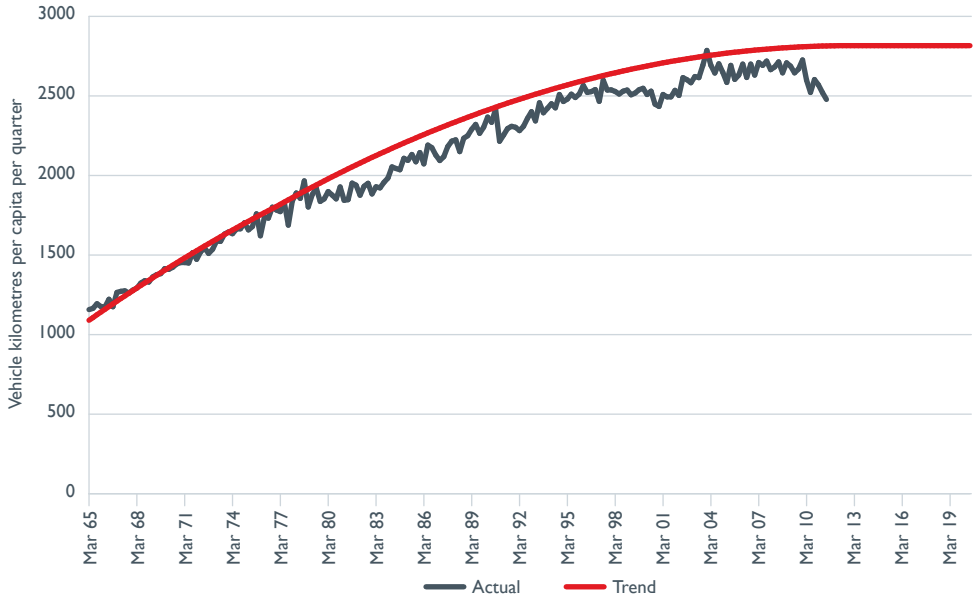


Figure 2.30 Actual and predicted levels of TAS traffic per person

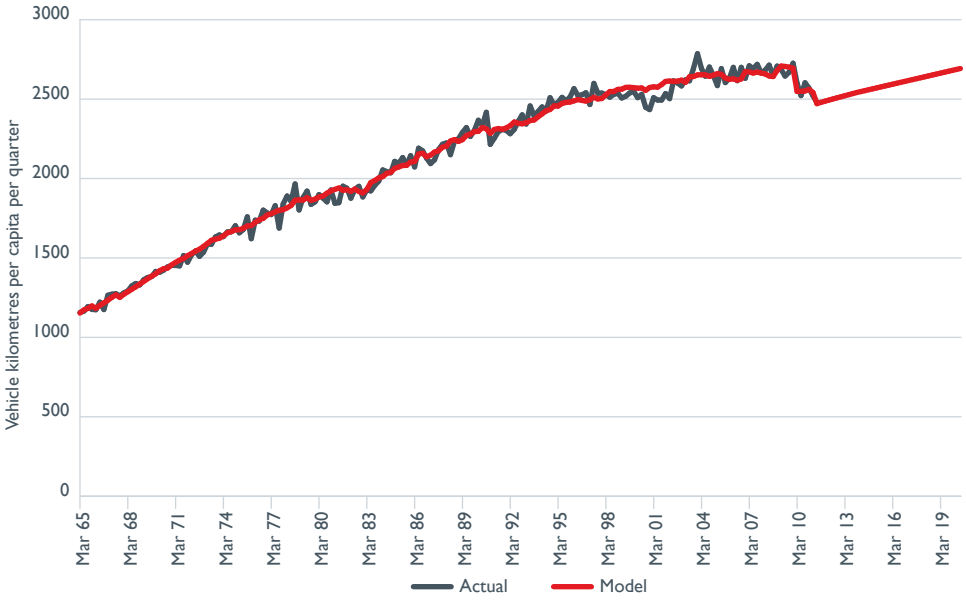


Figure 2.31 Components of predicted levels of TAS traffic per person

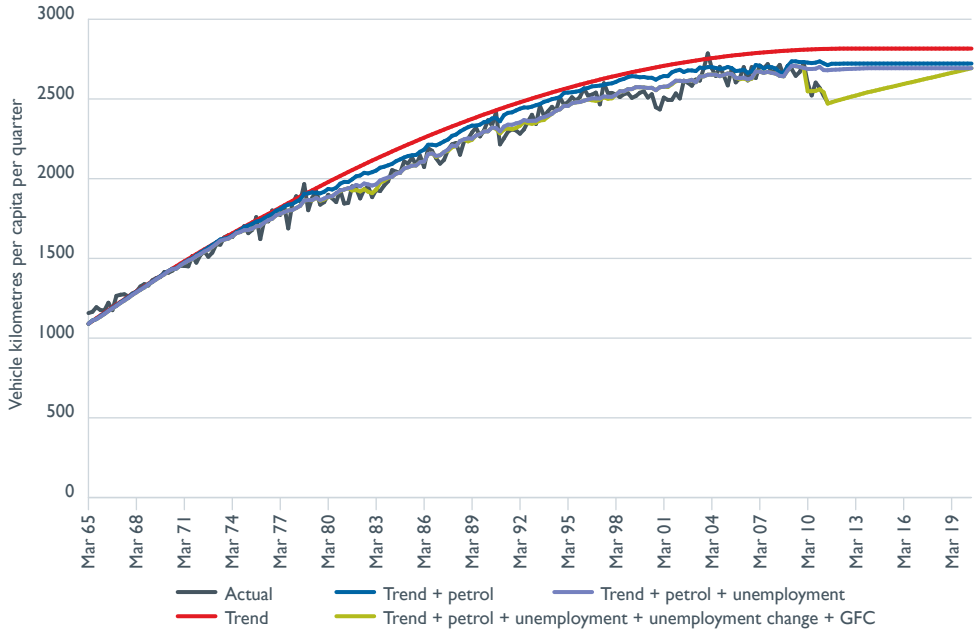
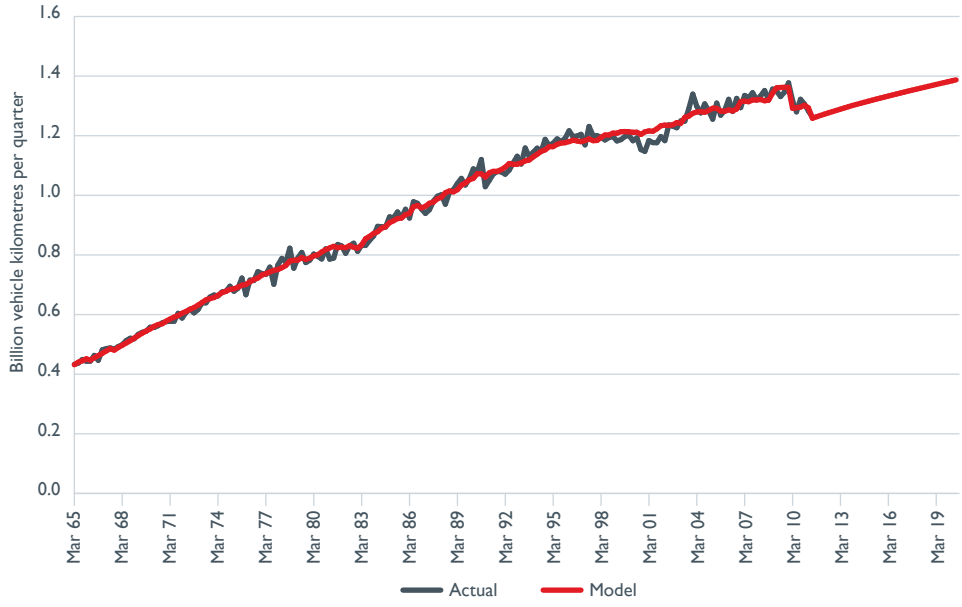


Figure 2.32 Aggregate traffic levels in Tasmania



2.9 The Northern Territory

The growth in traffic per person in the Northern Territory over the last 45 years is shown in Figure 2.33, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 2.8 and illustrated in Figure 2.34.

The Territory data shows the most extreme break between pre- and post-1978 trends. Saturation in per person traffic was reached back in 1997. The price of petrol has the right sign, but is not statistically significant.

The effect of the global financial crisis is apparent. Unemployment (level and change) has a discernable (though not statistically significant) influence, causing traffic per person to dip below trend in the 1980s and 1990s. Figure 2.35 shows the components of the prediction/forecast.

Table 2.8 Regression results for predicting NT traffic per person

Regression Statistics	
Multiple R	0.979109942
R Square	0.958656279
Adjusted R Square	0.956787636
Standard Error	81.80962664
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	27468531.9	3433566.488	513.0227688	3.8869E-118
Residual	177	1184628.257	6692.815011		
Total	185	28653160.16			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	820.3116928	50.24074767	16.32761714	3.74945E-37	721.1637296	919.4596561
pre78 time	73.44132907	7.333105977	10.01503719	5.47542E-19	58.96975857	87.91289957
time	39.60979545	8.121233189	4.877312907	2.3842E-06	23.58288966	55.63670124
time squared	-0.579084376	0.158712401	-3.648639762	0.000346672	-0.8922965	-0.265872252
petrol price	-0.356638249	0.925155332	-0.38549013	0.700337203	-2.182392665	1.469116166
unemployment	-9.815714218	6.105488237	-1.607687025	0.109686077	-21.8646337	2.233205265
unemployment change	-35.87577439	23.9195046	-1.499854407	0.135433693	-83.07989203	11.32834325
GFC-savings rate	-14.63221995	4.619400075	-3.167558496	0.001810917	-23.74840811	-5.516031796
Dummy 1965-66	73.33573221	51.07652756	1.435801056	0.152823868	-27.46160688	174.1330713

Using the predicted/forecast traffic per person and multiplying by a series estimating the Northern Territory population, a series predicting and forecasting *aggregate* traffic levels in the territory is derived. This is shown in Figure 2.36. The fit is good. The effect of Cyclone Tracy in late 1973 consisted mainly in the temporary reduction in the population of Darwin, and shows up more starkly in the modelling for the capital. The forecast is for a resumption of growth in traffic on Territorian roads, in the order of 1.8 per cent per year to 2020, assuming less GFC effect.

Figure 2.33 Traffic per person in the Northern Territory, 1965 to June 2011

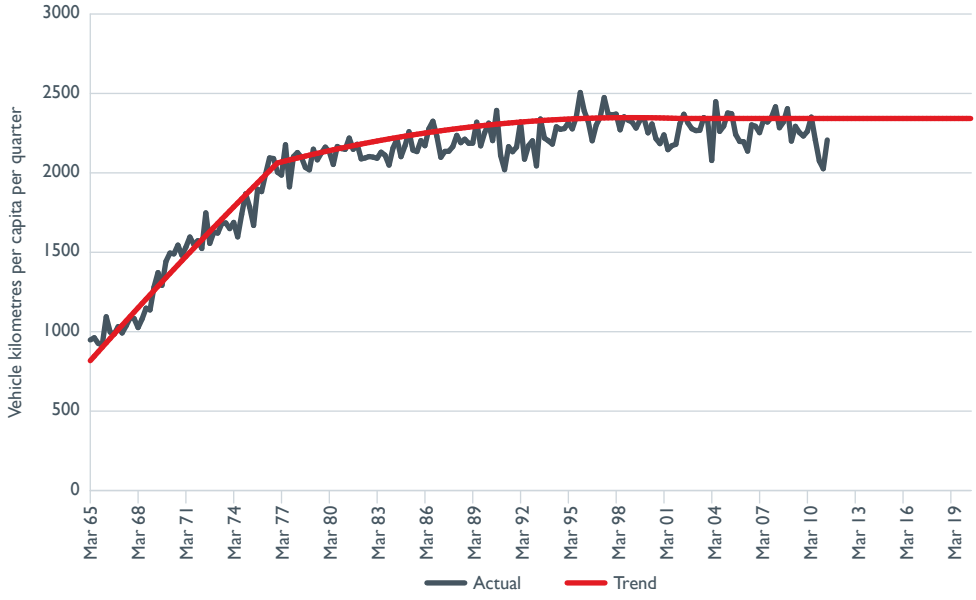


Figure 2.34 Actual and predicted levels of NT traffic per person

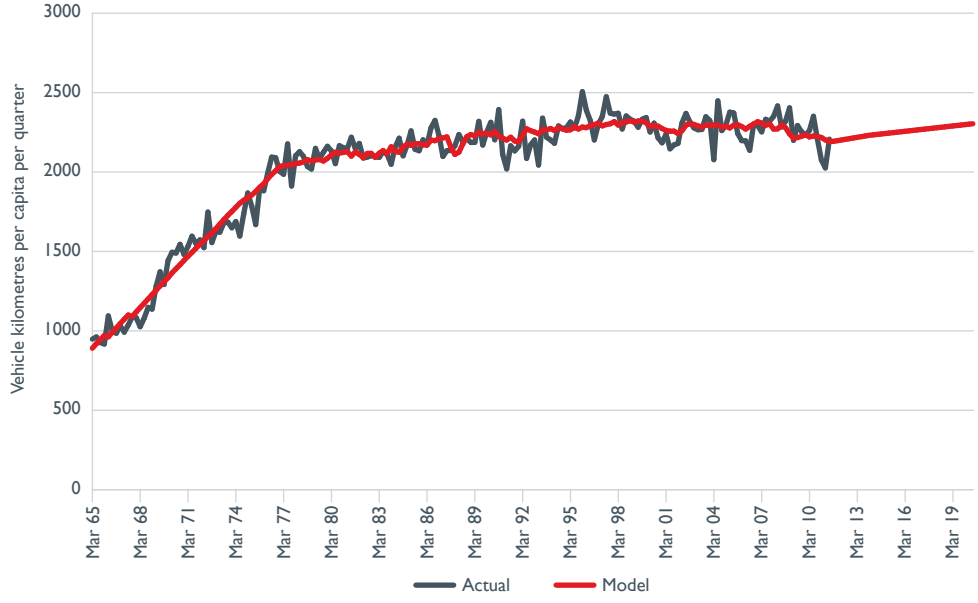


Figure 2.35 Components of predicted levels of NT traffic per person

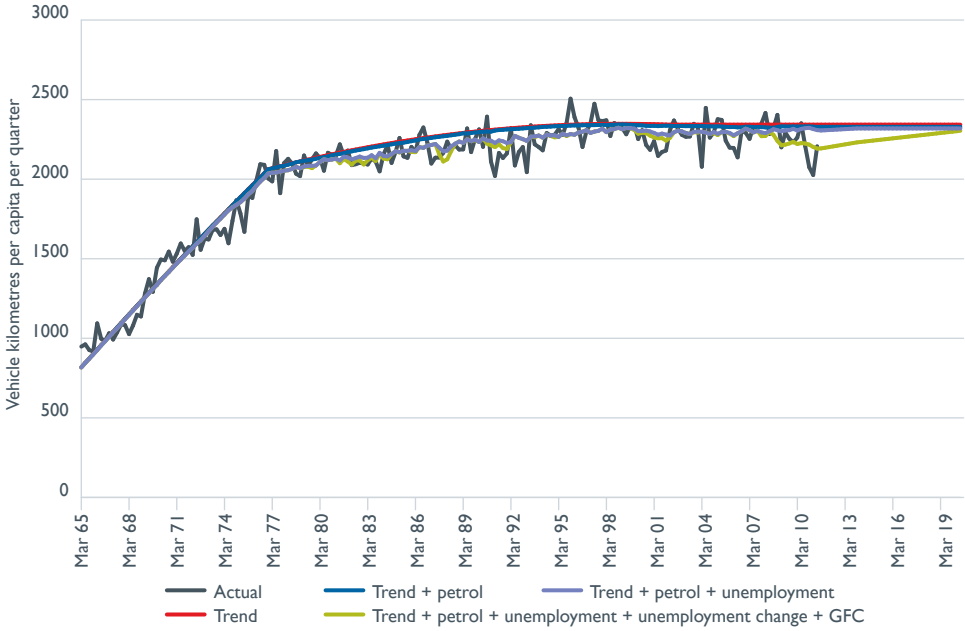
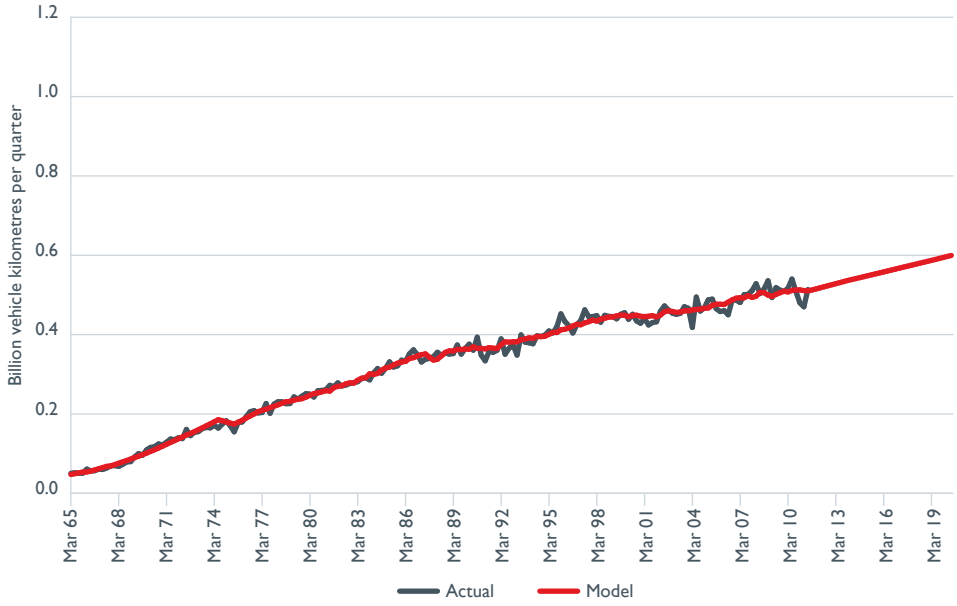


Figure 2.36 Aggregate traffic levels in the Northern Territory



2.10 The Australian Capital Territory (ACT)

The growth in traffic per person in the Australian Capital Territory over the last 45 years is shown in Figure 2.37, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 2.9 and illustrated in Figure 2.38.

Unemployment in the ACT does not reach significance as a variable.

However, most of the other usual features are apparent, consistent with national trends. The first is the 1965 to 1966 blip. The second is a higher growth trend to 1978. Third is the gradual trend toward saturation, which however will not be reached until 2018. Fourth is the effect of the global financial crisis from December 2008 on. Lastly, the price of petrol has a significant effect. Figure 2.39 shows the components of the prediction/forecast for the ACT.

Table 2.9 Regression results for predicting ACT traffic per person

Regression Statistics	
Multiple R	0.995679826
R Square	0.991378316
Adjusted R Square	0.990988635
Standard Error	40.77812789
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	33843489.96	4230436.245	2544.078965	2.4015E-178
Residual	177	294325.4614	1662.855714		
Total	185	34137815.42			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	1385.416134	25.51326008	54.30180734	2.7091E-112	1335.066808	1435.76546
pre78 time	6.240908891	3.054611481	2.043110533	0.042524054	0.212763989	12.26905379
time	59.1174309	2.844294288	20.784569	2.28049E-49	53.50433797	64.73052383
time squared	-0.54984119	0.054305095	-10.12503878	2.68931E-19	-0.657009968	-0.442672412
petrol price	-4.20583347	0.500090922	-8.410137613	1.32469E-14	-5.192741481	-3.21892546
unemployment	-4.202786129	2.811779736	-1.494706742	0.136771675	-9.751712984	1.346140726
unemployment change	-11.3588731	22.83343764	-0.497466622	0.619477458	-56.41968412	33.70193792
GFC-savings rate	-19.45941566	2.920880356	-6.662174854	3.29001E-10	-25.22364791	-13.6951834
Dummy 1965-66	66.87584113	26.43418128	2.529900224	0.012281941	14.70911679	119.0425655

Using the predicted/forecast traffic per person and multiplying by a series estimating the ACT's population, a series predicting and forecasting *aggregate* traffic levels in the territory is derived. This is shown in Figure 2.40. The fit is good, and the forecast is for a resumption of growth in traffic on ACT roads, in the order of 1.4 per cent per year to 2020, assuming the GFC effect wears off.

Figure 2.37 Traffic per person in the ACT, 1965 to June 2011

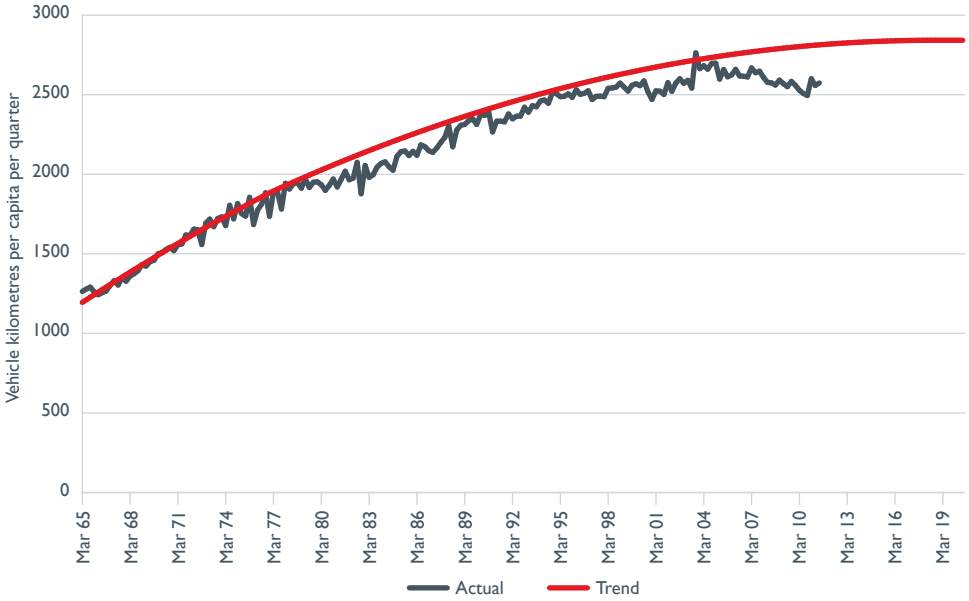


Figure 2.38 Actual and predicted levels of ACT traffic per person

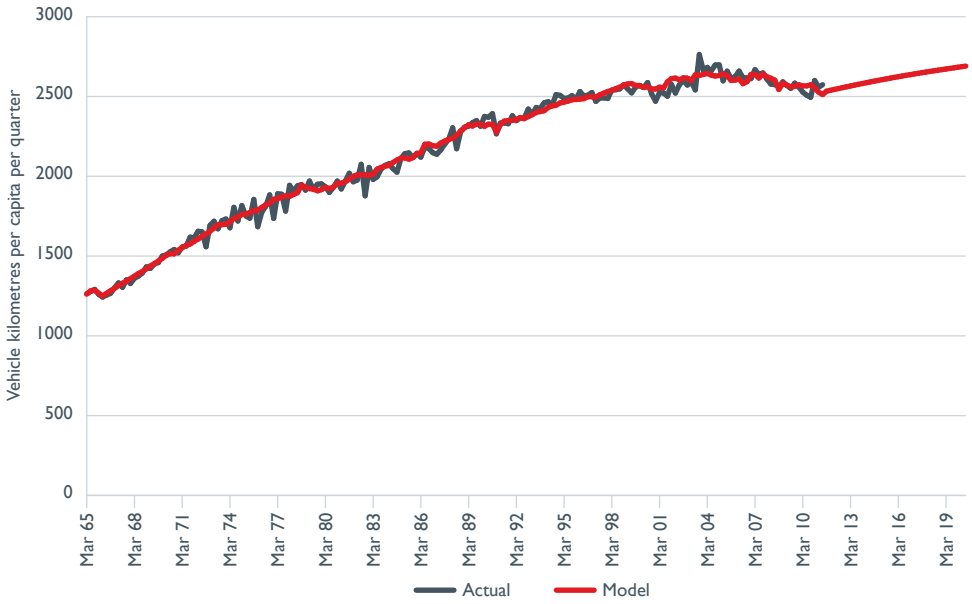


Figure 2.39 Components of predicted levels of ACT traffic per person

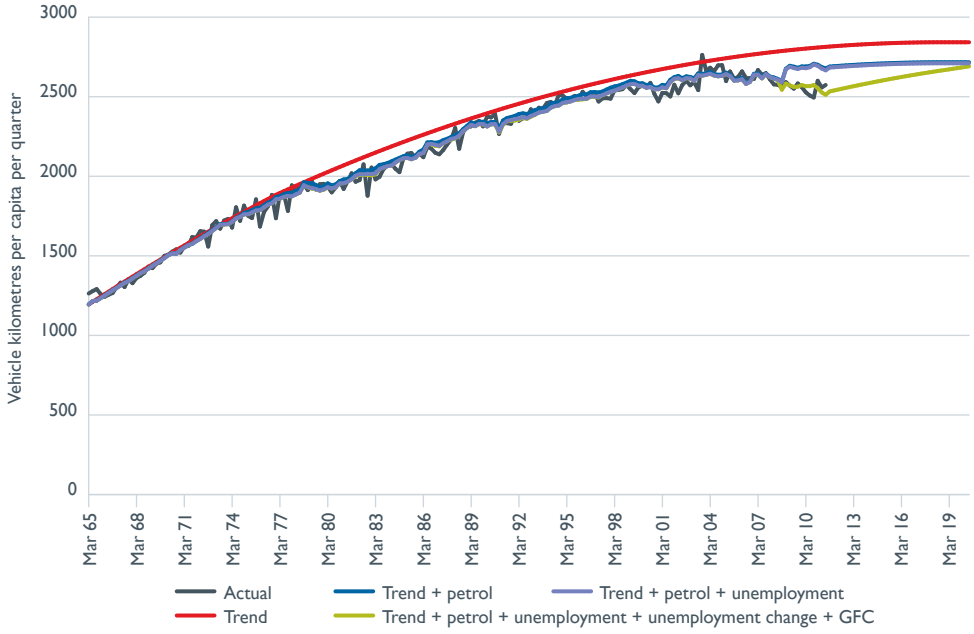
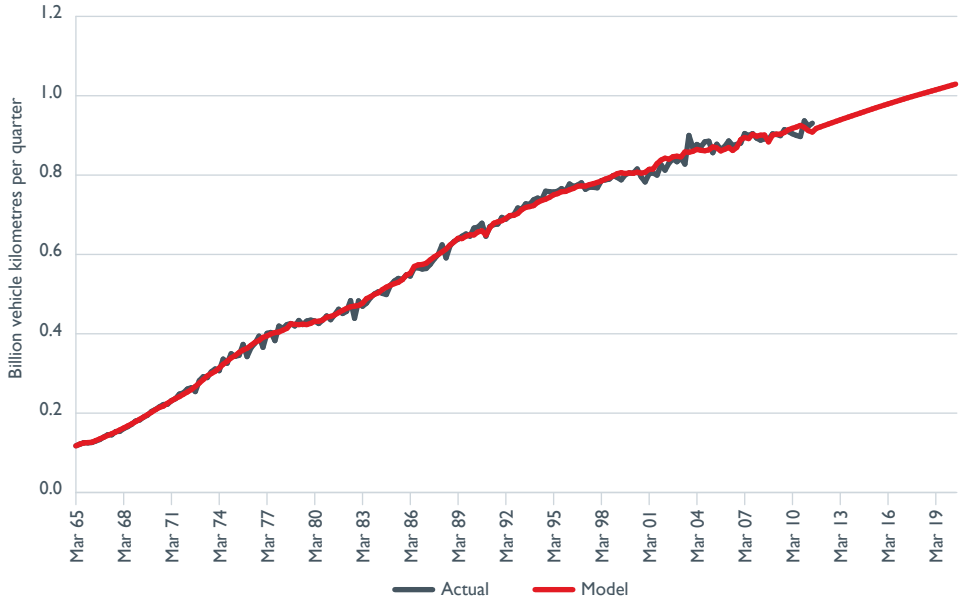


Figure 2.40 Aggregate traffic levels in the ACT



CHAPTER 3

Models of Traffic per Person in the Eight Australian Capital Cities

Summary

This chapter presents models of traffic growth in each of the eight Australian capital cities and an aggregate 'metropolitan' model.

The commonalities outweigh the differences in traffic per person patterns. Effects of saturation trends, fuel prices, unemployment and the global financial crisis were apparent in each city. Differences in aggregate traffic growth patterns were largely due to background differences in population growth rates.

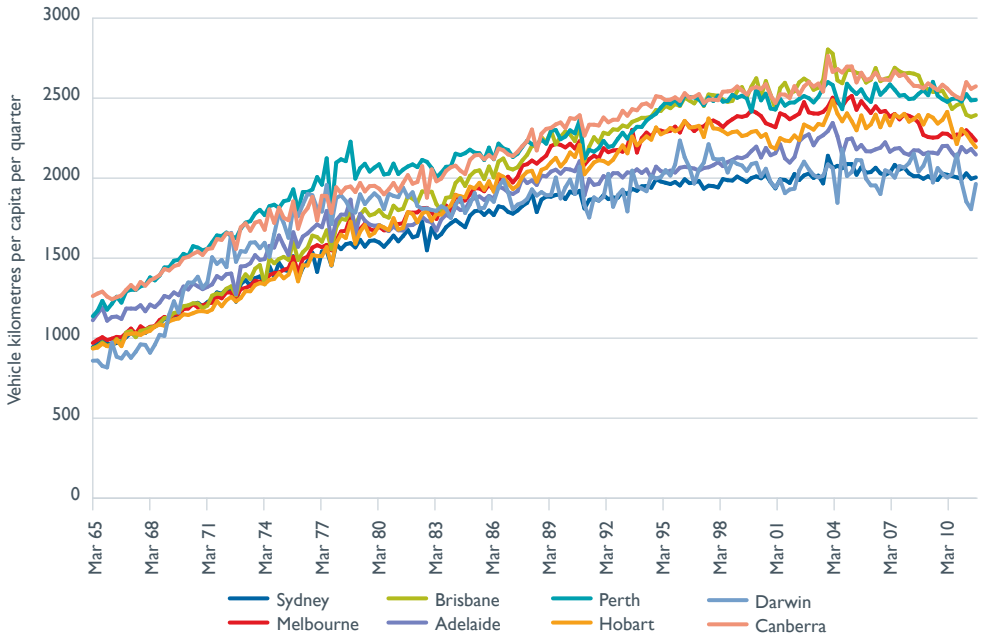
3.1 Background

This chapter presents models of quarterly traffic growth in each of seven Australian capital cities (Canberra is assumed to be represented by the ACT state model).

Traffic per person in the eight cities over the last 45 years is shown in Figure 3.1. The quarterly VKT estimates underlying Figure 3.1 were derived in earlier work (see BITRE 2011).

Fairly common to all capital cities is a period of faster growth in traffic up to 1978. This has been taken into account in the analyses by including an additional 'time' trend that applies up to 1978 and then turns off (by being held constant). There is also a short period from 1965 to 1966 when higher levels of traffic per person briefly occur in most capital cities. A dummy variable for this period is used in the analyses, and is important in allowing the 'time, time squared' trend to concentrate unhindered on the important period 1967 to 2011.

Figure 3.1 Patterns of traffic per person in Australian capital cities



Also important in determining capital city traffic growth are variations in unemployment (level and change) and petrol prices. These variables have been described at the beginning of Chapter 2.

The effect of the global financial crisis (GFC) on traffic levels is apparent in most states/territories (refer back to Figure 3.1). This effect is independent of the effect of associated increased levels of unemployment, and has been modelled by a variable derived from the national consumer savings rate (a sudden jump in late 2008, early 2009 taken to represent consumers sudden switch to economising – including on driving).

Finally, the results presented below also include forecasts of traffic growth based on the models fitted. To do this, world oil prices are assumed to remain constant, unemployment is assumed to decrease, and the step change downward due to the global financial crisis is assumed to gradually abate.

3.2 Metropolitan Australia

The growth in traffic per person in Metropolitan Australia (all eight capitals) over the last 45 years is shown in Figure 3.2, together with the saturating trend fitted. The trend is quite smooth, and saturation in per person traffic was reached about 2009.

A model was fit to the data, as detailed in Table 3.1 and the fit is illustrated in Figure 3.3.

Figure 3.4 shows the components of the Metropolitan prediction/forecast.

Several features are apparent. The first is the 1965 to 1966 blip. The second is an only slightly higher growth trend to 1978. Third is the effect of the global financial crisis. Unemployment (level and change) is a significant influence, causing dips below trend in the 1983 and early 1990's recessions. Also important is the rise in petrol prices from 1979 to the mid 1980s and lately.

Table 3.1 Regression results for predicting Metropolitan traffic per person

Regression Statistics	
Multiple R	0.997983394
R Square	0.995970855
Adjusted R Square	0.995788746
Standard Error	26.88026447
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	31613606.78	3951700.847	5469.114116	1.4057E-207
Residual	177	127891.1054	722.5486182		
Total	185	31741497.89			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	986.4046465	17.33136231	56.91443229	1.0357E-115	952.2019454	1020.607348
pre78 time	4.548700183	2.110064705	2.15571597	0.032456097	0.38457788	8.712822486
time	65.60402962	2.506952847	26.16883269	9.7375E-63	60.65666557	70.55139367
time squared	-0.739035379	0.046919603	-15.75110052	1.64811E-35	-0.831629205	-0.646441553
petrol price	-1.976423897	0.306770335	-6.442682588	1.07388E-09	-2.581822012	-1.371025782
unemployment	-4.549253371	2.157673549	-2.108406702	0.036403257	-8.807329687	-0.291177056
unemployment change	-31.47264046	6.16727935	-5.103164406	8.55758E-07	-43.64350206	-19.30177887
GFC-savings rate	-14.68551163	1.858329344	-7.902534434	2.80328E-13	-18.35284498	-11.01817828
Dummy 1965-66	84.8863576	16.90753078	5.020624165	1.24905E-06	51.52006991	118.2526453

Using the predicted/forecast traffic per person and multiplying by a series estimating the Australian population, a series predicting and forecasting *aggregate* Metropolitan traffic levels is derived. This is shown in Figure 3.5. The fit is good, and the forecast is for a resumption of growth in traffic on Australian capital city roads, in the order of 1.6 per cent per year to 2020, assuming the GFC effect wanes.

Also shown in Figure 3.5 is a prediction derived by aggregating predictions from models for all capital cities. It is to these models we now turn, starting with Sydney.

Figure 3.2 Traffic per person in Metropolitan Australia, 1965 to June 2011

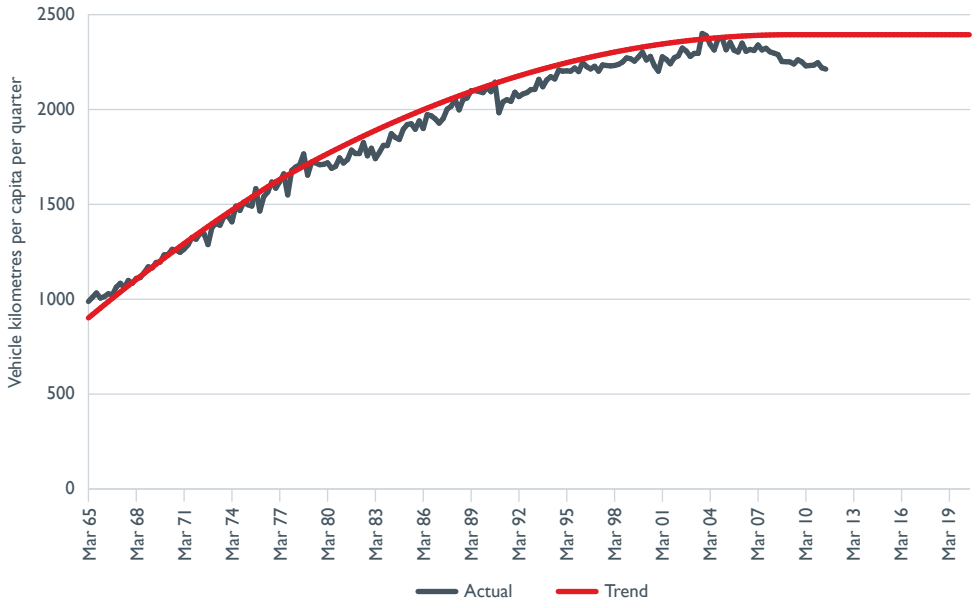


Figure 3.3 Actual and predicted levels of Metropolitan traffic per person

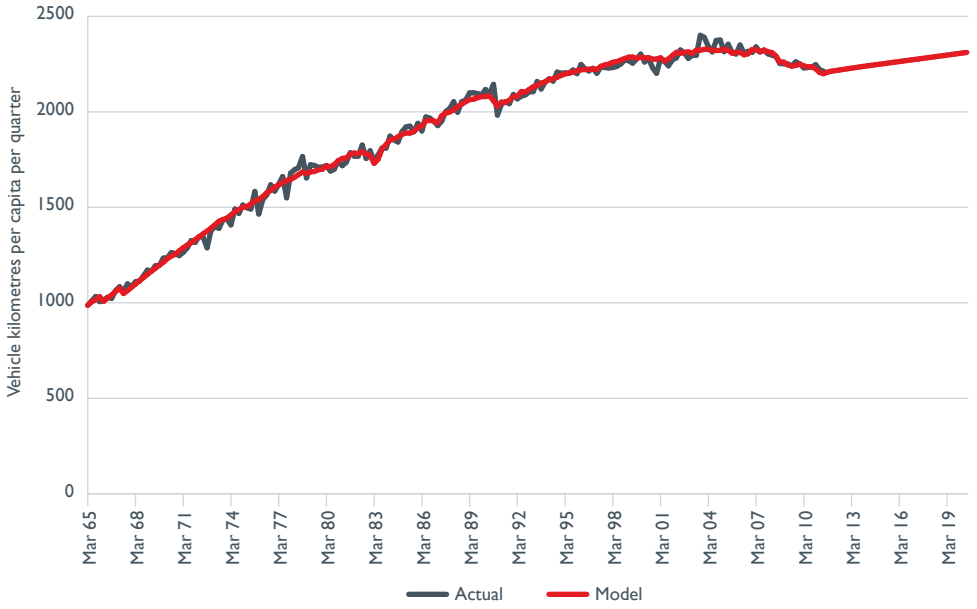


Figure 3.4 Components of predicted levels of Metropolitan traffic per person

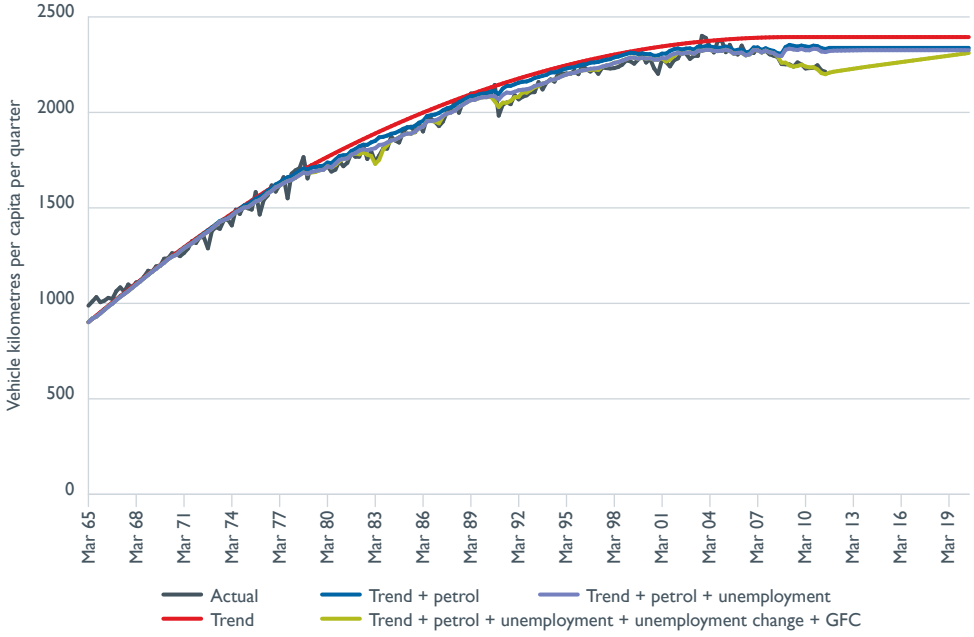
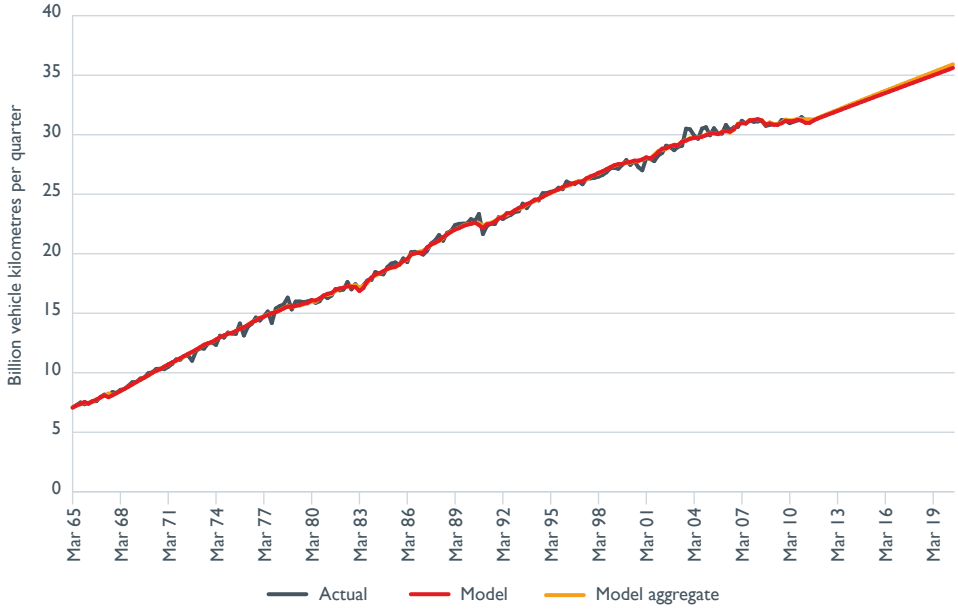


Figure 3.5 Aggregate Metropolitan traffic levels in Australia



3.3 Sydney

The growth in traffic per person in Sydney over the last 45 years is shown in Figure 3.6, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 3.2 and illustrated in Figure 3.7.

As with New South Wales, traffic per person in Sydney is mostly accounted for by the trend, with small contributions from the two economic shock variables (change in unemployment and the GFC).

The Sydney modelling shows the 1965 to 1966 blip, the higher growth trend to 1978, and a gradual trend toward saturation, which was reached in 2005. There is the effect of the global financial crisis from December 2008 on. Finally, unemployment change is the only other significant influence, causing traffic per person to dip below trend in the 1983 and early 1990's recessions. Figure 3.8 shows the components of the Sydney traffic prediction/forecast.

Table 3.2 Regression results for predicting Sydney traffic per person

Regression Statistics	
Multiple R	0.995612775
R Square	0.991244798
Adjusted R Square	0.990849083
Standard Error	31.86068173
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	2034211.06	2542776.382	2504.94411	9.3534E-178
Residual	177	179673.2382	1015.10304		
Total	185	20521884.3			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	912.5256438	20.28540965	44.98433405	8.4382E-99	872.4932568	952.5580307
pre76 time	9.651439914	2.58489007	3.733791245	0.000254081	4.550270094	14.75260973
time	49.79735145	2.885030222	17.26059958	8.73414E-40	44.1038679	55.490835
time squared	-0.587145181	0.05497897	-10.67945029	7.26945E-21	-0.695643824	-0.478646538
petrol price	-0.618816699	0.350760537	-1.764214137	0.079420921	-1.311027593	0.073394196
unemployment	-0.012538709	2.33620021	-0.005367138	0.995723708	-4.622929743	4.597852325
unemployment change	-25.45366783	6.925432685	-3.675390259	0.000314612	-39.12071256	-11.7866231
GFC-savings rate	-4.669215984	1.838185016	-2.540122971	0.011941183	-8.296795367	-1.041636601
Dummy 1965-66	34.32962146	20.22889421	1.697058727	0.091443252	-5.59123468	74.2504776

Using the predicted/forecast traffic per person and multiplying by a series estimating the Sydney population, a series predicting/forecasting *aggregate* traffic levels in the city is derived. This is shown in Figure 3.9. The fit is good, and the forecast is for a resumption of growth in traffic on Sydney roads, in the order of 1.0 per cent per year to 2020, assuming the GFC effect wears off.

Figure 3.6 Traffic per person in Sydney, 1965 to June 2011

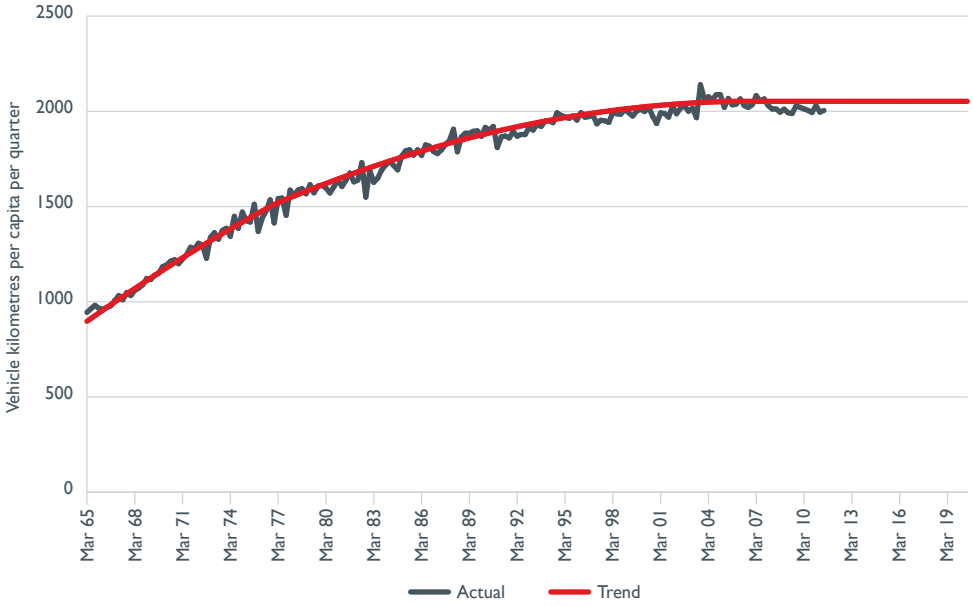


Figure 3.7 Actual and predicted levels of Sydney traffic per person

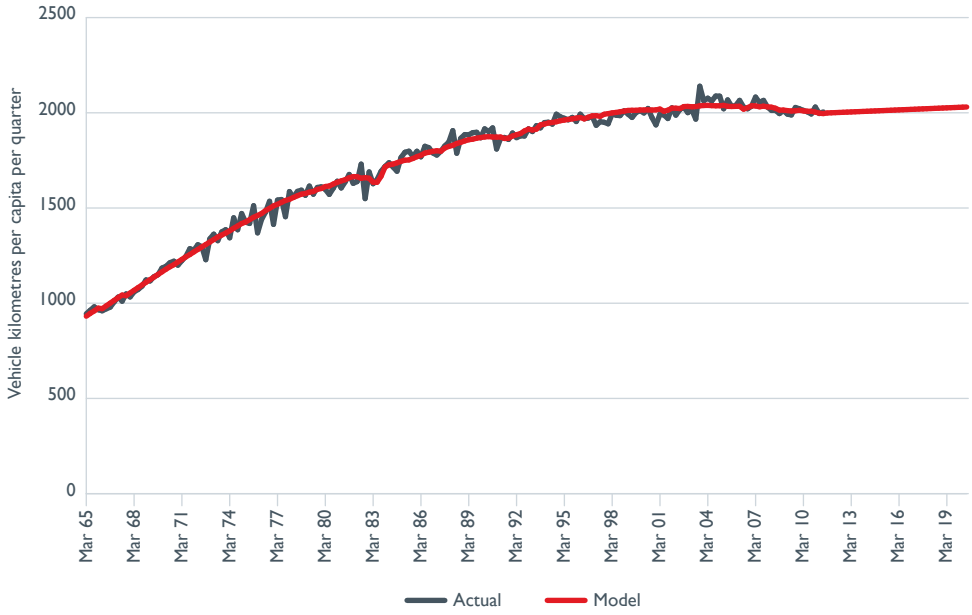


Figure 3.8 Components of predicted levels of Sydney traffic per person

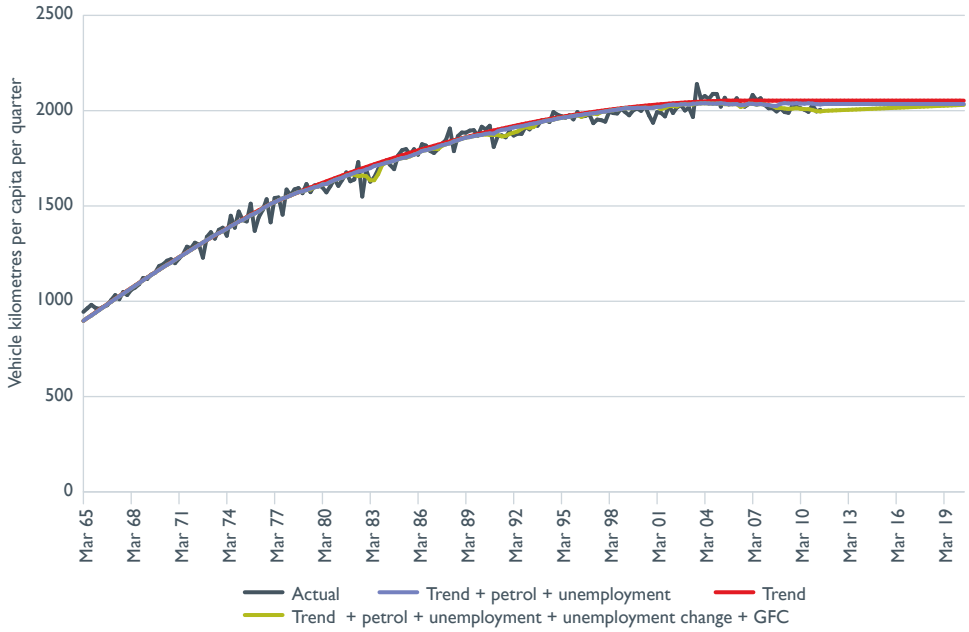
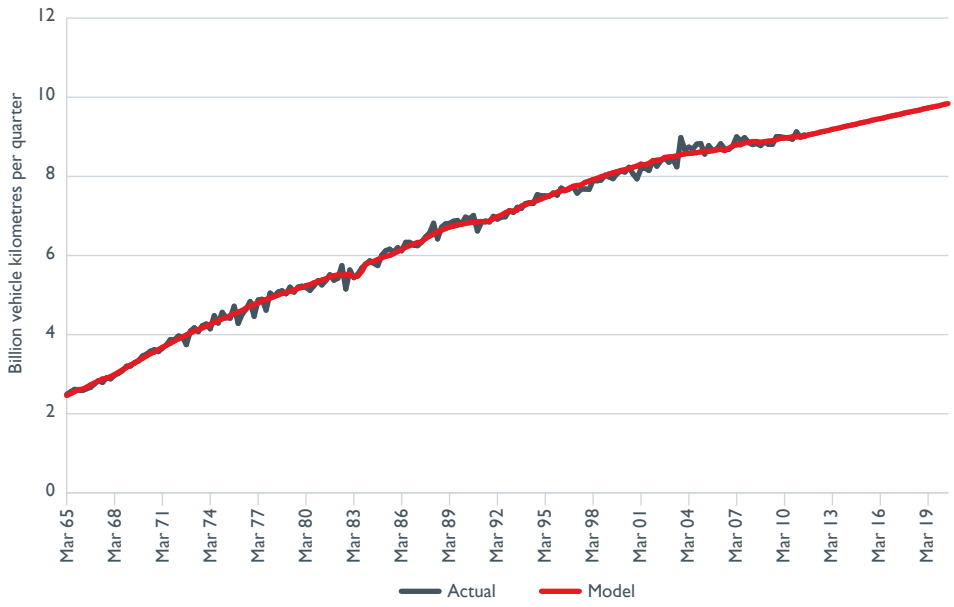


Figure 3.9 Aggregate traffic levels in Sydney



3.4 Melbourne

The growth in traffic per person in Melbourne over the last 45 years is shown in Figure 3.10, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 3.3 and illustrated in Figure 3.11.

Unlike Sydney, Melbourne traffic per person shows major deviations from its saturating trend. Among all the cities, Melbourne has one of the highest levels of response to price and economic activity variables.

The modelling shows the 1965 to 1966 blip, the higher growth trend to 1978, and the gradual trend toward saturation, which was reached in 2006. There is a major downward trend due to the global financial crisis from December 2008 on. Unemployment (level and change) is a significant influence, causing traffic per person to dip below trend in the 1983 and 1990's recessions. Also important is the rise in petrol prices that followed the lifting of price controls on domestic oil production from 1979 and recent price rises. Figure 3.12 shows the components of the Melbourne prediction/forecast.

Table 3.3 Regression results for predicting Melbourne traffic per person

Regression Statistics	
Multiple R	0.997734982
R Square	0.995475093
Adjusted R Square	0.995270578
Standard Error	32.53469522
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	41218059.16	5152257.395	4867.478769	4.049E-203
Residual	177	187355.6316	1058.506393		
Total	185	41405414.79			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	986.4268371	19.84049983	49.71784207	6.2667E-106	947.2724607	1025.581214
pre78 time	-16.88388845	2.610830721	-6.46686448	9.43704E-10	-22.03625104	-11.73152587
time	91.29264052	2.648028296	34.4757043	1.89389E-80	86.06687012	96.51841092
time squared	-1.095811244	0.048694192	-22.50394137	8.25929E-54	-1.191907146	-0.999715342
petrol price	-3.065283804	0.341931793	-8.964605993	4.33533E-16	-3.74007155	-2.390496058
unemployment	-7.709888467	1.976970249	-3.899850527	0.000136509	-11.61135456	-3.808422372
unemployment change	-17.43268081	6.973394975	-2.499884327	0.013333218	-31.19437706	-3.670984554
GFC-savings rate	-23.1337655	1.909073684	-12.11779603	5.33917E-25	-26.90124064	-19.36629037
Dummy 1965-66	123.7266339	20.18607782	6.129305309	5.58483E-09	83.89027412	163.5629938

Using the predicted/forecast traffic per person and multiplying by a series estimating the Melbourne population, a series predicting and forecasting *aggregate* traffic levels in the city is derived. This is shown in Figure 3.13. The fit is good, and the forecast is for a resumption of growth in traffic on Melbourne roads, in the order of 1.8 per cent per year to 2020, assuming the GFC effect fades.

Figure 3.10 Traffic per person in Melbourne, 1965 to June 2011

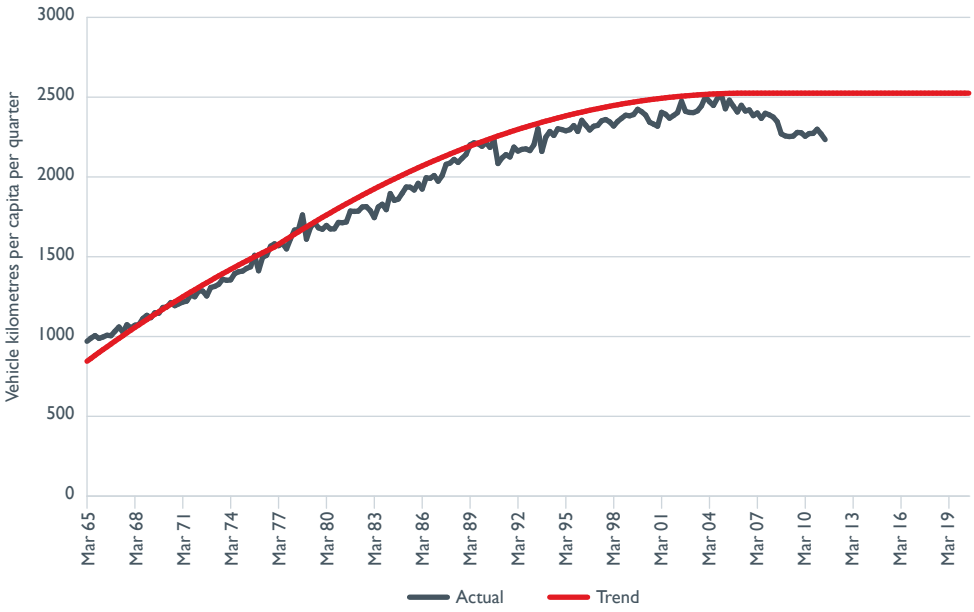


Figure 3.11 Actual and predicted levels of Melbourne traffic per person

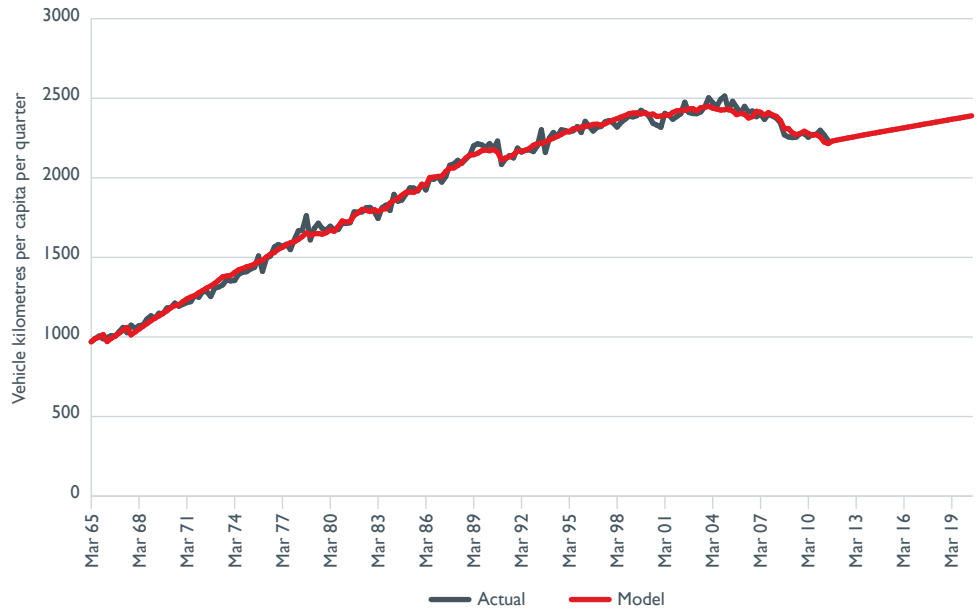


Figure 3.12 Components of predicted levels of Melbourne traffic per person

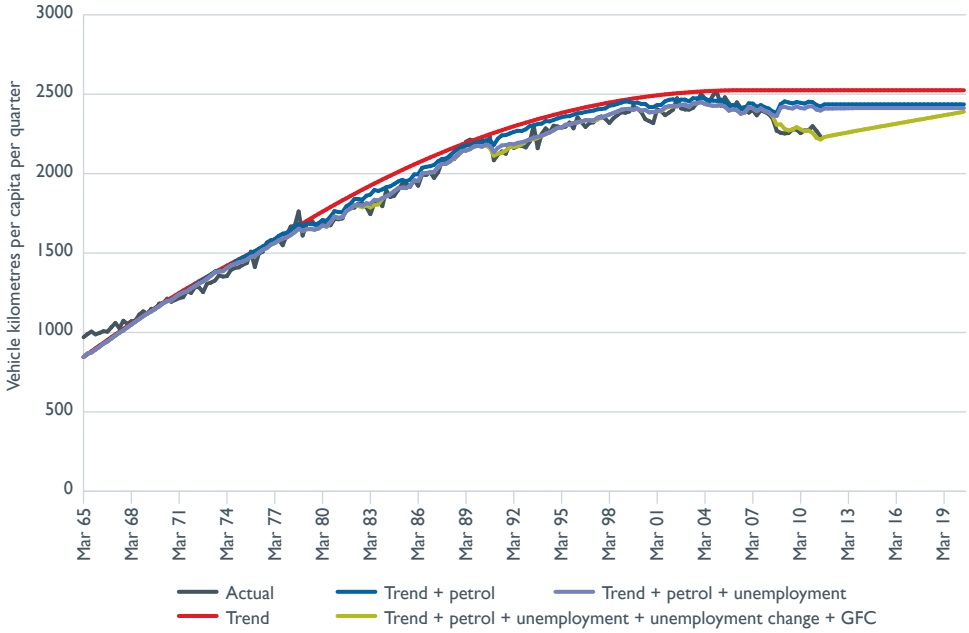
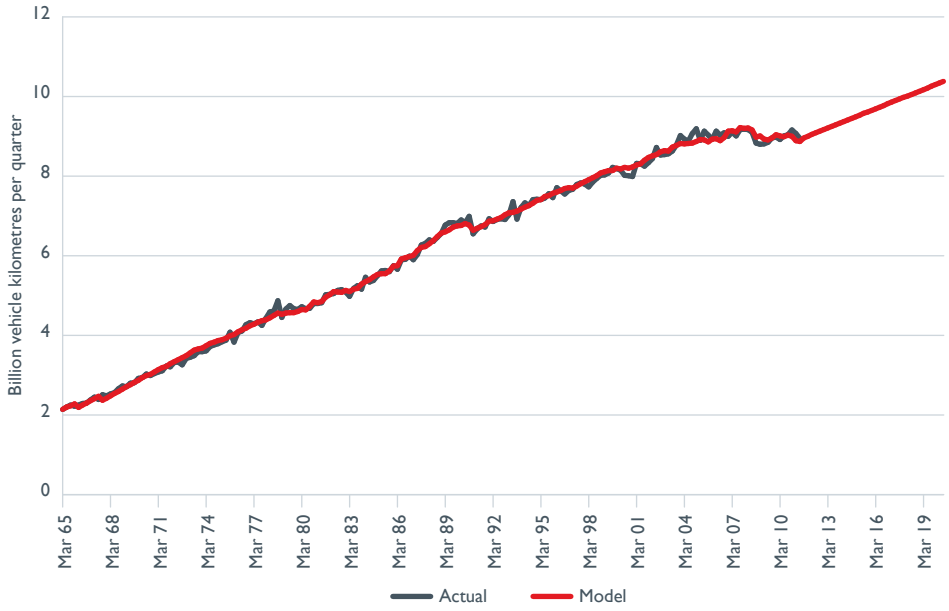


Figure 3.13 Aggregate traffic levels in Melbourne



3.5 Brisbane

The growth in traffic per person in Brisbane over the last 45 years is shown in Figure 3.14, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 3.4 and illustrated in Figure 3.15.

Brisbane is similar to Sydney in not deviating much from trend up to 2008, but it is similar to Melbourne in the important effect of the global financial crisis from December 2008 on.

The Brisbane data shows the 1965 to 1966 blip, and the gradual trend toward saturation, which will only be reached in 2013. Unemployment *change* is a significant influence, causing traffic per person to dip below trend at the beginning of the 1983 and early 1990's recessions. Also important is the rise in petrol prices from 1979 to the mid 1980s and lately. Figure 3.16 shows the components of the Brisbane prediction/forecast.

Table 3.4 Regression results for predicting Brisbane traffic per person

Regression Statistics	
Multiple R	0.99721699
R Square	0.994441724
Adjusted R Square	0.994190503
Standard Error	41.23450818
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	53843609.17	6730451.146	3958.426071	3.2491E-195
Residual	177	300950.3857	1700.284665		
Total	185	54144559.56			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	930.9134361	28.67813309	32.46074049	1.89594E-76	874.318369	987.5085032
pre78 time	1.092337368	3.511913863	0.311037631	0.756138017	-5.838274194	8.022948929
time	79.42067033	4.206219325	18.88172351	2.86096E-44	71.11987669	87.72146398
time squared	-0.803358962	0.078754867	-10.20075324	1.64673E-19	-0.958778317	-0.647939606
petrol price	-2.583961808	0.488006206	-5.29493637	3.49807E-07	-3.54702115	-1.620902467
unemployment	-5.134816552	3.10309221	-1.654741853	0.099749008	-11.25863609	0.98900299
unemployment change	-30.93046554	9.035715201	-3.423134179	0.000769063	-48.7620624	-13.09886867
GFC-savings rate	-33.32941848	3.243687499	-10.27516322	1.01602E-19	-39.7306968	-26.92814016
Dummy 1965-66	114.7321983	27.22437022	4.214319646	3.9871E-05	61.00606989	168.4583266

Using the predicted/forecast traffic per person and multiplying by a series estimating the Brisbane population, a series predicting and forecasting *aggregate* traffic levels in the city is derived. This is shown in Figure 3.17. The fit is good, and the forecast is for a resumption of growth in traffic on Brisbane roads, in the order of 2.9 per cent per year to 2020, assuming the GFC effect wears off.

Figure 3.14 Traffic per person in Brisbane, 1965 to June 2011

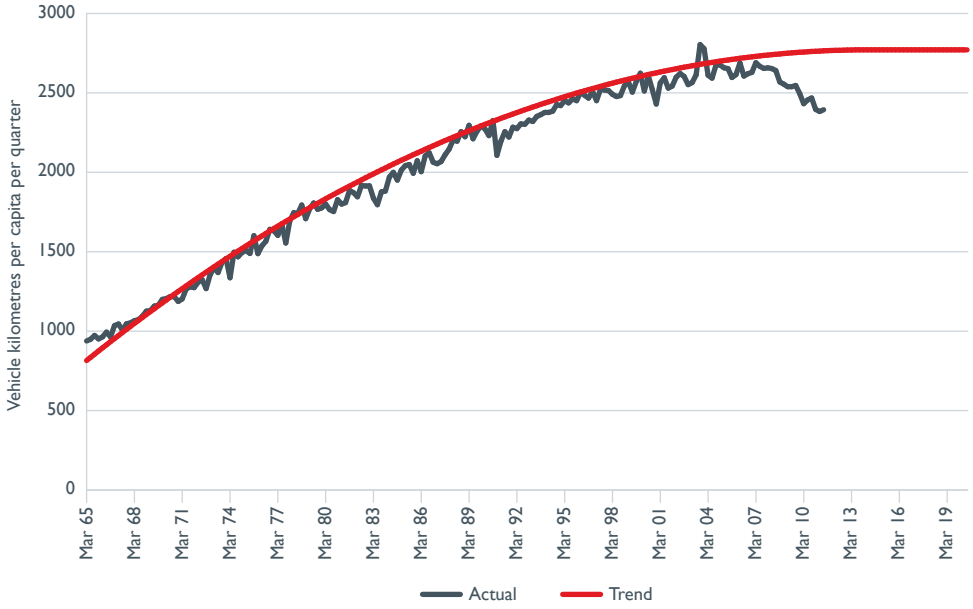


Figure 3.15 Actual and predicted levels of Brisbane traffic per person

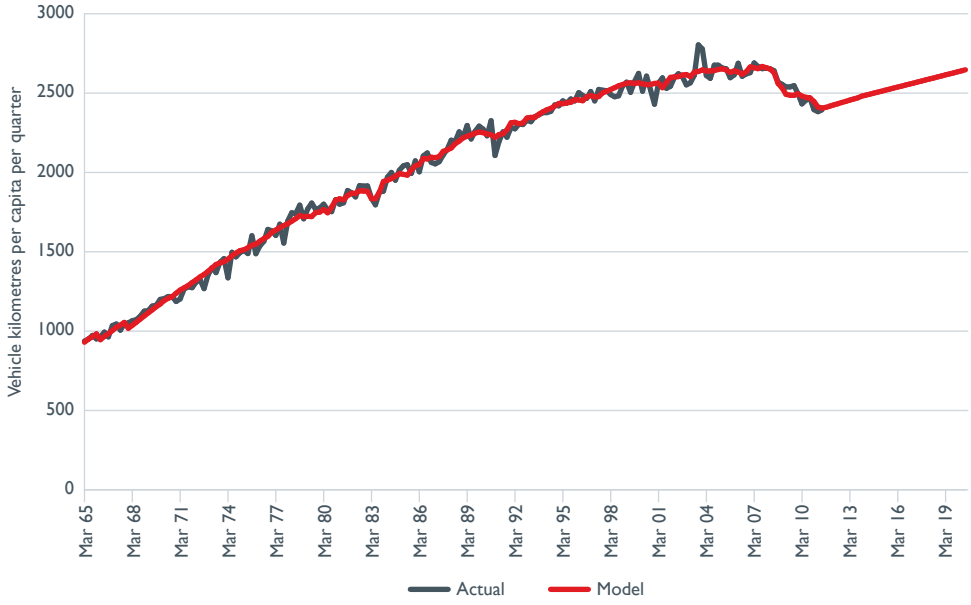


Figure 3.16 Components of predicted levels of Brisbane traffic per person

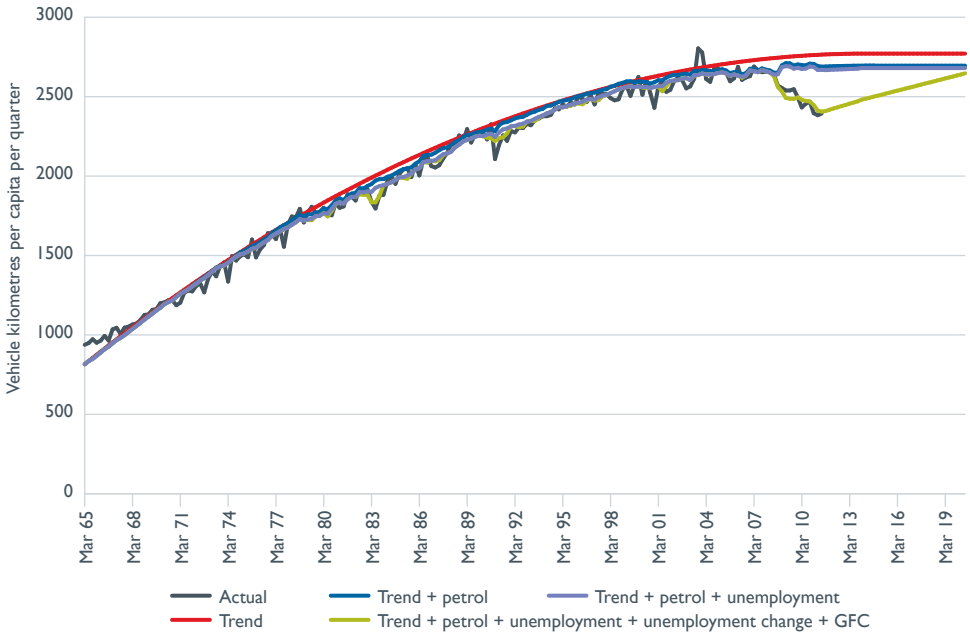
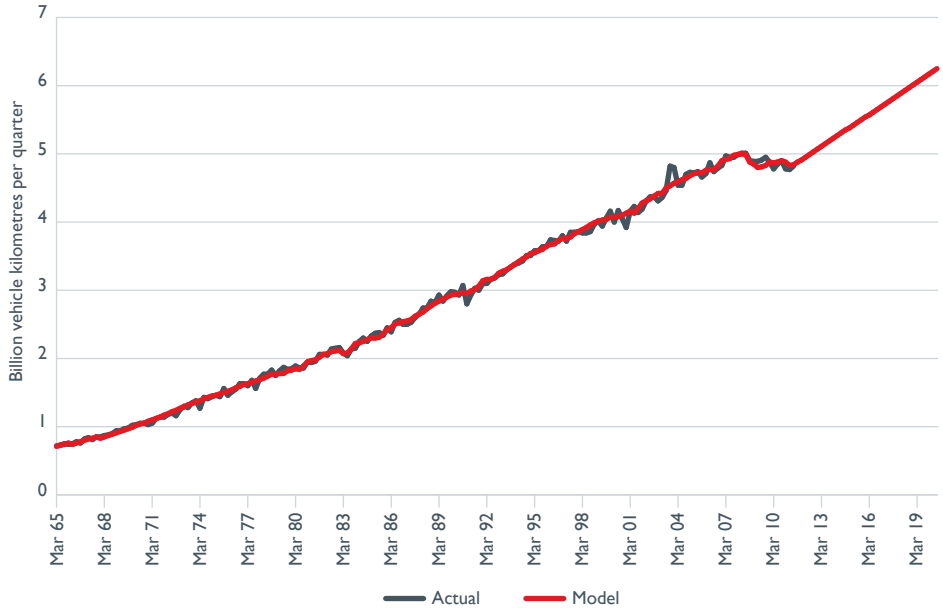


Figure 3.17 Aggregate traffic levels in Brisbane



3.6 Adelaide

The growth in traffic per person in Adelaide over the last 45 years is shown in Figure 3.18, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 3.5 and illustrated in Figure 3.19.

Several features are again apparent, consistent with the Metropolitan trend. The first is the 1965 to 1966 blip. The second is the higher growth trend to 1978. Third is the gradual trend toward saturation, which was reached in 2009. Fourth is the effect of the global financial crisis from December 2008 on. Finally, unemployment (level and change) is a significant influence, causing traffic per person to dip below trend in the 1983 and early 1990's recessions. Also important is the rise in petrol prices from 1979 to the mid 1980s and lately. Figure 3.20 shows the components of the Adelaide prediction/forecast.

Table 3.5 Regression results for predicting Adelaide traffic per person

Regression Statistics	
Multiple R	0.992117226
R Square	0.984296591
Adjusted R Square	0.98357872
Standard Error	43.17016999
Observations	184

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	20442668.86	2555333.607	1371.134597	1.6082E-153
Residual	175	326141.1259	1863.663577		
Total	183	20768809.98			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	1130.131332	26.78779018	42.18830014	1.23958E-93	1077.262617	1183.000048
pre78 time	20.49342754	3.667226667	5.588263122	8.65311E-08	13.25574344	27.73111164
time	51.03593657	4.885205477	10.44703991	3.67608E-20	41.39443436	60.67743878
time squared	-0.562084718	0.092747475	-6.060377572	8.11684E-09	-0.745132288	-0.379037149
petrol price	-3.357173393	0.47294503	-7.098443111	3.02944E-11	-4.29058358	-2.423763206
unemployment	-13.40590589	3.388607782	-3.956169245	0.000110513	-20.09370431	-6.718107481
unemployment change	-18.87281311	11.51198119	-1.63940618	0.102925128	-41.5930022	3.847375973
GFC-savings rate	-7.105314266	2.813014415	-2.525871972	0.012428755	-12.65711446	-1.553514074
Dummy 1965-66	149.559813	28.31028671	5.282878784	3.74416E-07	93.68627949	205.4333465

Using the predicted/forecast traffic per person and multiplying by a series estimating the Adelaide population, a series predicting and forecasting *aggregate* traffic levels in the city is derived. This is shown in Figure 3.21. The fit is good, and the forecast is for a resumption of growth in traffic on Adelaide roads, in the order of 0.6 per cent per year to 2020, assuming the GFC effect decreases.

Figure 3.18 Traffic per person in Adelaide, 1965 to June 2011

Figure 3.19 Actual and predicted levels of Adelaide traffic per person

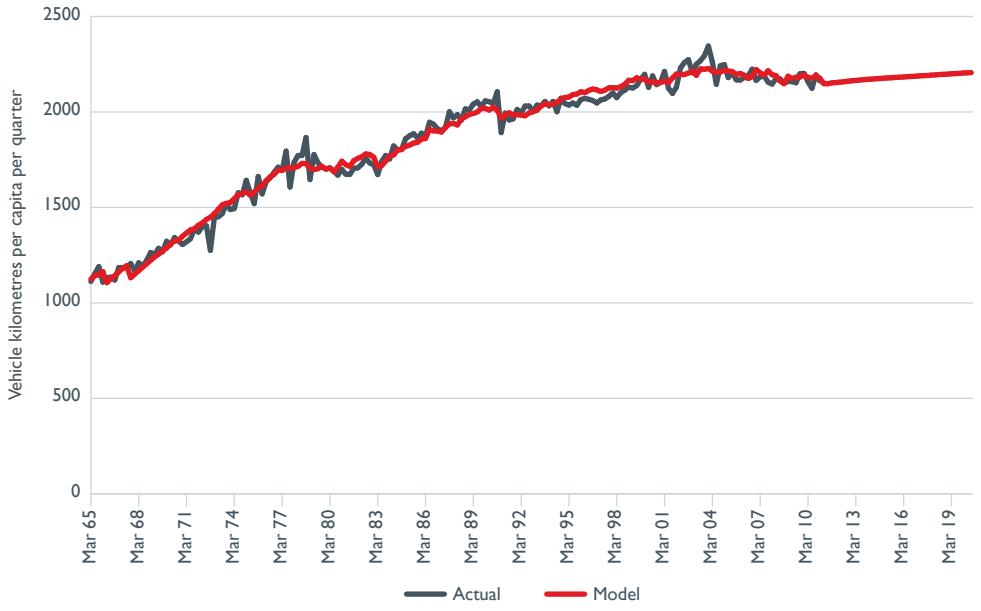


Figure 3.20 Components of predicted levels of Adelaide traffic per person

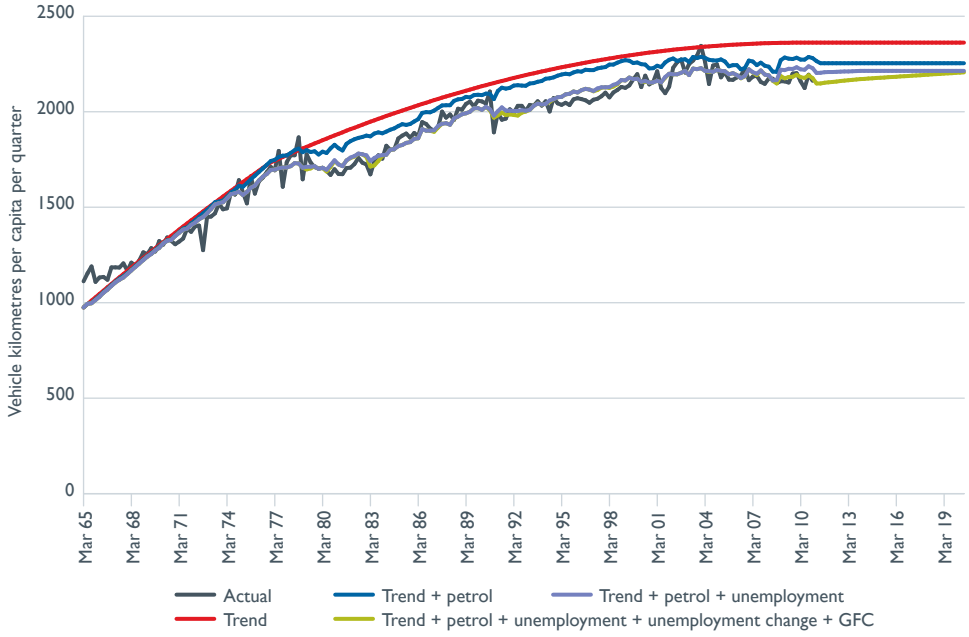
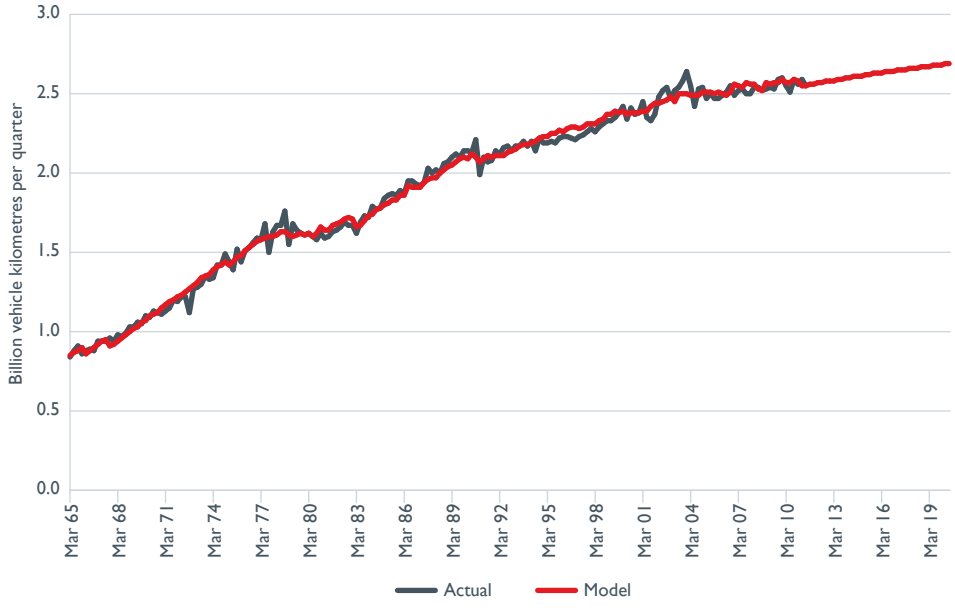


Figure 3.21 Aggregate traffic levels in Adelaide



3.7 Perth

The growth in traffic per person in Perth over the last 45 years is shown in Figure 3.22, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 3.6 and illustrated in Figure 3.23.

The Perth data is marked by a much higher growth trend to 1978, after which there is a marked slowing in trend growth. The post 1978 trend however is marked by a very gradual trend toward saturation, which will only be reached in 2017.

Perth shows the 1965 to 1966 blip (although it is much less apparent in Perth than in other capitals). There is a also fairly muted reaction to the global financial crisis from December 2008 on, compared to other cities. But unemployment (level and change) is a significant influence, causing traffic per person to dip below trend in the 1983 and early 1990's recessions. Also important is the rise in petrol prices from 1979 to the mid 1980s and lately. Figure 3.24 shows the components of the Perth prediction/forecast.

Table 3.6 Regression results for predicting Perth traffic per person

Regression Statistics	
Multiple R	0.992422112
R Square	0.984901649
Adjusted R Square	0.984219237
Standard Error	49.27745351
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	28037101.89	3504637.736	1443.266792	8.0799E-157
Residual	177	429803.3341	2428.267424		
Total	185	28466905.23			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	1289.376842	32.60669109	39.54332067	8.75966E-90	1225.028934	1353.72475
pre78 time	40.18448793	3.793652989	10.59255763	1.28374E-20	32.69787627	47.67109959
time	43.89648121	4.37067395	10.04341246	4.55879E-19	35.27114341	52.52181902
time squared	-0.418474949	0.08319719	-5.02991684	1.19724E-06	-0.582661041	-0.254288858
petrol price	-3.75344021	0.584325706	-6.423541138	1.1893E-09	-4.906581959	-2.600298461
unemployment	-11.25940155	3.777664478	-2.98051921	0.003282473	-18.71446056	-3.804342529
unemployment change	-32.99450411	12.31556826	-2.679089053	0.008078325	-57.29875049	-8.690257729
GFC-savings rate	-10.58737844	3.800208793	-2.785999143	0.005918101	-18.0869277	-3.087829184
Dummy 1965-66	47.40225444	31.73704796	1.493593686	0.137062328	-15.22945013	110.033959

Using the predicted/forecast traffic per person and multiplying by a series estimating the Perth population, a series predicting and forecasting *aggregate* traffic levels in the city is derived. This is shown in Figure 3.25. The fit is good, and the forecast is for a resumption of growth in traffic on Perth roads, in the order of 1.8 per cent per year to 2020, assuming the GFC effect declines.

Figure 3.22 Traffic per person in Perth, 1965 to June 2011

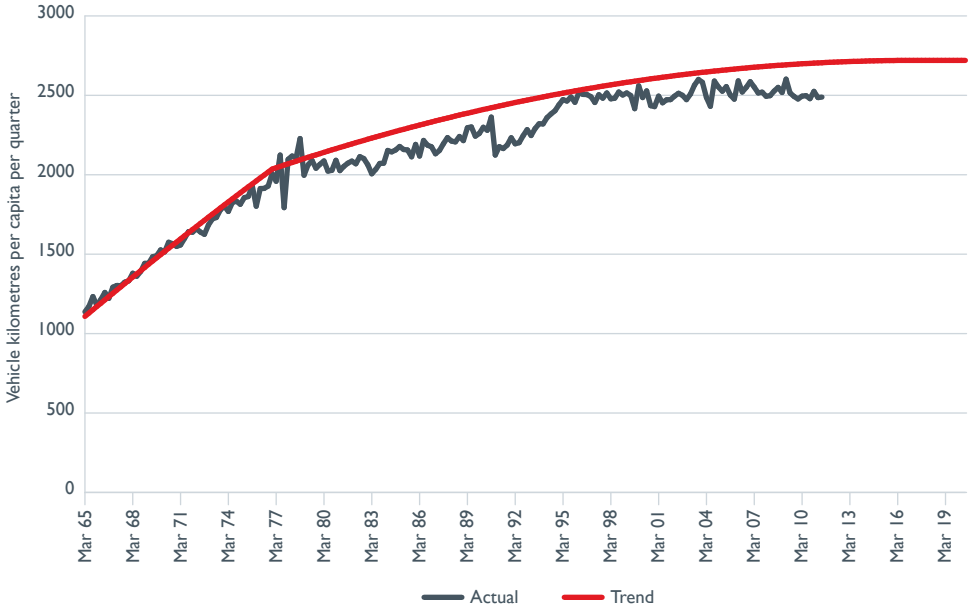


Figure 3.23 Actual and predicted levels of Perth traffic per person

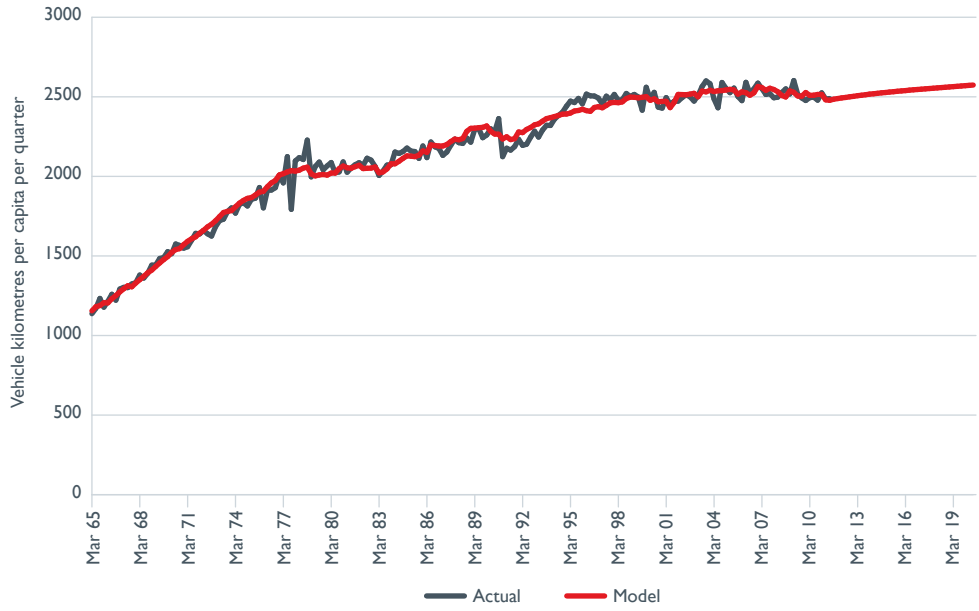


Figure 3.24 Components of predicted levels of Perth traffic per person

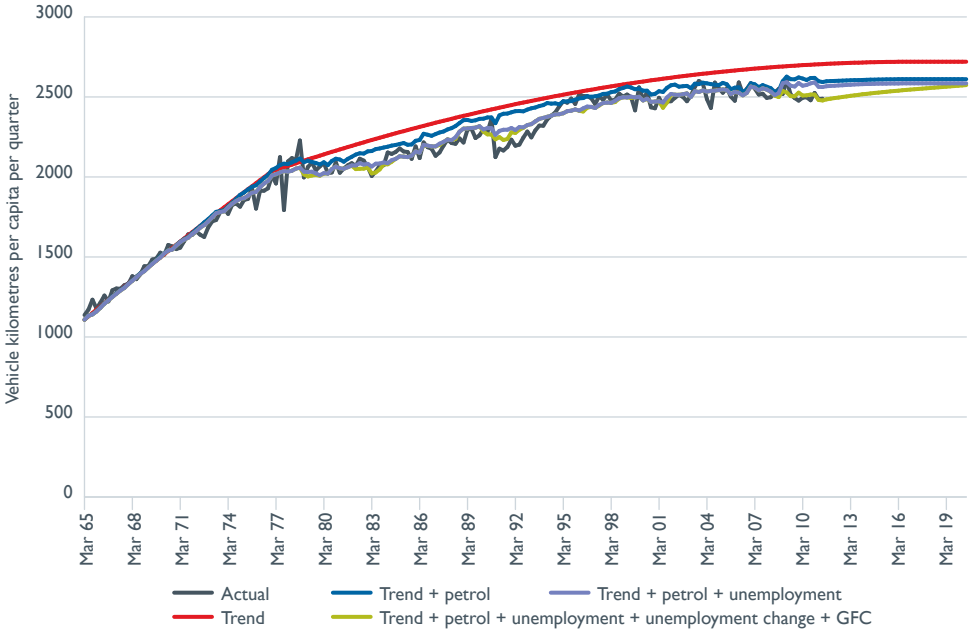
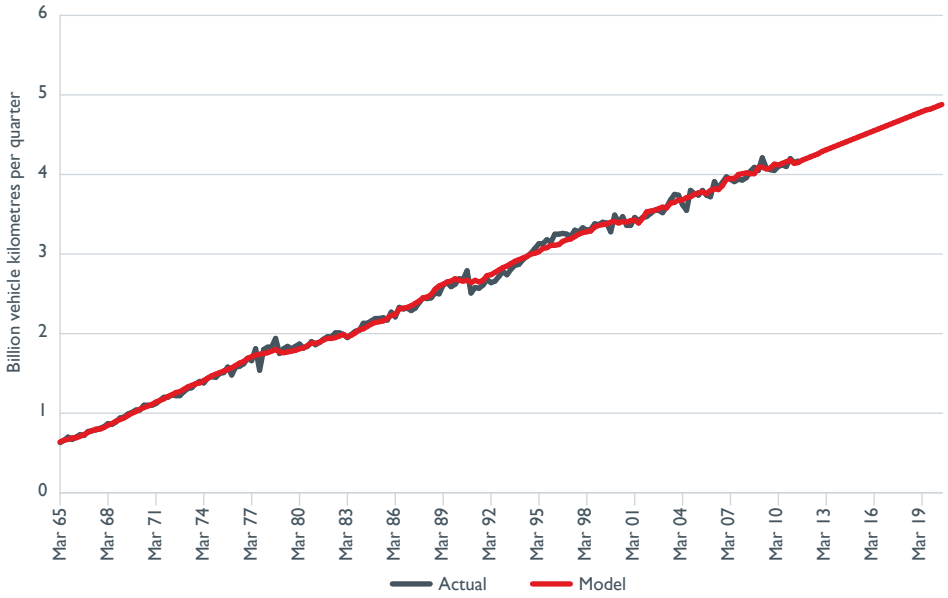


Figure 3.25 Aggregate traffic levels in Perth



3.8 Hobart

The growth in traffic per person in Hobart over the last 45 years is shown in Figure 3.26, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 3.7 and illustrated in Figure 3.27.

Hobart shows the 1965 to 1966 blip. However, in the case of Hobart, there is a slightly lower growth trend to 1978. There is the usual trend toward saturation, which was reached in 2005, and the effect of the global financial crisis is important. However, the effect of unemployment in the 1983 and early 1990's recessions, and the rise in petrol prices (from 1979 to the mid 1980s and lately), only *marginally* affect traffic per person in Hobart. Figure 3.28 shows the components of the Hobart prediction/forecast.

Table 3.7 Regression results for predicting Hobart traffic per person

Regression Statistics	
Multiple R	0.995349373
R Square	0.990720374
Adjusted R Square	0.990300956
Standard Error	46.03039369
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	40039002.99	5004875.374	2362.130509	1.6076E-175
Residual	177	375027.0943	2118.797143		
Total	185	40414030.08			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	829.6037977	26.98959504	30.73791202	6.94437E-73	776.3409881	882.8666073
pre78 time	-17.14688422	4.17026812	-4.111698272	6.00376E-05	-25.3767297	-8.917038736
time	90.91538093	5.70502695	15.93601252	4.88402E-36	79.65675464	102.1740072
time squared	-1.146680208	0.103687995	-11.05894865	6.00318E-22	-1.351304024	-0.942056393
petrol price	-0.652256384	0.494771199	-1.318299014	0.189106977	-1.62866615	0.324153382
unemployment	-3.701077432	3.624656902	-1.021083521	0.308608447	-10.85418255	3.452027688
unemployment change	-26.8495825	15.1104576	-1.776887451	0.077304295	-56.66942326	2.970258268
GFC	-91.29756149	18.7298019	-4.874454197	2.41483E-06	-128.2600232	-54.3350998
Dummy 1965-66	118.5254468	29.93544779	3.959367759	0.000108729	59.44912302	177.6017707

Using the predicted/forecast traffic per person and multiplying by a series estimating the Hobart population, a series predicting and forecasting *aggregate* traffic levels in the city is derived. This is shown in Figure 3.29. The fit is good, and the forecast is for a resumption of growth in traffic on Hobart roads, in the order of 1.1 per cent per year to 2020, assuming the GFC effect fades.

Figure 3.26 Traffic per person in Hobart, 1965 to June 2011

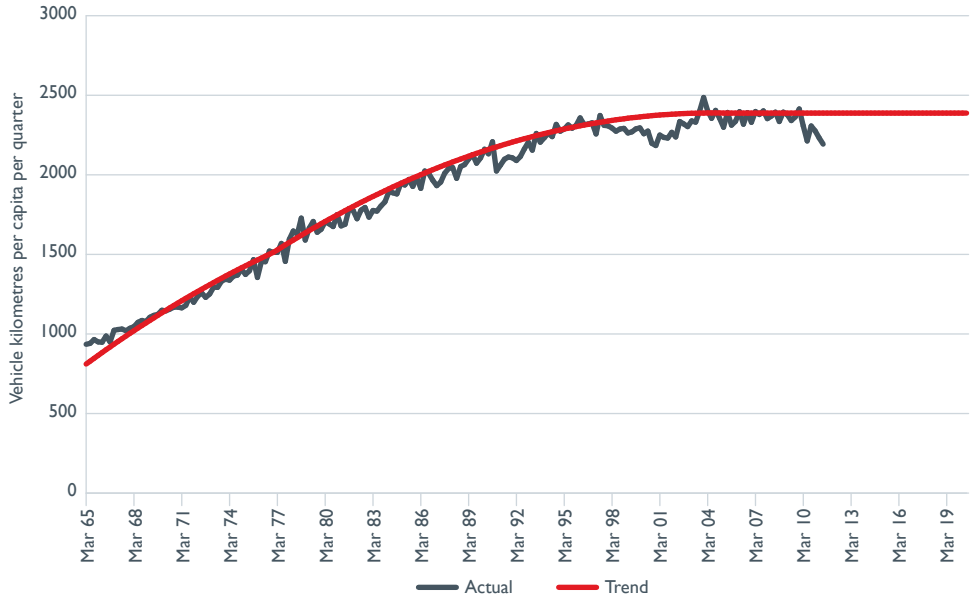


Figure 3.27 Actual and predicted levels of Hobart traffic per person

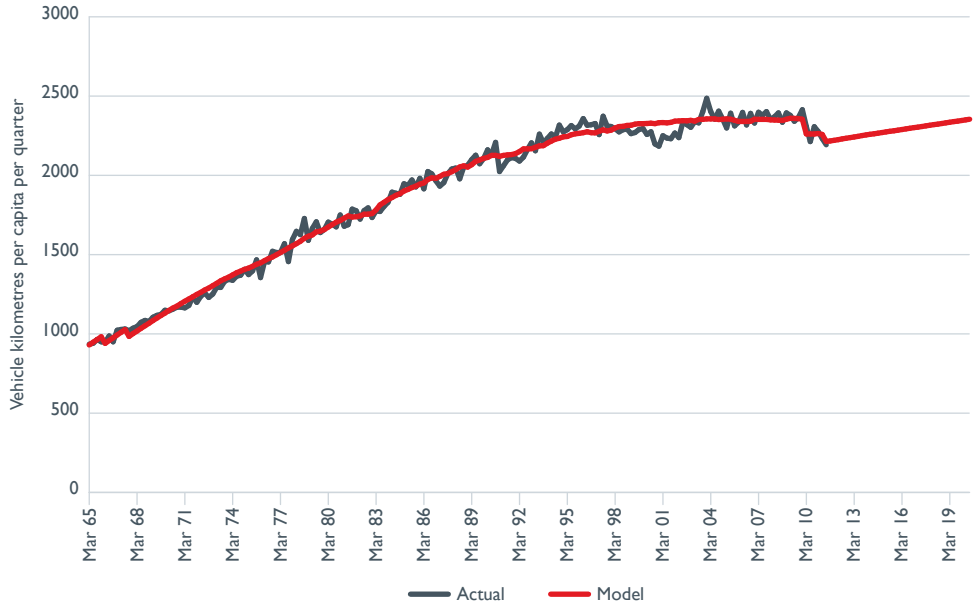


Figure 3.28 Components of predicted levels of Hobart traffic per person

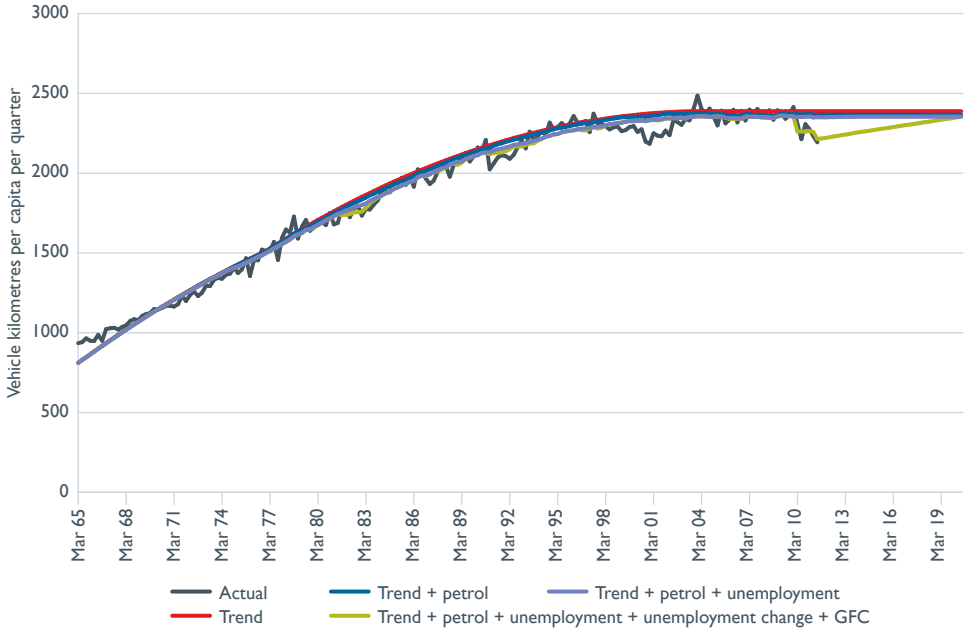
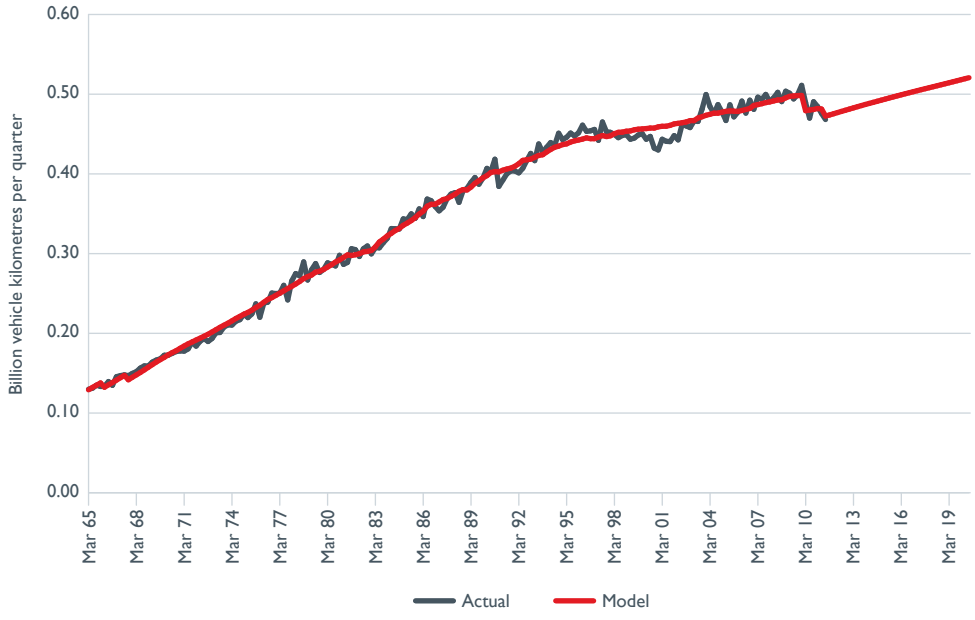


Figure 3.29 Aggregate traffic levels in Hobart



3.9 Darwin

The growth in traffic per person in Darwin over the last 45 years is shown in Figure 3.30, together with the saturating trend fitted. Using all the variables, a model was fit to the data, as detailed in Table 3.8 and illustrated in Figure 3.31.

Darwin shows the most extreme break between pre and post 1978 trends. There is a much higher growth trend to 1978, after which there is a marked slowing in trend growth, which in turn is surprisingly linear (little trend toward saturation yet apparent).

The effect of the global financial crisis from December 2008 on is apparent. Unemployment is a significant influence, causing traffic per person to dip below trend in the 1983 and early 1990's recessions. Also important is the rise in petrol prices from 1979 to the mid 1980s and lately. Figure 3.32 shows the components of the Darwin prediction/forecast.

Table 3.8 Regression results for predicting Darwin traffic per person

Regression Statistics	
Multiple R	0.976041162
R Square	0.95265635
Adjusted R Square	0.950516524
Standard Error	75.25680817
Observations	186

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	8	20171555.12	2521444.39	445.2027155	6.1651E-113
Residual	177	1002454.93	5663.587176		
Total	185	21174010.05			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	927.260663	50.58934027	18.32917089	9.36107E-43	827.4247672	1027.096559
pre78 time	86.36587908	5.978021851	14.44723376	9.31004E-32	74.56850905	98.16324911
time	13.68074179	5.72784178	2.388463633	0.017971164	2.377091407	24.98439216
time squared	-0.054965696	0.109653807	-0.501265733	0.616806965	-0.271362787	0.161431395
petrol price	-3.770554662	0.98213824	-3.839128251	0.000171725	-5.708762404	-1.83234692
unemployment	-13.69450825	5.44115243	-2.516839663	0.012729918	-24.43238947	-2.95662702
unemployment change	-25.3602365	21.88933154	-1.158566055	0.24819387	-68.55789457	17.83742158
GFC-savings rate	-20.51903707	5.345759715	-3.838376239	0.000172211	-31.06866486	-9.96940928
Dummy 1965-66	35.07082915	46.85320067	0.748525792	0.455136562	-57.39195524	127.5336135

Using the predicted/forecast traffic per person and multiplying by a series estimating Darwin population, a series predicting and forecasting *aggregate* traffic levels in the city is derived. This is shown in Figure 3.33. The fit is good. The effect of Cyclone Tracy in late 1973 consisted mainly in the temporary reduction in the population of Darwin, and shows up most starkly in the aggregate traffic level graph (Figure 3.33). The forecast for the rest of this decade is for a resumption of growth in traffic on Darwin's roads, in the order of 3.0 per cent per year to 2020, assuming the GFC effect abates.

Figure 3.30 Traffic per person in Darwin, 1965 to June 2011

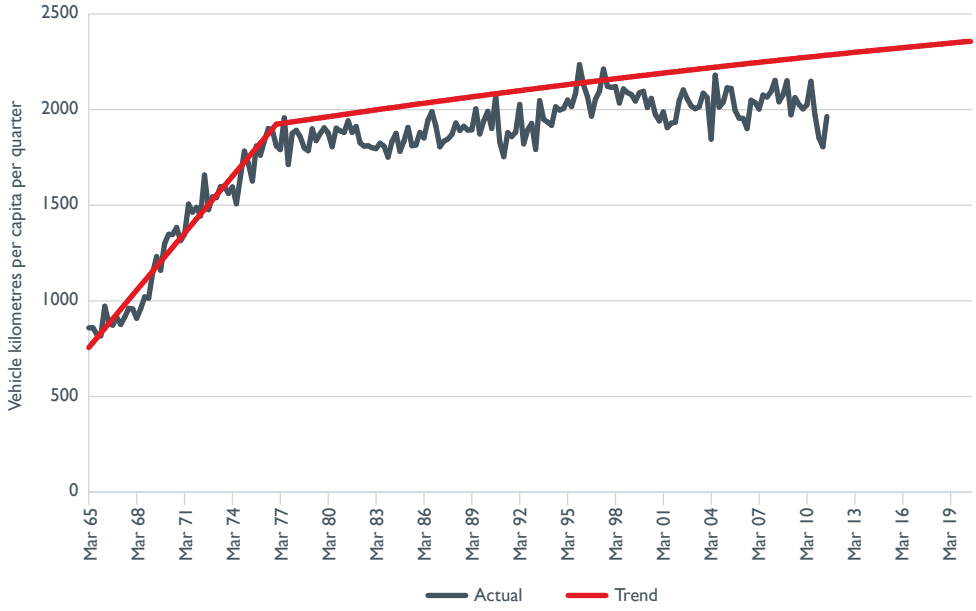


Figure 3.31 Actual and predicted levels of Darwin traffic per person

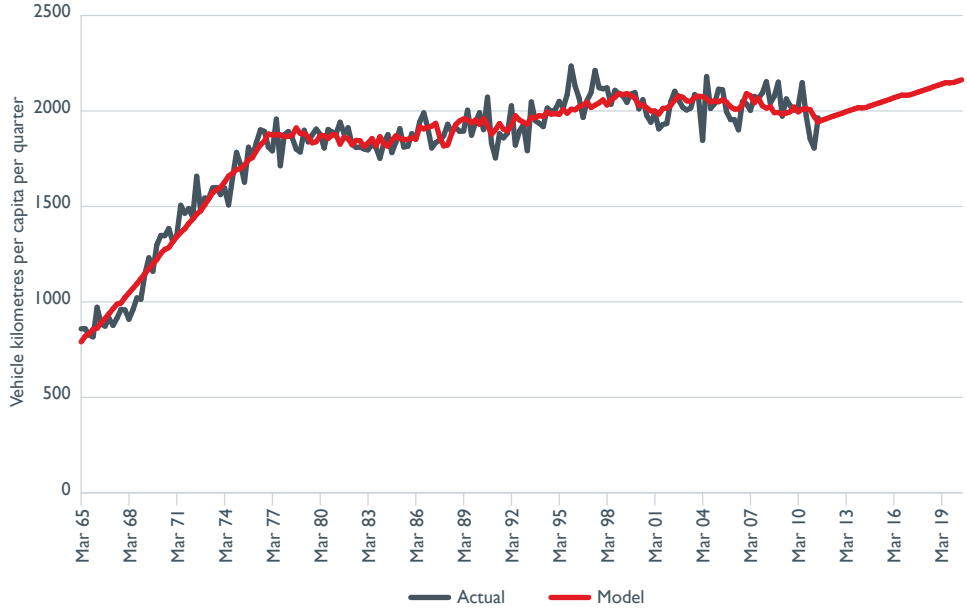


Figure 3.32 Components of predicted levels of Darwin traffic per person

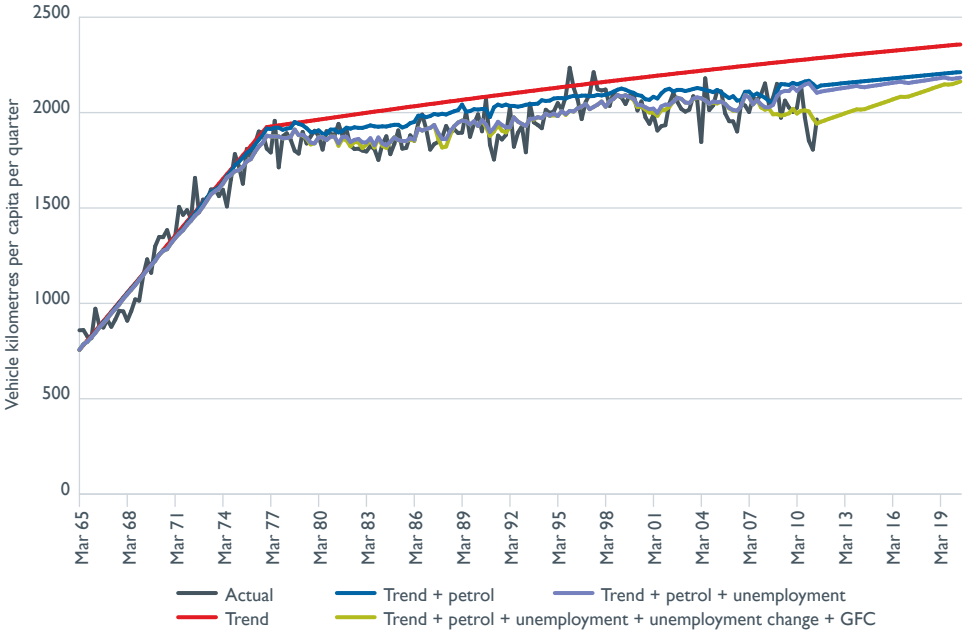
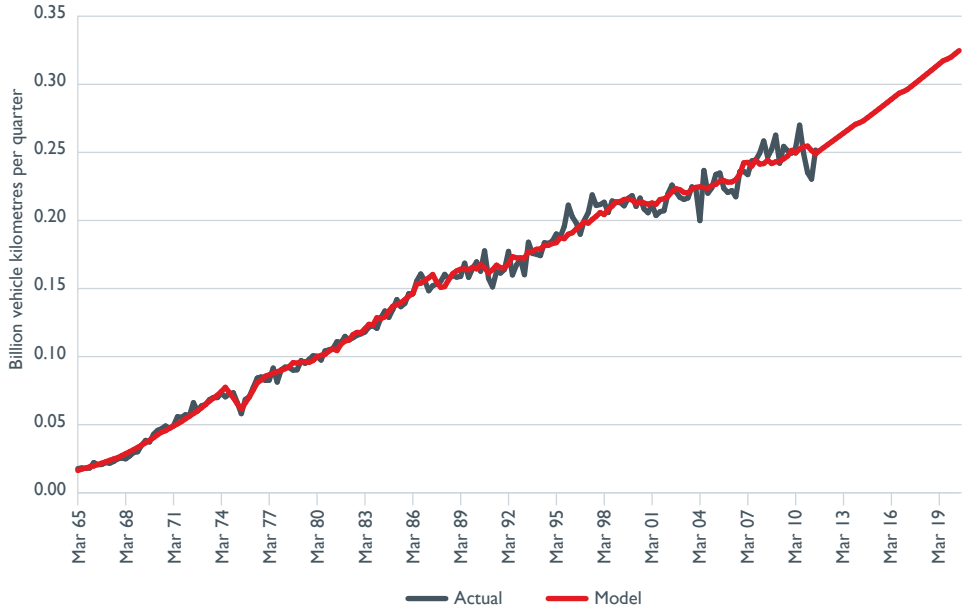


Figure 3.33 Aggregate traffic levels in Darwin



3.10 Canberra

Canberra was assumed to be identical to the ACT, which was analysed in Chapter 2.

Chapter 4
Sensitivity Testing

The predictions of future trends in traffic growth in Australian states/territories and cities presented in Chapters 2 and 3 rely on assumptions about three key variables. Unemployment was assumed to decline slightly to 2015 and then remain constant. Petrol prices were assumed to remain constant in real terms at June 2011 values. The effect of the GFC was assumed to reduce to near zero by 2020 (the savings rate was assumed to fall from 11 per cent to 4 per cent over the decade).

To demonstrate the sensitivity of the traffic forecasts to these assumptions, they will be varied in the Australia-level model as follows.

First, a **high petrol price** assumption will be tested. This will be derived from the 'IEA adjusted' peak oil scenario outlined in Gargett(2010). This has world oil price rising to US$160 per barrel (2011 prices) and Australian real 2011 petrol prices rising to $2.00 per litre by 2020 (before continuing upward).

Next, the petrol price will again be assumed to remain constant, and **unemployment** will be assumed to rise from 5 per cent nationally to 8 per cent over the period from December 2011 to June 2012, and then remain constant over the decade. This will illustrate the effect of changing assumptions on unemployment and change in unemployment.

Next, the unemployment assumption will be returned to base case, and the GFC dummy, instead of being assumed to decline, will be held constant.

Figure 4.1 shows the base case followed by the effect of the 3 sensitivity tests for both per person traffic and aggregate traffic at the Australia level.

In the base case, aggregate traffic levels rise to 64 billion vehicle kilometres travelled by 2020.

With higher petrol prices, aggregate traffic would only rise to 62 billion vkt per year.

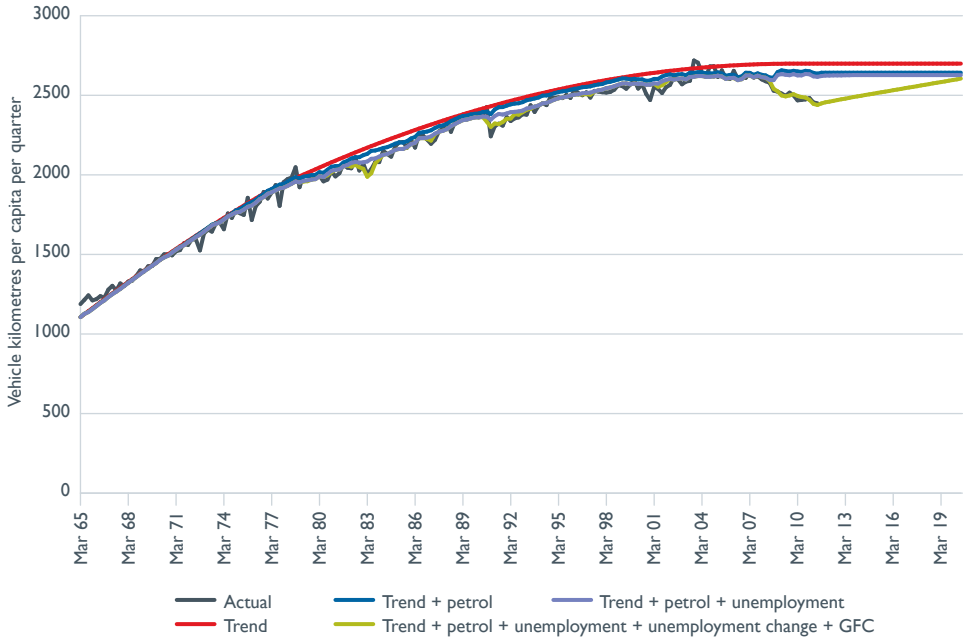
With higher unemployment, there would be a sharp temporary dip in traffic, before it would resume its upward path, reaching 63.5 billion vkt by 2020.

Finally, with no downward trend in the negative GFC effect, traffic growth is not continuously boosted by a decreasing 'fear factor' and remains subdued. The aggregate traffic level reaches only 60 billion vkt per year by 2020.

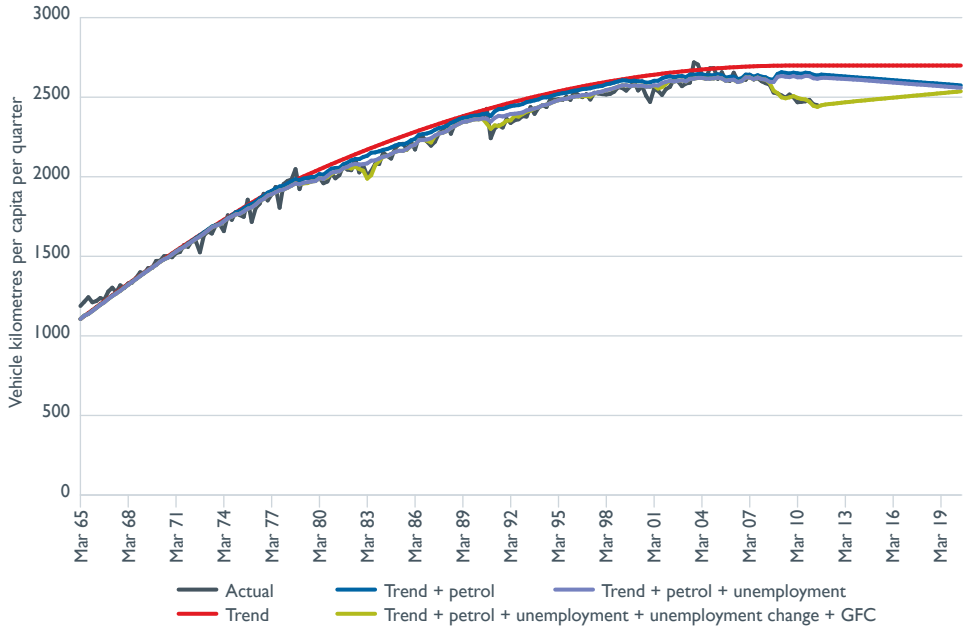
Sensitivity tests on the forecasts show that levels of traffic per person in 2020 are lower if a major rise in unemployment is posited, or if petrol prices rise substantially. The biggest fall in forecast traffic per person would arise if the effects of the GFC persist unchanged to 2020. But although all scenarios reduce the recovery in traffic per person, the growth in population to 2020 means that the aggregate traffic forecasts still grow fairly strongly.

Figure 4.1 Australian traffic per person

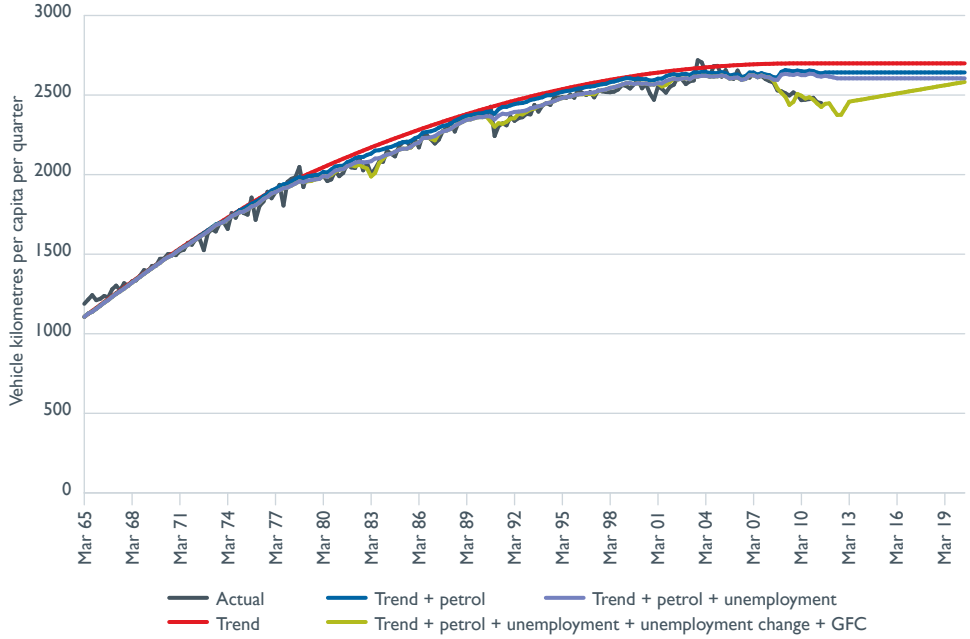
Basecase



High petrol price



High unemployment



Ongoing Global Financial Crisis

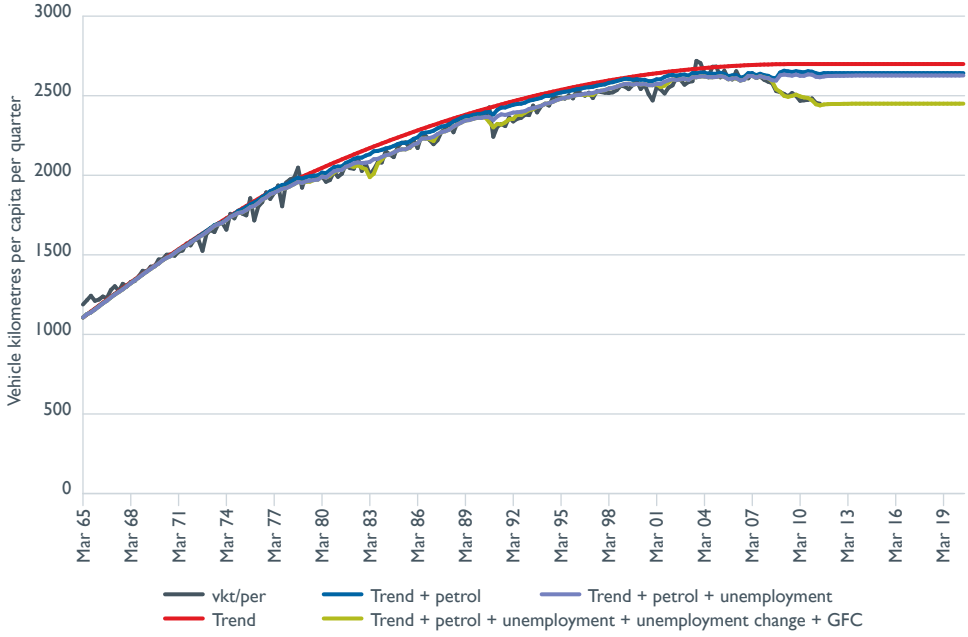
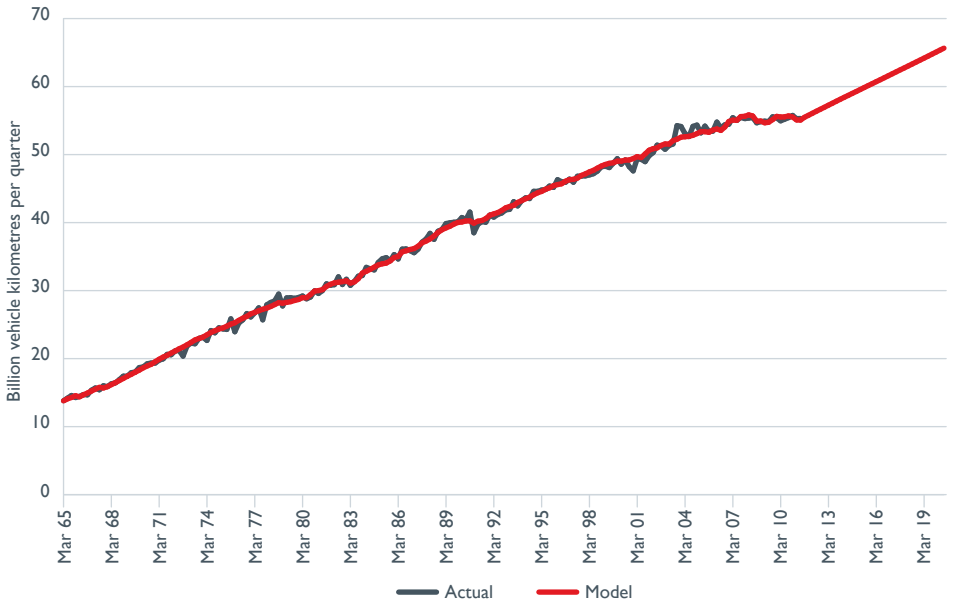
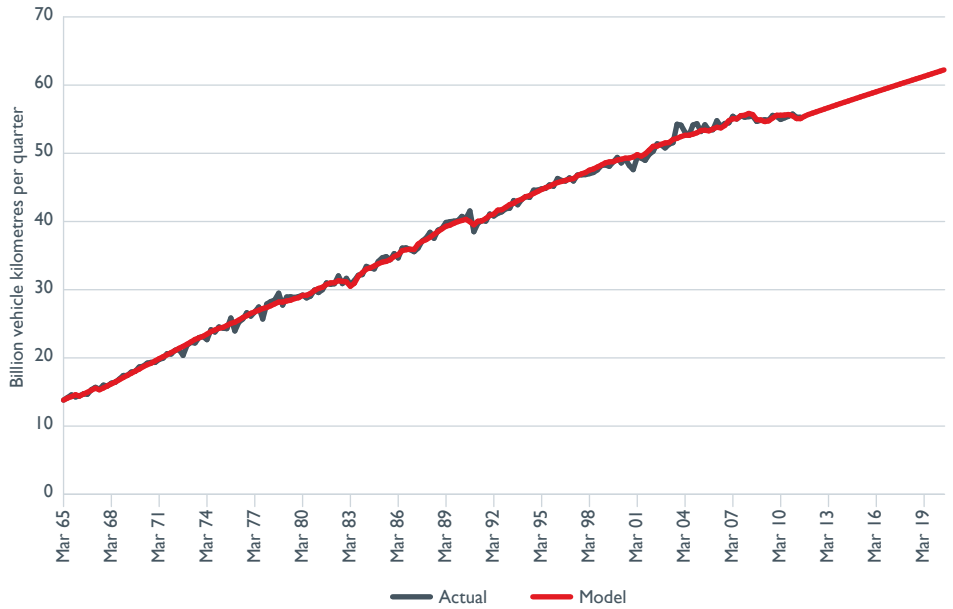


Figure 4.2 Australian aggregate traffic

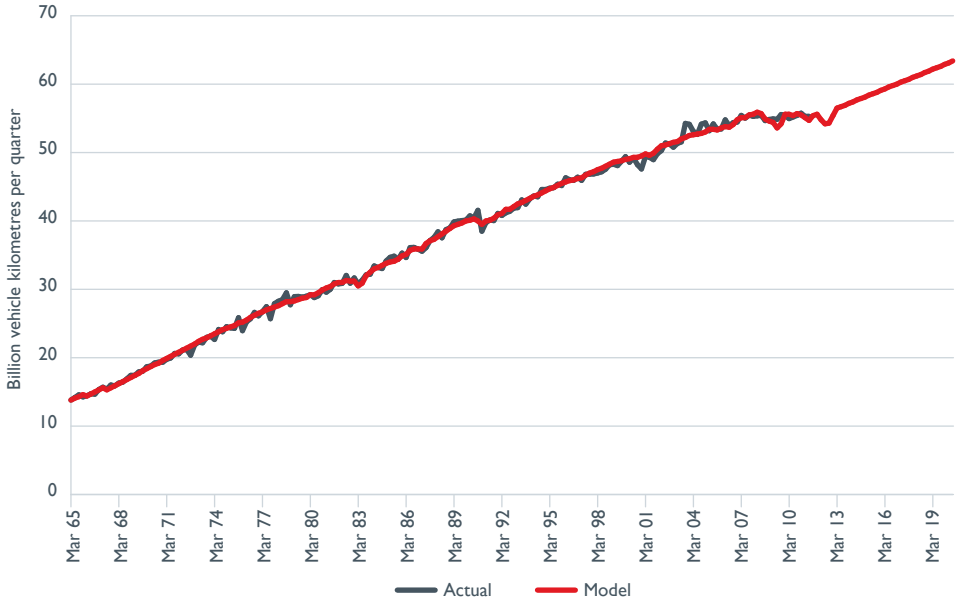
Basecase



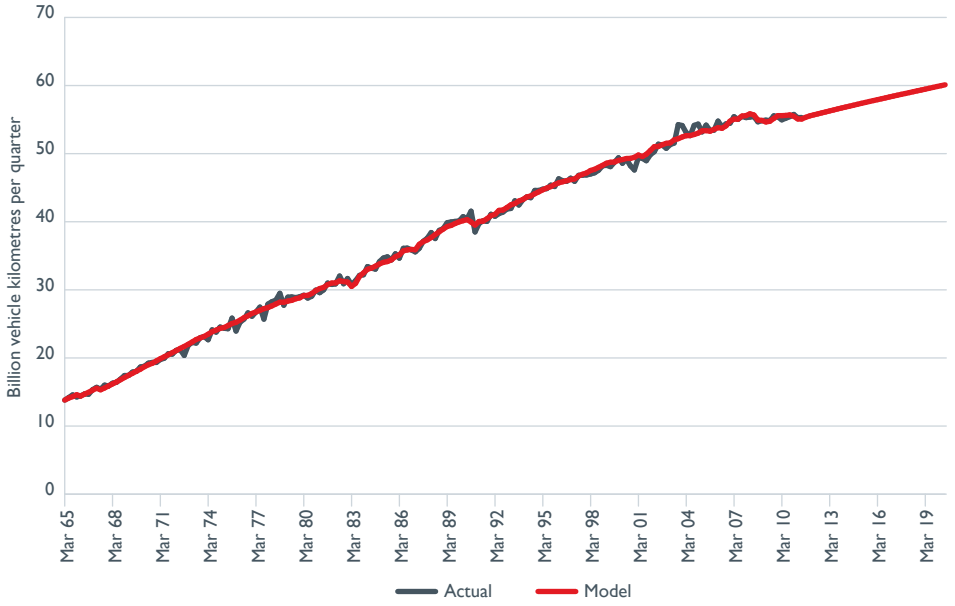
High petrol price



High unemployment



Ongoing Global Financial Crisis



Chapter 5
Conclusions

In Australia, as in other countries around the world, traffic growth has been a feature of the post World War Two experience. The automobile and commercial vehicles have multiplied, as living has increasingly been intertwined with mobility.

And yet in spite of its obvious benefits, traffic growth presents one of the key challenges to those tasked with assuring the continued benefits of mobility. It is therefore important to understand the nature, causes and outlooks for traffic growth.

This report has described an overview of the different patterns of traffic growth in eight Australian states/territories, and in the eight Australian capitals. In addition it has modelled the determinants of growth in all these locations.

The main determinant of the pattern of growth in traffic per person has been a trend toward saturation. After rapid growth in the seventies, growth in traffic per person (all vehicle types) has consistently slowed, with most states/cities already at saturation. The study has shown how this trend toward saturation can be estimated.

The main results of the study are models of vkt per capita as a function of this saturating effect over time, of petrol prices, and of fluctuations in the economy. Each state/territory and capital city is different, but the patterns of the models are amazingly similar. The models explain the common finding around the world of falling growth rates in aggregate traffic levels over the past four decades – a falling growth rate in population has been being reinforced by a declining rate of growth in traffic per person. Lately, there has been a significant effect from the global financial crisis in lowering traffic levels per capita.

But there are also many differences in the patterns of traffic growth uncovered in this study. Some jurisdictions (Victoria, South Australia, Western Australia, Tasmania and the ACT) respond much more substantially to changes in petrol prices than others, while some show substantial effects from changes in the economy (those just mentioned plus the Northern Territory). Some, like New South Wales and, to an extent Queensland pre 2008, are basically almost all trend.

But however much they are alike or differ, the models can be used to provide base-case forecasts of future trends in traffic growth in Australian states/territories and cities. These forecasts have traffic in Australia rising from 55 billion vkt per quarter in 2011 to more than 65 billion vkt per quarter in 2020.

Sensitivity tests on the forecasts show that levels of traffic per person in 2020 are lower if a major rise in unemployment is posited, or if petrol prices rise substantially. The biggest fall in forecast traffic per person would arise if the effects of the GFC persist unchanged to 2020.

But although all scenarios reduce the recovery in traffic per person, the growth in population to 2020 means that the aggregate traffic forecasts still grow fairly strongly.

These traffic forecasts can be useful in a variety of contexts, for instance, in forecasting road fatalities from fatality rates, examining needs for infrastructure, forecasting traffic growth in cities, and many other uses.

Appendix A
Traffic Growth Modelling Data

Background

This Appendix presents sources, corrections and final data for quarterly traffic growth models of eight Australian states/territories/cities.

There were several datasets underpinning the state/territory/city models.

Quarterly population estimates for each state/territory/city were available from June 1981 from the Australian Bureau of Statistics (ABS 2010). The populations as of June each year were available back to 1965 from the same source (ABS 2010). However there was a discontinuity from June 1970 to June 1971 when Aboriginals in the southern states began to be counted as people. This discontinuity was roughly allowed for and then the annual June figures interpolated to get the remainder of the quarterly population series. These are presented in Table A1 for states/territories and Table A2 for capital cities.

Quarterly traffic estimates for each jurisdiction were estimated in an earlier report (BITRE 2011). They are repeated here in Table A3 for Australian states/territories and Table A4 for Australian capital cities.

Quarterly petrol prices have been assembled from an array of sources. Data prior to June 1982 for Darwin and December 1980 for Canberra were not available. These were assumed to be equal to Hobart prices back to 1965. Retail petrol prices in all capital cities are now regularly available from the Australian Bureau of Statistics (ABS 2011b). Capital city petrol prices back to March 1965 are presented in Table A5.

Quarterly consumer price indices for each capital city are available from the Australian Bureau of Statistics (ABS 2011c). The Darwin index is not available prior to September 1980. It was assumed to move with the Hobart index back to 1965. A more important adjustment was done to the raw series, making a rough upward adjustment to the series values prior to the introduction of the Goods and Services Tax in 2000. Table A6 gives the adjusted CPI (all items) indices back to 1965.

Quarterly state/territory unemployment rates are available from the Australian Bureau of Statistics (ABS 2011d) from June 1978. Australia-level quarterly unemployment rates are available from the same source back to 1965. The slightly different rates for each jurisdiction in June 1978 were then adjusted back to the national rate over the three years back to 1975. Prior to that date, state/territory rates are thus assumed to equal the national rate. Table A7 gives the unemployment rate series so constructed back to 1965.

Table A1 Population of Australian states/territories

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Mar-65	4276153	3237877	1655790	1083879	844129	374397	53197	93137	11621234
Jun-65	4292206	3252227	1663322	1090882	849940	375297	53858	95172	11675531
Sep-65	4308258	3266577	1670855	1097885	855751	376198	54520	97207	11729828
Dec-65	4324311	3280926	1678387	1104888	861561	377098	55181	99242	11784125
Mar-66	4340363	3295276	1685920	1111891	867372	377999	55843	101277	11838422
Jun-66	4356416	3309626	1693452	1118893	873183	378899	56504	103313	11892719
Sep-66	4371151	3323532	1699940	1122673	881182	379870	57837	105315	11943875
Dec-66	4385886	3337438	1706428	1126453	889182	380841	59170	107318	11995031
Mar-67	4400622	3351345	1712916	1130233	897181	381812	60503	109321	12046187
Jun-67	4415357	3365251	1719404	1134013	905181	382784	61836	111323	12097344
Sep-67	4431827	3378057	1726740	1137086	914412	383907	63261	113641	12151057
Dec-67	4448296	3390863	1734076	1140159	923643	385030	64687	115958	12204771
Mar-68	4464766	3403669	1741413	1143233	932874	386154	66112	118276	12258484
Jun-68	4481235	3416475	1748749	1146306	942105	387277	67537	120593	12312198
Sep-68	4502273	3432113	1757369	1150782	952350	388614	68893	123167	12377400
Dec-68	4523312	3447752	1765989	1155259	962595	389952	70250	125740	12442603
Mar-69	4544350	3463390	1774609	1159735	972840	391289	71606	128313	12507805
Jun-69	4565388	3479028	1783230	1164211	983086	392626	72962	130886	12573007
Sep-69	4586240	3494417	1790728	1168976	992483	393347	74424	133523	12635635
Dec-69	4607093	3509806	1798227	1173741	1001880	394068	75887	136161	12698263
Mar-70	4627946	3525195	1805726	1178507	1011277	394789	77349	138798	12760891
Jun-70	4648799	3540584	1813224	1183272	1020673	395510	78811	141435	12823519
Sep-70	4667975	3555776	1822790	1187483	1028964	396151	80542	143869	12884455
Dec-70	4687151	3570968	1832355	1191693	1037254	396792	82273	146302	12945392
Mar-71	4706327	3586160	1841920	1195904	1045544	397432	84004	148736	13006328
Jun-71	4725503	3601352	1851485	1200114	1053834	398073	85735	151169	13067265
Sep-71	4742904	3616328	1863233	1203743	1060880	398632	87322	153325	13126365
Dec-71	4760305	3631303	1874982	1207371	1067926	399191	88908	155481	13185465
Mar-72	4777705	3646279	1886730	1211000	1074971	399749	90495	157636	13244564
Jun-72	4795106	3661254	1898478	1214628	1082017	400308	92081	159792	13303664
Sep-72	4806804	3672854	1911846	1218090	1086773	401003	93343	163171	13353883
Dec-72	4818502	3684454	1925215	1221552	1091529	401698	94604	166549	13404101
Mar-73	4830200	3696053	1938583	1225013	1096285	402392	95866	169928	13454320
Jun-73	4841898	3707653	1951951	1228475	1101041	403087	97127	173306	13504538
Sep-73	4854937	3719671	1966048	1231741	1107680	403853	98576	176540	13559046
Dec-73	4867976	3731690	1980146	1235007	1114320	404619	100026	179774	13613555
Mar-74	4881014	3743708	1994243	1238272	1120959	405385	101475	183007	13668063
Jun-74	4894053	3755726	2008340	1241538	1127598	406151	102924	186241	13722571
Sep-74	4903544	3763655	2019096	1247470	1134436	407135	100410	189433	13765177
Dec-74	4913035	3771584	2029851	1253401	1141273	408120	97897	192624	13807783
Mar-75	4922525	3779512	2040607	1259333	1148111	409104	95383	195816	13850389

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Table A1 Population of Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Jun-75	4932016	3787441	2051362	1265264	1154948	410088	92869	199007	13892995
Sep-75	4938909	3793187	2061615	1267466	1160797	410645	94209	201190	13928017
Dec-75	4945802	3798934	2071869	1269667	1166645	411201	95549	203374	13963039
Mar-76	4952695	3804680	2082122	1271869	1172494	411758	96888	205557	13998061
Jun-76	4959588	3810426	2092375	1274070	1178342	412314	98228	207740	14033083
Sep-76	4970163	3817161	2101741	1277082	1184848	412994	99656	209227	14072871
Dec-76	4980738	3823895	2111107	1280095	1191354	413673	101083	210714	14112659
Mar-77	4991313	3830630	2120473	1283107	1197860	414353	102511	212201	14152446
Jun-77	5001888	3837364	2129839	1286119	1204366	415032	103938	213688	14192234
Sep-77	5014864	3843963	2140391	1288641	1210237	415685	105449	214761	14233989
Dec-77	5027839	3850562	2150943	1291162	1216109	416337	106959	215835	14275745
Mar-78	5040815	3857160	2161495	1293684	1221980	416990	108470	216908	14317500
Jun-78	5053790	3863759	2172047	1296205	1227851	417642	109980	217981	14359255
Sep-78	5068125	3869421	2182728	1297431	1232541	418421	111022	218685	14398374
Dec-78	5082460	3875083	2193409	1298657	1237231	419199	112065	219389	14437492
Mar-79	5096795	3880744	2204090	1299883	1241921	419978	113107	220093	14476611
Jun-79	5111130	3886406	2214771	1301109	1246611	420756	114149	220797	14515729
Sep-79	5126229	3893380	2227562	1302931	1252225	421465	115173	221671	14560636
Dec-79	5141329	3900355	2240353	1304753	1257840	422173	116197	222544	14605543
Mar-80	5156428	3907329	2253144	1306575	1263454	422882	117221	223418	14650449
Jun-80	5171527	3914303	2265935	1308397	1269068	423590	118245	224291	14695356
Sep-80	5187368	3922457	2285753	1310990	1276815	424499	119338	225114	14752332
Dec-80	5203208	3930610	2305572	1313583	1284562	425407	120431	225936	14809308
Mar-81	5219049	3938764	2325390	1316176	1292309	426316	121523	226759	14866284
Jun-81	5234889	3946917	2345208	1318769	1300056	427224	122616	227581	14923260
Sep-81	5249455	3957333	2367477	1321235	1311284	427925	125186	228782	14988677
Dec-81	5266894	3968398	2387943	1325176	1320221	428283	127718	229484	15054117
Mar-82	5286119	3980826	2406355	1328670	1329700	429445	129593	230990	15121698
Jun-82	5303580	3992870	2424586	1331108	1338899	429845	130314	233045	15184247
Sep-82	5315846	4002731	2442912	1334090	1348096	430308	131517	233778	15239278
Dec-82	5328221	4012687	2456475	1337783	1354971	430974	132784	234996	15288891
Mar-83	5344027	4025254	2469709	1342193	1361874	431665	134529	236991	15346242
Jun-83	5352959	4035702	2482282	1345775	1369050	432805	135916	238983	15393472
Sep-83	5363744	4045185	2493373	1349553	1375244	433909	137942	240055	15439005
Dec-83	5374915	4054498	2503285	1353208	1381011	435100	139519	241960	15483496
Mar-84	5389180	4066209	2513443	1356511	1385878	436178	140666	243476	15531541
Jun-84	5402729	4076492	2523859	1360048	1391237	437760	142154	245112	15579391
Sep-84	5416536	4086549	2535976	1362611	1397817	438866	143934	246259	15628548
Dec-84	5431752	4097640	2547078	1365333	1403032	440070	145293	247084	15677282
Mar-85	5451549	4109741	2559452	1368721	1410377	441324	146662	248839	15736665
Jun-85	5464512	4120068	2571218	1371197	1418564	442828	148536	251389	15788312

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Table A1 Population of Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Sep-85	5478254	4129796	2583368	1373324	1427370	443548	150596	253446	15839702
Dec-85	5496467	4140421	2597100	1376838	1436900	444576	152356	255908	15900566
Mar-86	5516377	4151053	2610205	1380317	1447254	445723	153284	257285	15961498
Jun-86	5531526	4160856	2624595	1382550	1459019	446473	154421	258910	16018350
Sep-86	5549928	4171942	2636477	1384840	1468413	447325	155571	260545	16075041
Dec-86	5574251	4183842	2648778	1387499	1477398	448235	156578	262188	16138769
Mar-87	5596207	4197414	2662654	1390436	1486905	448597	157775	264053	16204041
Jun-87	5616736	4210111	2675107	1392764	1496248	449226	158205	265477	16263874
Sep-87	5639899	4223707	2688129	1395947	1505294	449373	159142	267375	16328866
Dec-87	5666219	4234945	2703516	1398959	1513355	449820	159040	268787	16394641
Mar-88	5689397	4249985	2723992	1402329	1525576	450572	158959	270957	16471767
Jun-88	5707309	4262569	2739907	1404909	1535167	451148	159026	272129	16532164
Sep-88	5730331	4280376	2760389	1408705	1548042	451905	159804	273087	16612639
Dec-88	5752254	4295300	2780869	1412323	1558914	452781	160536	274105	16687082
Mar-89	5769720	4309978	2806845	1416938	1569712	453932	161050	275867	16764042
Jun-89	5776283	4320164	2827637	1419029	1578434	455258	161179	276432	16814416
Sep-89	5785625	4333537	2847045	1421671	1588186	456830	161674	277470	16872038
Dec-89	5803079	4348225	2864007	1425461	1596225	458410	162097	279219	16936723
Mar-90	5818151	4364548	2884170	1429541	1605959	460070	162538	280659	17005636
Jun-90	5834021	4378592	2899283	1432056	1613049	462188	163728	282211	17065128
Sep-90	5849534	4391183	2913538	1435497	1619848	463469	164392	283671	17121132
Dec-90	5862497	4400707	2928713	1438882	1624390	464520	165047	285012	17169768
Mar-91	5883248	4413410	2947512	1443371	1631357	465870	165356	287300	17237424
Jun-91	5898731	4420373	2960951	1446299	1636067	466802	165493	289320	17284036
Sep-91	5917900	4430610	2977673	1449314	1642629	467695	166597	290462	17342880
Dec-91	5930450	4437479	2993817	1451405	1647167	468475	166807	291423	17387023
Mar-92	5949939	4448732	3015385	1454969	1653877	469317	167765	293332	17453316
Jun-92	5962569	4455002	3029950	1456512	1658045	469826	168086	294674	17494664
Sep-92	5976750	4460824	3049620	1457502	1664112	470250	168519	295819	17543396
Dec-92	5985078	4465415	3067320	1458800	1667743	471023	169713	296192	17581284
Mar-93	5998944	4471670	3093225	1459699	1673335	471582	170483	298816	17637754
Jun-93	6004880	4472387	3109788	1460674	1677669	471659	170734	299302	17667093
Sep-93	6020859	4475649	3131195	1462585	1683770	472194	171762	299555	17720408
Dec-93	6032780	4478835	3148072	1463635	1689007	472541	172330	299933	17759999
Mar-94	6051082	4484350	3170181	1465350	1697044	472642	172836	300782	17817163
Jun-94	6060190	4487570	3187113	1466138	1703009	472939	173375	301486	17854738
Sep-94	6079924	4495244	3206482	1467015	1711720	473352	173876	302339	17912907
Dec-94	6090258	4500354	3223006	1467536	1716595	473390	174961	302403	17951481
Mar-95	6107818	4509724	3244242	1468590	1725786	473652	176771	304424	18014016
Jun-95	6126981	4517387	3265109	1469429	1733787	473673	177552	304805	18071758
Sep-95	6147772	4527474	3284787	1470117	1742341	474011	178499	305765	18133824

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Table A1 Population of Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Dec-95	6168820	4539796	3303352	1471245	1749319	474136	180479	305822	18196054
Mar-96	6186382	4551380	3323059	1472850	1757661	474192	181352	307224	18257201
Jun-96	6204728	4560155	3338690	1474253	1765256	474443	181843	308251	18310714
Sep-96	6225149	4570326	3355031	1475640	1773413	474535	183514	308816	18369434
Dec-96	6244045	4579429	3367954	1477422	1780418	474300	184585	309214	18420320
Mar-97	6264394	4592571	3382091	1479994	1790104	474180	185426	309445	18481086
Jun-97	6276961	4597201	3394671	1481357	1794992	473605	186912	309042	18517564
Sep-97	6292200	4606809	3409429	1483220	1801349	473189	187800	308742	18565535
Dec-97	6306944	4615526	3421631	1484996	1807371	472842	188319	308732	18609115
Mar-98	6327900	4630982	3435718	1488274	1817146	472564	189079	309436	18673831
Jun-98	6339071	4637820	3447725	1489552	1822668	471967	189880	309888	18711271
Sep-98	6358144	4648937	3460388	1491007	1830820	471928	190626	310031	18764562
Dec-98	6373578	4661741	3472879	1493621	1836093	471910	191251	310546	18814276
Mar-99	6396087	4678319	3488631	1496458	1844211	471622	192042	311662	18881658
Jun-99	6411370	4686402	3501421	1497819	1849733	471430	192735	312326	18925855
Sep-99	6430225	4700404	3515029	1500080	1857717	471547	193453	312946	18984021
Dec-99	6447986	4713190	3530816	1502428	1861839	471630	194326	313506	19038338
Mar-00	6470679	4731998	3548084	1504200	1869838	471613	194795	314761	19108587
Jun-00	6486213	4741339	3561537	1505038	1874459	471409	195561	315215	19153380
Sep-00	6506625	4756661	3576874	1506654	1881333	471284	196127	316007	19214165
Dec-00	6527379	4770042	3592443	1508028	1887658	471416	196257	316816	19272644
Mar-01	6557399	4793874	3612587	1510386	1896309	471830	196905	318353	19360239
Jun-01	6575217	4804726	3628946	1511728	1901159	471795	197768	319317	19413240
Sep-01	6590602	4818203	3649488	1513590	1907779	471785	198309	319779	19472123
Dec-01	6605059	4833401	3670775	1516738	1913995	472274	198347	320787	19533972
Mar-02	6622700	4853201	3692082	1519243	1921854	472722	198747	322173	19605253
Jun-02	6628951	4863084	3714798	1521127	1926111	472766	199411	322675	19651438
Sep-02	6639719	4876758	3739653	1523555	1931262	473358	199531	323382	19709735
Dec-02	6649460	4892483	3764672	1525933	1937581	474862	199305	324146	19770963
Mar-03	6666697	4912785	3788228	1529109	1946477	476569	199099	325338	19846766
Jun-03	6672577	4923485	3809214	1531278	1953070	477646	200046	325661	19895435
Sep-03	6680589	4938647	3832411	1533408	1960458	479064	200390	325756	19953182
Dec-03	6688694	4952160	3857062	1536286	1967851	480772	200589	326024	20011882
Mar-04	6703567	4971230	3880647	1538899	1976549	482253	201148	327035	20083739
Jun-04	6707189	4981467	3900910	1540434	1982637	482770	202063	327475	20127363
Sep-04	6718450	4998917	3922150	1543120	1990331	483720	203194	327727	20190042
Dec-04	6728890	5013967	3945990	1545528	1998756	484640	203784	328155	20252132
Mar-05	6747371	5036434	3971952	1550134	2009847	485749	205090	329625	20338601
Jun-05	6756457	5048602	3994858	1552514	2017088	486327	206373	330164	20394791
Sep-05	6773279	5067054	4018495	1556113	2026970	487154	207507	330996	20469984
Dec-05	6786435	5085505	4043814	1559372	2037272	488495	208407	332380	20544064

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Table A1 Population of Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Mar-06	6806467	5112003	4068935	1565077	2050514	489660	209638	333210	20637870
Jun-06	6816087	5126540	4090908	1567888	2059381	489951	210627	334119	20697880
Sep-06	6839425	5149484	4114858	1572628	2072356	490827	211729	335390	20789080
Dec-06	6858555	5170618	4139685	1576491	2084733	491783	212335	337077	20873663
Mar-07	6887042	5201255	4169076	1582393	2100989	492724	213542	339117	20988526
Jun-07	6904942	5221310	4195981	1585794	2112967	493204	214804	341054	21072452
Sep-07	6930606	5247059	4220624	1589731	2127246	494354	216140	341633	21169796
Dec-07	6954961	5268760	4247043	1593743	2141057	495509	217473	342317	21263271
Mar-08	6991186	5302847	4279700	1599656	2161243	497068	218661	344528	21397307
Jun-08	7014887	5326978	4308570	1603985	2176980	497922	220503	346294	21498540
Sep-08	7044341	5358191	4338221	1609165	2196617	499308	221960	347388	21617615
Dec-08	7074158	5385888	4368462	1613346	2213663	500909	222905	348820	21730585
Mar-09	7109660	5422651	4401832	1619703	2234499	502438	224332	351230	21868782
Jun-09	7133398	5448207	4427278	1624572	2247337	503275	226171	352608	21965287
Sep-09	7164425	5478245	4452593	1630467	2261802	504424	227258	354045	22075702
Dec-09	7190482	5501387	4475132	1634835	2272556	505360	227949	355311	22165460
Mar-10	7220991	5529441	4498900	1640745	2286057	507084	228527	357673	22271864
Jun-10	7238819	5547527	4516361	1644642	2296411	507626	229675	358894	22342398
Sep-10	7254999	5560138	4535669	1646137	2304540	508033	230467	359578	22399560
Dec-10	7271179	5572749	4554976	1647632	2312668	508439	231259	360262	22459165
Mar-11	7287359	5585360	4574284	1649127	2320797	508846	232051	360946	22518769
Jun-11	7303539	5597970	4593591	1650622	2328925	509252	232844	361629	22578374
Sep-11	7318969	5610009	4612549	1651956	2336852	509558	233615	362258	22635766
Dec-11	7334399	5622047	4631506	1653289	2344779	509864	234386	362887	22693158
Mar-12	7349829	5634086	4650464	1654623	2352706	510170	235157	363515	22750550
Jun-12	7365259	5646124	4669421	1655956	2360633	510476	235928	364144	22807941
Sep-12	7379916	5657497	4688016	1657066	2368367	510734	236676	364768	22863040
Dec-12	7394573	5668870	4706610	1658176	2376100	510991	237424	365393	22918138
Mar-13	7409230	5680243	4725205	1659286	2383834	511249	238173	366017	22973237
Jun-13	7423887	5691617	4743799	1660396	2391567	511507	238921	366642	23028335
Sep-13	7438677	5703084	4762610	1661550	2399361	511754	239677	367229	23083944
Dec-13	7453467	5714552	4781422	1662705	2407154	512002	240433	367817	23139552
Mar-14	7468257	5726019	4800233	1663860	2414948	512250	241189	368405	23195161
Jun-14	7483047	5737487	4819044	1665015	2422742	512497	241945	368992	23250769
Sep-14	7497945	5749016	4838055	1666197	2430625	512729	242706	369619	23306892
Dec-14	7512842	5760546	4857065	1667378	2438509	512961	243468	370246	23363015
Mar-15	7527740	5772075	4876075	1668560	2446393	513193	244229	370873	23419138
Jun-15	7542637	5783605	4895086	1669742	2454276	513424	244990	371500	23475261
Sep-15	7556735	5794499	4913706	1670696	2461928	513578	245753	372069	23528963
Dec-15	7570832	5805394	4932325	1671650	2469580	513732	246515	372637	23582665
Mar-16	7584930	5816288	4950945	1672604	2477231	513885	247277	373205	23636367

(Continued)

Table A1 Population of Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Jun-16	7599028	5827183	4969565	1673558	2484883	514039	248040	373773	23690069
Sep-16	7613245	5838174	4988335	1674542	2492602	514177	248808	374355	23744239
Dec-16	7627463	5849166	5007106	1675527	2500320	514315	249576	374937	23798408
Mar-17	7641680	5860157	5025876	1676511	2508039	514453	250344	375518	23852578
Jun-17	7655898	5871148	5044646	1677495	2515758	514590	251112	376100	23906747
Sep-17	7669279	5881459	5062998	1678311	2523219	514651	251856	376623	23958397
Dec-17	7682660	5891770	5081349	1679126	2530681	514712	252600	377147	24010047
Mar-18	7696041	5902081	5099701	1679942	2538143	514773	253345	377671	24061696
Jun-18	7709422	5912392	5118052	1680758	2545604	514834	254089	378194	24113346
Sep-18	7722910	5922780	5136589	1681553	2553110	514908	254839	378732	24165421
Dec-18	7736398	5933167	5155125	1682348	2560616	514982	255589	379270	24217496
Mar-19	7749886	5943555	5173662	1683143	2568122	515056	256340	379807	24269571
Jun-19	7763374	5953943	5192199	1683938	2575628	515131	257090	380345	24321646
Sep-19	7776994	5964418	5210876	1684722	2583196	515163	257873	380899	24374142
Dec-19	7790615	5974894	5229553	1685506	2590765	515195	258656	381453	24426637
Mar-20	7804235	5985370	5248231	1686290	2598334	515228	259439	382007	24479133
Jun-20	7817855	5995845	5266908	1687074	2605902	515260	260222	382561	24531629

Table A2 Population of Australian capital cities

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Mar-65	2637748	2207286	762746	754242	555542	138922	20642	91581	7168710
Jun-65	2652592	2220304	767667	760201	560452	139400	21180	93591	7215387
Sep-65	2667436	2233322	772588	766160	565361	139878	21719	95601	7262064
Dec-65	2682280	2246340	777509	772118	570271	140356	22257	97611	7308741
Mar-66	2697123	2259358	782430	778077	575180	140833	22796	99621	7355418
Jun-66	2711967	2272376	787351	784036	580089	141311	23334	101631	7402095
Sep-66	2724562	2285975	791455	787422	586488	141831	23788	103646	7445167
Dec-66	2737156	2299573	795559	790809	592887	142351	24243	105661	7488239
Mar-67	2749751	2313172	799662	794195	599287	142870	24697	107677	7531311
Jun-67	2762345	2326771	803766	797581	605686	143390	25151	109692	7574382
Sep-67	2776456	2339347	808049	800392	612974	144000	25899	111960	7619077
Dec-67	2790568	2351923	812333	803202	620262	144610	26647	114229	7663772
Mar-68	2804679	2364499	816616	806012	627550	145220	27395	116497	7708467
Jun-68	2818790	2377075	820899	808823	634838	145830	28143	118765	7753162
Sep-68	2836238	2392356	825741	812667	642891	146645	28917	121308	7806762
Dec-68	2853685	2407638	830582	816511	650944	147460	29692	123850	7860361
Mar-69	2871133	2422919	835424	820356	658997	148275	30466	126393	7913961
Jun-69	2888580	2438200	840265	824200	667050	149090	31240	128935	7967560
Sep-69	2904393	2453050	844887	828613	674513	149625	32155	131451	8018686
Dec-69	2920205	2467900	849508	833025	681975	150160	33070	133968	8069811
Mar-70	2936018	2482750	854130	837438	689438	150695	33985	136484	8120936
Jun-70	2951830	2497600	858752	841850	696900	151230	34900	139000	8172062
Sep-70	2964306	2510195	864590	845895	703272	151698	35450	141450	8216856
Dec-70	2976783	2522790	870428	849940	709644	152165	36000	143901	8261651
Mar-71	2989259	2535385	876266	853985	716016	152633	36550	146351	8306445
Jun-71	3001735	2547980	882104	858031	722389	153100	37100	148801	8351240
Sep-71	3012157	2559309	888218	861477	728253	153275	37800	150972	8391461
Dec-71	3022578	2570638	894333	864923	734117	153450	38500	153143	8431682
Mar-72	3033000	2581966	900447	868370	739982	153625	39200	155313	8471903
Jun-72	3043421	2593295	906561	871816	745846	153800	39900	157484	8512124
Sep-72	3049535	2603296	912946	875343	750243	154225	40625	160878	8547090
Dec-72	3055648	2613298	919331	878869	754639	154650	41350	164271	8582056
Mar-73	3061762	2623299	925716	882396	759036	155075	42075	167665	8617023
Jun-73	3067875	2633300	932101	885923	763433	155500	42800	171058	8651989
Sep-73	3073856	2642500	938410	889754	769412	156075	43775	174307	8688090
Dec-73	3079838	2651700	944720	893586	775391	156650	44750	177556	8724190
Mar-74	3085819	2660900	951029	897418	781371	157225	45725	180804	8760291
Jun-74	3091800	2670100	957338	901250	787350	157800	46700	184053	8796391
Sep-74	3096975	2677275	960182	904463	793663	158500	43950	187260	8822267
Dec-74	3102150	2684450	963027	907675	799975	159200	41200	190466	8848143
Mar-75	3107325	2691625	965871	910888	806288	159900	38450	193673	8874019

(Continued)

Table A2 Population of Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Jun-75	3112500	2698800	968716	914100	812600	160600	35700	196879	8899895
Sep-75	3120325	2705025	974107	916575	817650	161550	37858	199077	8932167
Dec-75	3128150	2711250	979498	919050	822700	162500	40016	201276	8964439
Mar-76	3135975	2717475	984889	921525	827750	163450	42174	203474	8996712
Jun-76	3143800	2723700	990280	924000	832800	164400	44332	205672	9028984
Sep-76	3149875	2727975	993049	926550	837550	164750	44946	207174	9051869
Dec-76	3155950	2732250	995817	929100	842300	165100	45560	208676	9074753
Mar-77	3162025	2736525	998585	931650	847050	165450	46174	210178	9097637
Jun-77	3168100	2740800	1001353	934200	851800	165800	46788	211680	9120521
Sep-77	3175500	2744900	1005308	936375	856100	166175	47458	212768	9144584
Dec-77	3182900	2749000	1009262	938550	860400	166550	48129	213857	9168647
Mar-78	3190300	2753100	1013216	940725	864700	166925	48799	214945	9192710
Jun-78	3197700	2757200	1017171	942900	869000	167300	49469	216033	9216773
Sep-78	3204975	2760650	1021618	943375	872475	167575	50023	216752	9237443
Dec-78	3212250	2764100	1026066	943850	875950	167850	50577	217471	9258114
Mar-79	3219525	2767550	1030514	944325	879425	168125	51130	218190	9278784
Jun-79	3226800	2771000	1034962	944800	882900	168400	51684	218909	9299455
Sep-79	3234475	2775100	1039111	945600	887025	168650	52250	219798	9322009
Dec-79	3242150	2779200	1043261	946400	891150	168900	52817	220686	9344564
Mar-80	3249825	2783300	1047411	947200	895275	169150	53383	221575	9367118
Jun-80	3257500	2787400	1051561	948000	899400	169400	53949	222463	9389673
Sep-80	3263000	2792125	1059665	949425	905050	169825	54758	223301	9417148
Dec-80	3268500	2796850	1067769	950850	910700	170250	55567	224138	9444623
Mar-81	3274000	2801575	1075873	952275	916350	170675	56375	224976	9472098
Jun-81	3279500	2806300	1083977	953700	922000	171100	57184	225813	9499574
Sep-81	3289300	2813175	1091980	955900	929600	171375	58618	227194	9537142
Dec-81	3299100	2820050	1099983	958100	937200	171650	60052	228575	9574710
Mar-82	3308900	2826925	1107985	960300	944800	171925	61486	229956	9612278
Jun-82	3318700	2833800	1115988	962500	952400	172200	62920	231337	9649846
Sep-82	3326700	2840775	1120801	965225	958500	172500	63865	232837	9681203
Dec-82	3334700	2847750	1125614	967950	964600	172800	64810	234336	9712560
Mar-83	3342700	2854725	1130426	970675	970700	173100	65755	235836	9743917
Jun-83	3350700	2861700	1135239	973400	976800	173400	66700	237335	9775274
Sep-83	3358750	2867425	1138394	976125	981500	173925	67822	238882	9802823
Dec-83	3366800	2873150	1141549	978850	986200	174450	68943	240430	9830372
Mar-84	3374850	2878875	1144705	981575	990900	174975	70065	241977	9857921
Jun-84	3382900	2884600	1147860	984300	995600	175500	71186	243524	9885470
Sep-84	3393475	2890725	1151607	986725	1001250	176000	72256	245108	9917147
Dec-84	3404050	2896850	1155355	989150	1006900	176500	73326	246693	9948823
Mar-85	3414625	2902975	1159102	991575	1012550	177000	74396	248277	9980500
Jun-85	3425200	2909100	1162849	994000	1018200	177500	75466	249861	10012176

(Continued)

Table A2 Population of Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Sep-85	3436792	2921050	1172908	996387	1026180	178643	76606	251756	10060321
Dec-85	3448384	2933001	1182966	998774	1034160	179786	77746	253652	10108467
Mar-86	3459975	2944951	1193024	1001161	1042140	180928	78886	255547	10156612
Jun-86	3471567	2956901	1203082	1003548	1050120	182071	80026	257442	10204757
Sep-86	3485797	2968571	1208242	1005637	1057491	182384	80739	259099	10247959
Dec-86	3500027	2980242	1213402	1007726	1064862	182696	81452	260756	10291161
Mar-87	3514256	2991912	1218561	1009815	1072232	183009	82166	262412	10334363
Jun-87	3528486	3003582	1223721	1011904	1079603	183321	82879	264069	10377565
Sep-87	3544110	3013339	1230135	1014207	1087320	183537	82954	265747	10421347
Dec-87	3559733	3023095	1236548	1016511	1095036	183754	83029	267425	10465130
Mar-88	3575357	3032852	1242962	1018814	1102753	183970	83103	269103	10508912
Jun-88	3590980	3042608	1249376	1021117	1110469	184186	83178	270781	10552695
Sep-88	3598950	3053351	1258162	1024206	1119696	184624	83415	271872	10594274
Dec-88	3606920	3064094	1266948	1027294	1128922	185062	83652	272963	10635854
Mar-89	3614889	3074837	1275734	1030383	1138149	185500	83888	274053	10677433
Jun-89	3622859	3085580	1284520	1033471	1147375	185938	84125	275144	10719012
Sep-89	3628059	3095665	1292053	1036254	1154372	186713	84479	276604	10754199
Dec-89	3633260	3105750	1299586	1039037	1161369	187489	84834	278064	10789385
Mar-90	3638460	3115834	1307118	1041819	1168365	188264	85188	279523	10824572
Jun-90	3643660	3125919	1314651	1044602	1175362	189039	85542	280983	10859758
Sep-90	3650959	3133333	1321305	1047592	1178712	189464	85760	282786	10889911
Dec-90	3658258	3140748	1327960	1050582	1182062	189889	85979	284589	10920065
Mar-91	3665556	3148162	1334615	1053571	1185412	190314	86197	286392	10950219
Jun-91	3672855	3155576	1341269	1056561	1188762	190739	86415	288195	10980372
Sep-91	3682183	3162292	1348752	1058833	1193409	191164	86770	289535	11012938
Dec-91	3691512	3169009	1356235	1061104	1198056	191589	87126	290875	11045504
Mar-92	3700840	3175725	1363717	1063376	1202703	192014	87481	292214	11078069
Jun-92	3710168	3182441	1371200	1065647	1207350	192439	87836	293554	11110635
Sep-92	3716328	3186313	1379672	1066389	1211901	192736	88354	294721	11136413
Dec-92	3722489	3190184	1388143	1067132	1216451	193033	88872	295888	11162191
Mar-93	3728649	3194056	1396615	1067874	1221002	193330	89390	297055	11187970
Jun-93	3734809	3197927	1405087	1068616	1225552	193627	89908	298222	11213748
Sep-93	3743517	3201701	1413067	1069380	1230731	193850	90214	298949	11241408
Dec-93	3752225	3205474	1421046	1070144	1235909	194073	90521	299677	11269068
Mar-94	3760933	3209248	1429026	1070908	1241088	194296	90827	300404	11296729
Jun-94	3769641	3213021	1437006	1071672	1246266	194519	91133	301131	11324389
Sep-94	3782539	3220693	1444768	1072424	1252634	194646	91659	301964	11361326
Dec-94	3795437	3228364	1452530	1073176	1259002	194773	92186	302797	11398264
Mar-95	3808335	3236036	1460292	1073927	1265370	194899	92712	303630	11435201
Jun-95	3821233	3243707	1468055	1074679	1271738	195026	93238	304463	11472139
Sep-95	3836209	3253600	1476242	1075619	1277577	195199	93886	305327	11513656

(Continued)

Table A2 Population of Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Dec-95	3851185	3263493	1484429	1076558	1283415	195372	94534	306190	11555174
Mar-96	3866160	3273385	1492616	1077498	1289254	195545	95181	307054	11596692
Jun-96	3881136	3283278	1500803	1078437	1295092	195718	95829	307917	11638210
Sep-96	3893017	3289859	1506681	1079804	1300388	195783	96595	308113	11670238
Dec-96	3904897	3296440	1512559	1081172	1305683	195847	97360	308309	11702266
Mar-97	3916778	3303020	1518437	1082539	1310979	195912	98126	308504	11734293
Jun-97	3928658	3309601	1524315	1083906	1316274	195976	98891	308700	11766321
Sep-97	3938906	3317758	1530382	1085561	1320954	195960	99460	308910	11797890
Dec-97	3949154	3325916	1536450	1087216	1325633	195945	100028	309120	11829460
Mar-98	3959401	3334073	1542517	1088871	1330313	195929	100597	309329	11861029
Jun-98	3969649	3342230	1548584	1090526	1334992	195913	101165	309539	11892598
Sep-98	3982225	3351601	1554489	1092128	1340087	195938	101640	310146	11928254
Dec-98	3994802	3360972	1560394	1093730	1345183	195962	102115	310753	11963910
Mar-99	4007378	3370343	1566299	1095332	1350278	195987	102589	311360	11999565
Jun-99	4019954	3379714	1572204	1096934	1355373	196011	103064	311967	12035221
Sep-99	4032239	3390466	1578799	1098312	1359767	196125	103576	312687	12071971
Dec-99	4044524	3401218	1585395	1099690	1364160	196240	104089	313408	12108721
Mar-00	4056808	3411970	1591990	1101067	1368554	196354	104601	314128	12145471
Jun-00	4069093	3422722	1598585	1102445	1372947	196468	105113	314848	12182221
Sep-00	4083888	3434948	1606222	1103830	1377961	196672	105545	315871	12224936
Dec-00	4098683	3447174	1613859	1105216	1382975	196875	105978	316894	12267651
Mar-01	4113477	3459399	1621496	1106601	1387988	197079	106410	317916	12310366
Jun-01	4128272	3471625	1629133	1107986	1393002	197282	106842	318939	12353081
Sep-01	4136954	3484705	1638582	1109737	1398218	197444	106992	319783	12392416
Dec-01	4145636	3497786	1648031	1111488	1403435	197607	107143	320628	12431751
Mar-02	4154317	3510866	1657479	1113239	1408651	197769	107293	321472	12471085
Jun-02	4162999	3523946	1666928	1114990	1413867	197931	107443	322316	12510420
Sep-02	4169968	3537312	1677382	1116678	1419377	198412	107442	323072	12549643
Dec-02	4176937	3550679	1687837	1118366	1424887	198892	107442	323828	12588866
Mar-03	4183905	3564045	1698291	1120054	1430397	199373	107441	324584	12628089
Jun-03	4190874	3577411	1708745	1121742	1435907	199853	107440	325340	12667312
Sep-03	4196718	3589559	1718767	1123106	1442013	200412	107732	325794	12704100
Dec-03	4202561	3601707	1728789	1124470	1448118	200971	108023	326248	12740887
Mar-04	4208405	3613855	1738811	1125834	1454224	201530	108315	326702	12777675
Jun-04	4214248	3626003	1748833	1127198	1460329	202089	108606	327156	12814462
Sep-04	4221947	3639655	1757883	1129027	1466703	202434	109269	327833	12854749
Dec-04	4229647	3653306	1766932	1130856	1473076	202778	109932	328511	12895037
Mar-05	4237346	3666958	1775982	1132684	1479450	203123	110595	329188	12935324
Jun-05	4245045	3680609	1785031	1134513	1485823	203467	111258	329865	12975611
Sep-05	4254281	3696211	1793714	1137338	1494054	203971	112034	330859	13022460
Dec-05	4263517	3711812	1802397	1140163	1502286	204474	112810	331852	13069309

(Continued)

Table A2 Population of Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Mar-06	4272752	3727414	1811079	1142987	1510517	204978	113586	332846	13116158
Jun-06	4281988	3743015	1819762	1145812	1518748	205481	114362	333839	13163007
Sep-06	4294996	3758700	1829063	1148849	1527592	205961	115121	335248	13215530
Dec-06	4308004	3774385	1838364	1151887	1536437	206440	115881	336657	13268053
Mar-07	4321012	3790070	1847665	1154924	1545281	206920	116640	338065	13320576
Jun-07	4334020	3805755	1856966	1157961	1554125	207399	117399	339474	13373099
Sep-07	4347470	3824125	1866817	1161155	1564850	208006	118261	340595	13431279
Dec-07	4360920	3842495	1876668	1164349	1575575	208613	119123	341716	13489458
Mar-08	4374370	3860864	1886520	1167543	1586299	209220	119985	342836	13547638
Jun-08	4387820	3879234	1896371	1170738	1597024	209827	120847	343957	13605818
Sep-08	4398488	3889911	1906040	1172110	1603486	210125	121462	344661	13646281
Dec-08	4409155	3900587	1915709	1173481	1609947	210422	122078	345365	13686745
Mar-09	4419823	3911263	1925378	1174853	1616409	210719	122694	346070	13727208
Jun-09	4430491	3921940	1935047	1176225	1622870	211016	123309	346774	13767672
Sep-09	4441286	3932704	1944902	1177597	1629407	211350	123903	347494	13808642
Dec-09	4452081	3943468	1954757	1178969	1635943	211683	124497	348215	13849613
Mar-10	4462876	3954232	1964612	1180341	1642480	212016	125091	348935	13890583
Jun-10	4473670	3964996	1974467	1181713	1649017	212350	125685	349656	13931554
Sep-10	4484005	3975347	1984182	1182963	1655446	212637	126300	350323	13971203
Dec-10	4494340	3985698	1993898	1184212	1661876	212925	126915	350990	14010853
Mar-11	4504675	3996049	2003613	1185461	1668306	213212	127529	351657	14050502
Jun-11	4515009	4006400	2013329	1186710	1674736	213500	128144	352324	14090152
Sep-11	4524880	4016359	2022975	1187836	1681029	213769	128750	352938	14128536
Dec-11	4534750	4026318	2032622	1188963	1687322	214038	129356	353551	14166920
Mar-12	4544621	4036277	2042268	1190089	1693615	214307	129962	354164	14205303
Jun-12	4554491	4046236	2051915	1191215	1699908	214576	130568	354777	14243687
Sep-12	4563868	4055748	2061422	1192187	1706076	214826	131165	355387	14280678
Dec-12	4573244	4065259	2070929	1193158	1712245	215076	131761	355996	14317668
Mar-13	4582621	4074771	2080436	1194130	1718413	215325	132357	356605	14354658
Jun-13	4591997	4084283	2089943	1195101	1724581	215575	132953	357215	14391648
Sep-13	4601496	4093873	2099603	1196124	1730820	215805	133556	357788	14429066
Dec-13	4610995	4103463	2109263	1197147	1737059	216034	134160	358361	14466483
Mar-14	4620495	4113052	2118924	1198171	1743297	216264	134763	358935	14503900
Jun-14	4629994	4122642	2128584	1199194	1749536	216494	135366	359508	14541317
Sep-14	4639520	4132294	2138352	1200204	1755828	216729	135975	360120	14579022
Dec-14	4649046	4141946	2148120	1201214	1762121	216964	136584	360732	14616727
Mar-15	4658572	4151598	2157888	1202224	1768413	217200	137193	361343	14654432
Jun-15	4668099	4161250	2167656	1203234	1774705	217435	137802	361955	14692136
Sep-15	4677139	4170463	2177297	1204138	1780837	217650	138430	362510	14728464
Dec-15	4686180	4179676	2186938	1205042	1786969	217865	139058	363064	14764792
Mar-16	4695221	4188888	2196579	1205946	1793101	218080	139686	363619	14801120

(Continued)

Table A2 Population of Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Jun-16	4704262	4198101	2206220	1206851	1799233	218295	140313	364173	14837448
Sep-16	4713386	4207408	2215998	1207744	1805447	218487	140918	364741	14874129
Dec-16	4722511	4216715	2225775	1208637	1811662	218679	141522	365308	14910811
Mar-17	4731636	4226022	2235553	1209531	1817876	218871	142127	365876	14947492
Jun-17	4740761	4235329	2245331	1210424	1824090	219063	142731	366444	14984173
Sep-17	4749362	4244176	2254953	1211189	1830118	219236	143354	366955	15019343
Dec-17	4757962	4253024	2264576	1211955	1836146	219408	143977	367466	15054513
Mar-18	4766563	4261871	2274198	1212720	1842174	219580	144600	367977	15089683
Jun-18	4775163	4270718	2283821	1213486	1848202	219752	145223	368488	15124852
Sep-18	4783832	4279638	2293556	1214268	1854262	219930	145853	369013	15160353
Dec-18	4792501	4288559	2303292	1215051	1860323	220108	146482	369537	15195853
Mar-19	4801170	4297479	2313027	1215834	1866383	220287	147111	370062	15231354
Jun-19	4809839	4306400	2322763	1216617	1872443	220465	147741	370587	15266854
Sep-19	4818610	4315396	2332629	1217398	1878575	220651	148348	371127	15302734
Dec-19	4827380	4324392	2342496	1218180	1884707	220837	148955	371668	15338615
Mar-20	4836150	4333388	2352362	1218961	1890840	221023	149562	372209	15374495
Jun-20	4844920	4342385	2362229	1219742	1896972	221208	150170	372750	15410376

Table A3 Vehicle kilometres travelled (billion), Australian states/territories

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Mar-65	4.91	3.86	1.91	1.42	1.11	0.43	0.05	0.12	13.81
Jun-65	5.03	3.97	1.94	1.48	1.15	0.44	0.05	0.12	14.19
Sep-65	5.15	4.05	2.00	1.54	1.22	0.45	0.05	0.13	14.58
Dec-65	5.08	4.00	1.96	1.44	1.17	0.44	0.05	0.13	14.27
Mar-66	5.07	4.05	1.99	1.48	1.22	0.44	0.06	0.13	14.44
Jun-66	5.14	4.11	2.06	1.49	1.27	0.46	0.06	0.13	14.72
Sep-66	5.20	4.11	2.00	1.48	1.24	0.45	0.06	0.13	14.67
Dec-66	5.36	4.25	2.15	1.57	1.33	0.48	0.06	0.14	15.35
Mar-67	5.52	4.38	2.18	1.57	1.35	0.49	0.06	0.15	15.69
Jun-67	5.42	4.26	2.10	1.57	1.36	0.49	0.06	0.15	15.41
Sep-67	5.64	4.47	2.19	1.61	1.40	0.48	0.07	0.15	16.01
Dec-67	5.57	4.40	2.21	1.56	1.42	0.49	0.07	0.15	15.88
Mar-68	5.73	4.49	2.25	1.62	1.48	0.50	0.07	0.16	16.30
Jun-68	5.82	4.53	2.26	1.60	1.47	0.51	0.07	0.17	16.43
Sep-68	5.93	4.71	2.32	1.64	1.52	0.52	0.08	0.17	16.90
Dec-68	6.14	4.81	2.39	1.71	1.59	0.52	0.08	0.18	17.42
Mar-69	6.13	4.77	2.41	1.70	1.61	0.53	0.09	0.18	17.42
Jun-69	6.28	4.93	2.48	1.75	1.67	0.54	0.10	0.19	17.93
Sep-69	6.35	4.93	2.49	1.73	1.69	0.54	0.10	0.19	18.03
Dec-69	6.57	5.11	2.57	1.81	1.75	0.56	0.11	0.20	18.68
Mar-70	6.64	5.14	2.59	1.79	1.75	0.56	0.12	0.21	18.78
Jun-70	6.76	5.28	2.62	1.85	1.83	0.56	0.12	0.22	19.24
Sep-70	6.86	5.24	2.65	1.84	1.85	0.57	0.12	0.22	19.35
Dec-70	6.79	5.33	2.62	1.82	1.85	0.58	0.12	0.22	19.34
Mar-71	6.98	5.42	2.68	1.86	1.89	0.58	0.13	0.23	19.77
Jun-71	7.03	5.43	2.78	1.86	1.92	0.58	0.14	0.24	19.96
Sep-71	7.28	5.63	2.82	1.94	1.98	0.60	0.14	0.25	20.63
Dec-71	7.25	5.59	2.82	1.92	1.99	0.59	0.14	0.25	20.56
Mar-72	7.44	5.78	2.91	1.96	2.03	0.61	0.14	0.26	21.13
Jun-72	7.40	5.80	2.96	1.97	2.02	0.62	0.16	0.26	21.20
Sep-72	7.02	5.68	2.85	1.80	2.01	0.61	0.15	0.25	20.37
Dec-72	7.66	5.95	3.06	2.05	2.09	0.62	0.15	0.28	21.86
Mar-73	7.82	6.00	3.18	2.05	2.15	0.64	0.16	0.29	22.28
Jun-73	7.64	6.08	3.12	2.08	2.17	0.64	0.16	0.29	22.18
Sep-73	7.92	6.24	3.29	2.16	2.24	0.66	0.17	0.30	22.98
Dec-73	8.00	6.23	3.36	2.12	2.29	0.67	0.16	0.31	23.14
Mar-74	7.76	6.27	3.10	2.13	2.26	0.66	0.17	0.31	22.67
Jun-74	8.39	6.47	3.50	2.25	2.34	0.68	0.16	0.34	24.13
Sep-74	8.03	6.53	3.44	2.24	2.37	0.68	0.17	0.33	23.79
Dec-74	8.54	6.54	3.52	2.36	2.36	0.70	0.18	0.35	24.54
Mar-75	8.28	6.61	3.57	2.27	2.43	0.68	0.17	0.34	24.36

(Continued)

Table A3 Vehicle kilometres travelled (billion), Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Jun-75	8.25	6.66	3.54	2.19	2.46	0.69	0.15	0.35	24.29
Sep-75	8.81	6.99	3.82	2.40	2.56	0.72	0.18	0.37	25.85
Dec-75	8.00	6.53	3.56	2.27	2.40	0.67	0.18	0.34	23.95
Mar-76	8.43	6.92	3.69	2.37	2.56	0.72	0.19	0.36	25.24
Jun-76	8.67	6.97	3.78	2.40	2.58	0.71	0.21	0.38	25.70
Sep-76	9.02	7.23	3.97	2.45	2.62	0.74	0.21	0.39	26.63
Dec-76	8.33	7.29	3.96	2.50	2.74	0.74	0.20	0.37	26.12
Mar-77	9.10	7.23	3.90	2.48	2.69	0.73	0.20	0.40	26.74
Jun-77	9.13	7.29	4.08	2.64	2.94	0.76	0.23	0.40	27.47
Sep-77	8.62	7.12	3.81	2.37	2.49	0.70	0.20	0.38	25.70
Dec-77	9.43	7.41	4.16	2.56	2.93	0.77	0.22	0.42	27.90
Mar-78	9.27	7.65	4.30	2.62	2.98	0.79	0.23	0.41	28.26
Jun-78	9.48	7.66	4.30	2.63	2.97	0.78	0.23	0.42	28.48
Sep-78	9.55	8.08	4.45	2.78	3.16	0.82	0.23	0.43	29.49
Dec-78	9.41	7.38	4.26	2.45	2.84	0.76	0.23	0.42	27.74
Mar-79	9.73	7.70	4.43	2.65	2.95	0.79	0.24	0.43	28.93
Jun-79	9.50	7.85	4.54	2.60	3.00	0.81	0.24	0.42	28.96
Sep-79	9.74	7.69	4.47	2.57	2.94	0.77	0.24	0.43	28.86
Dec-79	9.79	7.65	4.52	2.56	2.99	0.78	0.25	0.43	28.99
Mar-80	9.74	7.76	4.61	2.58	3.04	0.80	0.25	0.43	29.21
Jun-80	9.60	7.66	4.55	2.56	2.96	0.80	0.24	0.43	28.79
Sep-80	9.83	7.66	4.57	2.53	2.98	0.79	0.26	0.43	29.06
Dec-80	10.09	7.85	4.81	2.59	3.09	0.82	0.26	0.45	29.96
Mar-81	9.90	7.84	4.79	2.56	3.01	0.79	0.26	0.44	29.58
Jun-81	10.13	7.87	4.86	2.56	3.07	0.79	0.27	0.45	30.00
Sep-81	10.40	8.19	5.11	2.62	3.12	0.84	0.27	0.46	31.00
Dec-81	10.14	8.18	5.11	2.63	3.17	0.83	0.28	0.45	30.79
Mar-82	10.22	8.20	5.08	2.67	3.16	0.81	0.27	0.46	30.87
Jun-82	10.82	8.33	5.32	2.73	3.26	0.83	0.27	0.48	32.03
Sep-82	9.70	8.36	5.32	2.69	3.25	0.84	0.28	0.44	30.89
Dec-82	10.59	8.27	5.34	2.68	3.21	0.81	0.28	0.48	31.67
Mar-83	10.22	8.09	5.14	2.61	3.13	0.83	0.28	0.47	30.77
Jun-83	10.37	8.42	5.04	2.72	3.19	0.83	0.29	0.48	31.34
Sep-83	10.66	8.53	5.27	2.78	3.26	0.85	0.29	0.49	32.13
Dec-83	10.84	8.40	5.30	2.75	3.27	0.86	0.29	0.50	32.21
Mar-84	10.99	8.89	5.55	2.87	3.41	0.90	0.30	0.51	33.42
Jun-84	10.86	8.72	5.64	2.84	3.41	0.89	0.31	0.50	33.19
Sep-84	10.74	8.79	5.52	2.85	3.45	0.89	0.30	0.50	33.04
Dec-84	11.23	8.99	5.71	2.95	3.50	0.93	0.32	0.52	34.14
Mar-85	11.43	9.20	5.80	2.98	3.49	0.92	0.33	0.53	34.68
Jun-85	11.48	9.22	5.83	3.00	3.50	0.94	0.32	0.54	34.85

(Continued)

Table A3 Vehicle kilometres travelled (billion), Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Sep-85	11.32	9.15	5.70	2.97	3.45	0.93	0.32	0.54	34.39
Dec-85	11.52	9.37	5.95	3.02	3.61	0.95	0.34	0.55	35.30
Mar-86	11.35	9.21	5.77	3.00	3.51	0.92	0.33	0.55	34.65
Jun-86	11.73	9.57	6.08	3.12	3.70	0.98	0.35	0.57	36.10
Sep-86	11.71	9.58	6.15	3.11	3.67	0.97	0.36	0.57	36.13
Dec-86	11.56	9.69	6.00	3.08	3.68	0.95	0.35	0.56	35.87
Mar-87	11.51	9.54	5.99	3.07	3.63	0.94	0.33	0.56	35.57
Jun-87	11.67	9.73	6.05	3.10	3.68	0.95	0.34	0.57	36.10
Sep-87	11.89	10.11	6.20	3.24	3.78	0.98	0.34	0.59	37.13
Dec-87	12.07	10.17	6.34	3.19	3.87	1.00	0.34	0.60	37.58
Mar-88	12.50	10.31	6.53	3.23	3.86	1.00	0.36	0.62	38.42
Jun-88	11.76	10.25	6.54	3.19	3.88	0.97	0.35	0.59	37.53
Sep-88	12.31	10.41	6.77	3.29	3.97	1.01	0.35	0.62	38.73
Dec-88	12.47	10.56	6.72	3.29	3.95	1.02	0.35	0.63	38.99
Mar-89	12.49	10.89	6.99	3.35	4.12	1.04	0.35	0.64	39.86
Jun-89	12.59	10.99	6.78	3.37	4.16	1.06	0.37	0.65	39.97
Sep-89	12.63	10.99	6.97	3.34	4.07	1.03	0.35	0.65	40.05
Dec-89	12.46	10.95	7.12	3.40	4.13	1.06	0.37	0.65	40.12
Mar-90	12.79	11.10	7.11	3.40	4.23	1.09	0.38	0.67	40.75
Jun-90	12.72	10.98	7.03	3.39	4.21	1.08	0.36	0.67	40.44
Sep-90	12.87	11.24	7.36	3.50	4.38	1.12	0.39	0.68	41.55
Dec-90	12.15	10.52	6.71	3.15	3.95	1.03	0.35	0.65	38.50
Mar-91	12.55	10.72	7.03	3.32	4.07	1.05	0.33	0.67	39.74
Jun-91	12.60	10.84	7.25	3.27	4.06	1.07	0.36	0.68	40.14
Sep-91	12.56	10.78	7.19	3.29	4.12	1.08	0.36	0.68	40.05
Dec-91	12.82	11.11	7.44	3.38	4.22	1.08	0.36	0.69	41.10
Mar-92	12.69	11.00	7.45	3.35	4.16	1.07	0.39	0.69	40.80
Jun-92	12.78	11.08	7.59	3.42	4.19	1.08	0.35	0.70	41.19
Sep-92	12.80	11.10	7.64	3.42	4.28	1.11	0.37	0.70	41.41
Dec-92	13.08	11.06	7.78	3.38	4.36	1.13	0.37	0.72	41.87
Mar-93	13.00	11.24	7.80	3.43	4.30	1.11	0.35	0.71	41.95
Jun-93	13.24	11.77	7.96	3.43	4.39	1.16	0.40	0.73	43.08
Sep-93	13.19	11.05	8.05	3.47	4.46	1.13	0.38	0.73	42.45
Dec-93	13.41	11.52	8.14	3.44	4.46	1.14	0.38	0.74	43.23
Mar-94	13.45	11.70	8.19	3.48	4.55	1.16	0.38	0.74	43.65
Jun-94	13.41	11.58	8.26	3.39	4.60	1.15	0.40	0.74	43.53
Sep-94	13.82	11.81	8.45	3.51	4.66	1.19	0.40	0.76	44.60
Dec-94	13.77	11.81	8.47	3.47	4.75	1.17	0.40	0.76	44.59
Mar-95	13.76	11.78	8.63	3.46	4.83	1.17	0.41	0.76	44.79
Jun-95	13.74	11.84	8.63	3.48	4.82	1.19	0.40	0.76	44.86
Sep-95	13.88	12.02	8.76	3.46	4.89	1.18	0.42	0.77	45.38

(Continued)

Table A3 Vehicle kilometres travelled (billion), Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Dec-95	13.76	11.88	8.76	3.52	4.85	1.19	0.45	0.76	45.17
Mar-96	14.08	12.29	8.99	3.53	4.99	1.22	0.43	0.78	46.31
Jun-96	13.95	12.19	8.97	3.53	4.98	1.20	0.42	0.77	46.02
Sep-96	14.01	12.08	8.93	3.53	5.00	1.20	0.40	0.77	45.93
Dec-96	14.12	12.25	9.12	3.51	4.99	1.20	0.42	0.78	46.40
Mar-97	13.81	12.32	8.93	3.54	4.94	1.17	0.44	0.76	45.93
Jun-97	13.99	12.53	9.23	3.56	5.06	1.23	0.46	0.77	46.82
Sep-97	14.00	12.57	9.23	3.59	5.04	1.20	0.45	0.77	46.84
Dec-97	13.98	12.49	9.25	3.63	5.13	1.20	0.45	0.77	46.87
Mar-98	14.39	12.35	9.18	3.59	5.07	1.19	0.45	0.79	47.01
Jun-98	14.37	12.50	9.16	3.64	5.10	1.19	0.43	0.79	47.18
Sep-98	14.40	12.65	9.22	3.67	5.20	1.19	0.45	0.79	47.56
Dec-98	14.62	12.79	9.49	3.69	5.18	1.20	0.45	0.80	48.21
Mar-99	14.53	12.80	9.62	3.69	5.23	1.18	0.45	0.79	48.29
Jun-99	14.44	12.88	9.42	3.71	5.22	1.19	0.44	0.79	48.09
Sep-99	14.67	13.08	9.71	3.77	5.06	1.20	0.45	0.80	48.74
Dec-99	14.79	13.01	9.95	3.81	5.38	1.20	0.46	0.81	49.40
Mar-00	14.73	12.91	9.56	3.70	5.24	1.18	0.44	0.80	48.58
Jun-00	14.95	12.68	9.97	3.80	5.35	1.19	0.45	0.82	49.21
Sep-00	14.65	12.61	9.68	3.72	5.17	1.15	0.43	0.80	48.22
Dec-00	14.41	12.53	9.38	3.74	5.18	1.15	0.43	0.78	47.60
Mar-01	14.88	13.00	9.94	3.84	5.34	1.18	0.44	0.80	49.42
Jun-01	14.90	12.93	10.11	3.69	5.27	1.18	0.42	0.81	49.30
Sep-01	14.79	12.88	9.91	3.65	5.33	1.18	0.43	0.80	48.96
Dec-01	15.24	13.07	10.02	3.71	5.35	1.20	0.43	0.83	49.84
Mar-02	14.98	13.26	10.30	3.88	5.42	1.18	0.46	0.81	50.29
Jun-02	15.23	13.75	10.46	3.94	5.47	1.24	0.47	0.83	51.39
Sep-02	15.34	13.48	10.45	3.97	5.46	1.23	0.46	0.84	51.25
Dec-02	15.15	13.53	10.31	3.85	5.42	1.23	0.45	0.83	50.78
Mar-03	15.29	13.61	10.43	3.93	5.52	1.25	0.45	0.84	51.33
Jun-03	14.94	13.77	10.69	3.97	5.66	1.25	0.45	0.83	51.56
Sep-03	16.27	14.01	11.53	4.01	5.76	1.29	0.47	0.90	54.26
Dec-03	15.70	14.42	11.49	4.11	5.74	1.34	0.47	0.87	54.13
Mar-04	15.82	14.30	10.86	3.96	5.55	1.30	0.42	0.88	53.09
Jun-04	15.72	14.23	10.85	3.76	5.45	1.28	0.49	0.87	52.65
Sep-04	15.95	14.53	11.26	3.94	5.83	1.31	0.46	0.88	54.15
Dec-04	15.97	14.68	11.33	3.95	5.77	1.28	0.47	0.89	54.34
Mar-05	15.49	14.21	11.32	3.84	5.73	1.26	0.49	0.86	53.19
Jun-05	15.88	14.55	11.37	3.89	5.82	1.31	0.49	0.88	54.19
Sep-05	15.66	14.38	11.19	3.83	5.74	1.27	0.47	0.86	53.40
Dec-05	15.73	14.23	11.34	3.84	5.71	1.29	0.46	0.87	53.45

(Continued)

Table A3 Vehicle kilometres travelled (billion), Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Mar-06	15.97	14.53	11.72	3.87	6.01	1.32	0.46	0.89	54.78
Jun-06	15.74	14.37	11.44	3.89	5.88	1.28	0.45	0.87	53.93
Sep-06	15.71	14.46	11.57	3.96	5.99	1.33	0.49	0.88	54.38
Dec-06	15.86	14.30	11.67	3.86	6.11	1.29	0.49	0.88	54.46
Mar-07	16.28	14.45	12.01	3.90	6.07	1.34	0.48	0.90	55.43
Jun-07	16.11	14.29	11.97	3.92	6.01	1.33	0.50	0.90	55.03
Sep-07	16.25	14.56	11.98	3.87	6.07	1.34	0.50	0.90	55.47
Dec-07	16.02	14.57	12.06	3.87	6.05	1.32	0.51	0.89	55.29
Mar-08	15.93	14.55	12.10	3.93	6.10	1.33	0.53	0.89	55.37
Jun-08	15.98	14.44	12.11	3.94	6.22	1.35	0.50	0.89	55.44
Sep-08	15.89	14.01	11.85	3.91	6.29	1.32	0.51	0.89	54.67
Dec-08	16.05	13.97	11.84	3.93	6.24	1.36	0.54	0.90	54.84
Mar-09	15.94	13.99	11.83	3.93	6.47	1.35	0.49	0.90	54.92
Jun-09	15.95	14.06	11.89	3.93	6.28	1.33	0.52	0.90	54.85
Sep-09	16.30	14.23	11.99	4.02	6.25	1.35	0.51	0.91	55.56
Dec-09	16.28	14.26	11.81	4.02	6.23	1.38	0.51	0.91	55.40
Mar-10	16.25	14.16	11.56	3.95	6.30	1.32	0.52	0.90	54.96
Jun-10	16.23	14.31	11.72	3.89	6.33	1.28	0.54	0.90	55.20
Sep-10	16.17	14.35	11.85	4.02	6.31	1.32	0.51	0.90	55.43
Dec-10	16.51	14.56	11.56	3.97	6.45	1.31	0.48	0.94	55.76
Mar-11	16.27	14.40	11.55	4.01	6.37	1.28	0.47	0.92	55.28
Jun-11	16.37	14.22	11.66	3.95	6.41	1.26	0.51	0.93	55.31
Sep-11	16.36	14.31	11.78	3.94	6.41	1.26	0.51	0.92	55.49
Dec-11	16.41	14.41	11.87	3.95	6.44	1.27	0.52	0.92	55.78
Mar-12	16.45	14.51	11.96	3.96	6.48	1.27	0.52	0.92	56.08
Jun-12	16.50	14.61	12.05	3.97	6.51	1.28	0.52	0.93	56.38
Sep-12	16.55	14.72	12.14	3.98	6.55	1.28	0.52	0.93	56.67
Dec-12	16.60	14.82	12.24	3.99	6.58	1.28	0.53	0.94	56.96
Mar-13	16.65	14.92	12.33	3.99	6.61	1.29	0.53	0.94	57.26
Jun-13	16.69	15.03	12.42	4.00	6.65	1.29	0.53	0.94	57.55
Sep-13	16.74	15.13	12.51	4.01	6.68	1.30	0.53	0.95	57.85
Dec-13	16.79	15.23	12.60	4.02	6.71	1.30	0.54	0.95	58.14
Mar-14	16.84	15.33	12.69	4.02	6.75	1.30	0.54	0.95	58.43
Jun-14	16.88	15.44	12.78	4.03	6.78	1.31	0.54	0.96	58.71
Sep-14	16.93	15.54	12.86	4.04	6.81	1.31	0.54	0.96	59.00
Dec-14	16.98	15.64	12.95	4.05	6.84	1.32	0.55	0.96	59.28
Mar-15	17.03	15.75	13.04	4.05	6.87	1.32	0.55	0.97	59.57
Jun-15	17.08	15.85	13.13	4.06	6.91	1.32	0.55	0.97	59.86
Sep-15	17.12	15.95	13.22	4.07	6.94	1.33	0.55	0.97	60.15
Dec-15	17.17	16.06	13.30	4.07	6.97	1.33	0.56	0.98	60.43
Mar-16	17.22	16.16	13.39	4.08	7.00	1.33	0.56	0.98	60.72

(Continued)

Table A3 Vehicle kilometres travelled (billion), Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Jun-16	17.26	16.27	13.48	4.09	7.03	1.34	0.56	0.98	61.00
Sep-16	17.31	16.37	13.57	4.09	7.06	1.34	0.56	0.99	61.29
Dec-16	17.36	16.48	13.66	4.10	7.09	1.34	0.57	0.99	61.58
Mar-17	17.40	16.58	13.75	4.11	7.12	1.35	0.57	0.99	61.87
Jun-17	17.45	16.69	13.84	4.11	7.16	1.35	0.57	0.99	62.16
Sep-17	17.50	16.80	13.93	4.12	7.19	1.35	0.57	1.00	62.45
Dec-17	17.54	16.90	14.02	4.12	7.22	1.36	0.57	1.00	62.73
Mar-18	17.59	17.01	14.11	4.13	7.25	1.36	0.58	1.00	63.02
Jun-18	17.63	17.12	14.20	4.14	7.28	1.36	0.58	1.01	63.31
Sep-18	17.68	17.22	14.29	4.14	7.31	1.37	0.58	1.01	63.60
Dec-18	17.72	17.33	14.38	4.15	7.34	1.37	0.58	1.01	63.89
Mar-19	17.77	17.44	14.47	4.15	7.37	1.37	0.59	1.01	64.18
Jun-19	17.82	17.55	14.56	4.16	7.40	1.38	0.59	1.02	64.47
Sep-19	17.86	17.66	14.65	4.17	7.43	1.38	0.59	1.02	64.77
Dec-19	17.91	17.77	14.75	4.17	7.47	1.38	0.59	1.02	65.06
Mar-20	17.96	17.88	14.84	4.18	7.50	1.38	0.60	1.03	65.36
Jun-20	18.00	17.99	14.93	4.19	7.53	1.39	0.60	1.03	65.65

Table A4 Vehicle kilometres travelled (billion), Australian capital cities

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Mar-65	2.49	2.14	0.72	0.84	0.63	0.13	0.02	0.12	7.08
Jun-65	2.55	2.20	0.73	0.88	0.66	0.13	0.02	0.12	7.29
Sep-65	2.62	2.25	0.75	0.91	0.70	0.13	0.02	0.13	7.50
Dec-65	2.59	2.22	0.74	0.86	0.67	0.13	0.02	0.13	7.35
Mar-66	2.59	2.25	0.75	0.88	0.70	0.13	0.02	0.13	7.46
Jun-66	2.63	2.29	0.78	0.89	0.73	0.14	0.02	0.13	7.62
Sep-66	2.67	2.30	0.76	0.88	0.72	0.13	0.02	0.13	7.61
Dec-66	2.76	2.38	0.82	0.94	0.77	0.15	0.02	0.14	7.97
Mar-67	2.84	2.45	0.84	0.94	0.78	0.15	0.02	0.15	8.16
Jun-67	2.79	2.39	0.81	0.94	0.79	0.15	0.02	0.15	8.04
Sep-67	2.91	2.51	0.85	0.96	0.81	0.15	0.02	0.15	8.37
Dec-67	2.88	2.48	0.85	0.94	0.83	0.15	0.03	0.15	8.31
Mar-68	2.97	2.53	0.87	0.98	0.87	0.15	0.02	0.16	8.56
Jun-68	3.02	2.56	0.88	0.97	0.86	0.16	0.03	0.17	8.64
Sep-68	3.09	2.66	0.90	0.99	0.89	0.16	0.03	0.17	8.90
Dec-68	3.20	2.73	0.94	1.03	0.94	0.16	0.03	0.18	9.21
Mar-69	3.21	2.71	0.94	1.03	0.95	0.16	0.03	0.18	9.22
Jun-69	3.29	2.80	0.97	1.06	0.99	0.17	0.04	0.19	9.51
Sep-69	3.34	2.81	0.98	1.05	1.01	0.17	0.04	0.19	9.59
Dec-69	3.46	2.92	1.02	1.10	1.04	0.17	0.04	0.20	9.96
Mar-70	3.50	2.94	1.03	1.09	1.04	0.17	0.05	0.21	10.04
Jun-70	3.58	3.03	1.05	1.13	1.10	0.17	0.05	0.22	10.32
Sep-70	3.62	2.99	1.05	1.12	1.10	0.18	0.05	0.22	10.33
Dec-70	3.57	3.04	1.03	1.11	1.10	0.18	0.05	0.22	10.30
Mar-71	3.66	3.08	1.05	1.13	1.12	0.18	0.05	0.23	10.50
Jun-71	3.74	3.11	1.12	1.15	1.16	0.18	0.06	0.24	10.75
Sep-71	3.87	3.23	1.14	1.20	1.20	0.19	0.06	0.25	11.12
Dec-71	3.86	3.21	1.14	1.19	1.20	0.18	0.06	0.25	11.10
Mar-72	3.97	3.32	1.18	1.22	1.23	0.19	0.06	0.26	11.42
Jun-72	3.95	3.33	1.20	1.22	1.22	0.19	0.07	0.26	11.45
Sep-72	3.75	3.26	1.16	1.12	1.22	0.19	0.06	0.25	11.01
Dec-72	4.09	3.42	1.25	1.27	1.27	0.19	0.06	0.28	11.83
Mar-73	4.17	3.45	1.30	1.28	1.31	0.20	0.06	0.29	12.06
Jun-73	4.08	3.49	1.28	1.30	1.32	0.20	0.07	0.29	12.03
Sep-73	4.23	3.59	1.35	1.35	1.37	0.21	0.07	0.30	12.46
Dec-73	4.27	3.59	1.38	1.33	1.40	0.21	0.07	0.31	12.55
Mar-74	4.15	3.61	1.27	1.34	1.38	0.21	0.07	0.31	12.34
Jun-74	4.48	3.72	1.43	1.42	1.44	0.22	0.07	0.34	13.11
Sep-74	4.29	3.76	1.41	1.42	1.46	0.22	0.07	0.33	12.95
Dec-74	4.56	3.79	1.44	1.49	1.45	0.22	0.07	0.35	13.38
Mar-75	4.43	3.84	1.46	1.44	1.50	0.22	0.07	0.34	13.29

(Continued)

Table A4 Vehicle kilometres travelled (billion), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Jun-75	4.42	3.88	1.44	1.39	1.51	0.22	0.06	0.35	13.27
Sep-75	4.72	4.08	1.56	1.52	1.58	0.24	0.07	0.37	14.14
Dec-75	4.28	3.83	1.46	1.44	1.48	0.22	0.07	0.34	13.13
Mar-76	4.52	4.07	1.51	1.51	1.58	0.24	0.08	0.36	13.87
Jun-76	4.65	4.11	1.55	1.53	1.59	0.24	0.08	0.38	14.13
Sep-76	4.84	4.27	1.63	1.56	1.62	0.25	0.09	0.39	14.64
Dec-76	4.46	4.32	1.63	1.59	1.69	0.25	0.08	0.37	14.39
Mar-77	4.88	4.29	1.60	1.58	1.66	0.25	0.08	0.40	14.74
Jun-77	4.89	4.34	1.68	1.68	1.81	0.26	0.09	0.40	15.15
Sep-77	4.62	4.25	1.56	1.50	1.54	0.24	0.08	0.38	14.18
Dec-77	5.05	4.43	1.71	1.63	1.80	0.27	0.09	0.42	15.40
Mar-78	4.96	4.59	1.77	1.67	1.83	0.27	0.09	0.41	15.60
Jun-78	5.08	4.61	1.77	1.67	1.83	0.27	0.09	0.42	15.74
Sep-78	5.11	4.87	1.83	1.76	1.94	0.29	0.09	0.43	16.32
Dec-78	5.03	4.45	1.75	1.55	1.75	0.27	0.09	0.42	15.32
Mar-79	5.20	4.66	1.82	1.68	1.81	0.28	0.10	0.43	15.98
Jun-79	5.07	4.75	1.87	1.64	1.84	0.29	0.10	0.42	15.99
Sep-79	5.20	4.67	1.84	1.62	1.81	0.28	0.10	0.43	15.94
Dec-79	5.22	4.65	1.85	1.61	1.84	0.28	0.10	0.43	15.99
Mar-80	5.19	4.72	1.89	1.62	1.87	0.29	0.10	0.43	16.11
Jun-80	5.12	4.67	1.86	1.60	1.82	0.29	0.10	0.43	15.87
Sep-80	5.23	4.68	1.86	1.58	1.84	0.28	0.10	0.43	16.01
Dec-80	5.36	4.80	1.95	1.62	1.90	0.30	0.10	0.45	16.48
Mar-81	5.26	4.80	1.94	1.59	1.86	0.29	0.11	0.44	16.27
Jun-81	5.37	4.82	1.96	1.60	1.89	0.29	0.11	0.45	16.49
Sep-81	5.51	5.02	2.06	1.63	1.93	0.31	0.11	0.46	17.03
Dec-81	5.38	5.03	2.06	1.64	1.96	0.30	0.11	0.45	16.93
Mar-82	5.42	5.05	2.05	1.66	1.96	0.30	0.11	0.46	16.99
Jun-82	5.74	5.13	2.14	1.69	2.01	0.31	0.11	0.48	17.63
Sep-82	5.15	5.15	2.15	1.67	2.01	0.31	0.12	0.44	17.00
Dec-82	5.63	5.09	2.16	1.67	1.99	0.30	0.12	0.48	17.44
Mar-83	5.44	4.98	2.08	1.62	1.95	0.31	0.12	0.47	16.96
Jun-83	5.53	5.18	2.04	1.69	1.99	0.31	0.12	0.48	17.34
Sep-83	5.68	5.25	2.14	1.73	2.03	0.31	0.12	0.49	17.76
Dec-83	5.79	5.16	2.15	1.72	2.04	0.32	0.12	0.50	17.79
Mar-84	5.87	5.46	2.25	1.79	2.13	0.33	0.13	0.51	18.47
Jun-84	5.80	5.34	2.30	1.77	2.13	0.33	0.13	0.50	18.32
Sep-84	5.74	5.38	2.25	1.78	2.16	0.33	0.13	0.50	18.27
Dec-84	6.01	5.50	2.33	1.84	2.19	0.34	0.13	0.52	18.87
Mar-85	6.12	5.62	2.37	1.86	2.19	0.34	0.14	0.53	19.18
Jun-85	6.16	5.63	2.38	1.87	2.20	0.35	0.14	0.54	19.27

(Continued)

Table A4 Vehicle kilometres travelled (billion), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Sep-85	6.08	5.60	2.34	1.86	2.17	0.34	0.14	0.54	19.07
Dec-85	6.20	5.75	2.45	1.89	2.27	0.36	0.15	0.55	19.61
Mar-86	6.12	5.66	2.39	1.87	2.21	0.35	0.15	0.55	19.29
Jun-86	6.33	5.90	2.53	1.95	2.33	0.37	0.16	0.57	20.13
Sep-86	6.33	5.91	2.56	1.95	2.31	0.37	0.16	0.57	20.16
Dec-86	6.26	5.99	2.50	1.93	2.32	0.36	0.16	0.56	20.07
Mar-87	6.25	5.90	2.50	1.92	2.29	0.35	0.15	0.56	19.93
Jun-87	6.34	6.03	2.53	1.94	2.32	0.36	0.15	0.57	20.26
Sep-87	6.47	6.27	2.60	2.03	2.39	0.37	0.15	0.59	20.86
Dec-87	6.57	6.31	2.65	2.00	2.45	0.37	0.16	0.60	21.11
Mar-88	6.82	6.40	2.74	2.02	2.44	0.38	0.16	0.62	21.58
Jun-88	6.42	6.36	2.74	2.00	2.45	0.36	0.16	0.59	21.09
Sep-88	6.72	6.46	2.84	2.06	2.51	0.38	0.16	0.62	21.75
Dec-88	6.80	6.56	2.82	2.07	2.50	0.38	0.16	0.63	21.92
Mar-89	6.81	6.77	2.93	2.10	2.61	0.39	0.16	0.64	22.41
Jun-89	6.87	6.83	2.84	2.12	2.64	0.40	0.17	0.65	22.51
Sep-89	6.89	6.83	2.92	2.10	2.59	0.39	0.16	0.65	22.53
Dec-89	6.79	6.81	2.98	2.14	2.62	0.39	0.16	0.65	22.54
Mar-90	6.97	6.90	2.97	2.14	2.69	0.41	0.17	0.67	22.91
Jun-90	6.93	6.83	2.93	2.13	2.68	0.40	0.16	0.67	22.74
Sep-90	7.01	6.99	3.07	2.21	2.79	0.42	0.18	0.68	23.34
Dec-90	6.62	6.55	2.80	1.99	2.51	0.38	0.16	0.65	21.65
Mar-91	6.84	6.67	2.93	2.10	2.58	0.39	0.15	0.67	22.34
Jun-91	6.87	6.75	3.03	2.07	2.57	0.40	0.16	0.68	22.53
Sep-91	6.85	6.72	3.00	2.08	2.61	0.40	0.16	0.68	22.50
Dec-91	6.99	6.93	3.10	2.14	2.68	0.40	0.16	0.69	23.09
Mar-92	6.92	6.86	3.10	2.12	2.64	0.40	0.18	0.69	22.91
Jun-92	6.97	6.91	3.16	2.16	2.66	0.41	0.16	0.70	23.13
Sep-92	6.98	6.93	3.18	2.17	2.72	0.42	0.17	0.70	23.26
Dec-92	7.13	6.91	3.23	2.14	2.78	0.43	0.17	0.72	23.50
Mar-93	7.09	7.03	3.24	2.17	2.74	0.42	0.16	0.71	23.57
Jun-93	7.22	7.36	3.30	2.17	2.81	0.44	0.18	0.73	24.21
Sep-93	7.19	6.92	3.34	2.20	2.86	0.43	0.18	0.73	23.83
Dec-93	7.31	7.21	3.38	2.17	2.87	0.43	0.18	0.74	24.29
Mar-94	7.34	7.33	3.40	2.20	2.93	0.44	0.17	0.74	24.55
Jun-94	7.31	7.26	3.43	2.14	2.97	0.44	0.18	0.74	24.48
Sep-94	7.54	7.41	3.51	2.22	3.01	0.45	0.18	0.76	25.08
Dec-94	7.51	7.42	3.51	2.19	3.07	0.44	0.18	0.76	25.09
Mar-95	7.51	7.41	3.58	2.19	3.13	0.45	0.19	0.76	25.20
Jun-95	7.50	7.45	3.58	2.20	3.13	0.45	0.19	0.76	25.26
Sep-95	7.58	7.56	3.64	2.19	3.18	0.45	0.20	0.77	25.55

(Continued)

Table A4 Vehicle kilometres travelled (billion), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Dec-95	7.53	7.46	3.64	2.22	3.15	0.45	0.21	0.76	25.42
Mar-96	7.70	7.71	3.74	2.23	3.25	0.46	0.20	0.78	26.07
Jun-96	7.64	7.63	3.73	2.23	3.25	0.45	0.20	0.77	25.90
Sep-96	7.68	7.55	3.72	2.22	3.26	0.45	0.19	0.77	25.84
Dec-96	7.74	7.64	3.80	2.21	3.25	0.46	0.20	0.78	26.08
Mar-97	7.58	7.67	3.72	2.23	3.22	0.44	0.21	0.76	25.84
Jun-97	7.67	7.79	3.85	2.24	3.30	0.47	0.22	0.77	26.30
Sep-97	7.68	7.83	3.85	2.26	3.28	0.45	0.21	0.77	26.34
Dec-97	7.67	7.80	3.86	2.28	3.33	0.45	0.21	0.77	26.38
Mar-98	7.90	7.73	3.84	2.26	3.30	0.45	0.21	0.79	26.48
Jun-98	7.89	7.85	3.84	2.29	3.31	0.45	0.21	0.79	26.61
Sep-98	7.91	7.94	3.86	2.31	3.38	0.45	0.21	0.79	26.84
Dec-98	8.03	8.02	3.97	2.33	3.37	0.45	0.21	0.80	27.18
Mar-99	7.99	8.03	4.02	2.33	3.40	0.44	0.21	0.79	27.22
Jun-99	7.94	8.08	3.94	2.35	3.39	0.44	0.21	0.79	27.14
Sep-99	8.07	8.22	4.06	2.38	3.28	0.45	0.22	0.80	27.49
Dec-99	8.13	8.19	4.16	2.42	3.49	0.45	0.22	0.81	27.87
Mar-00	8.11	8.15	4.00	2.34	3.40	0.44	0.21	0.80	27.46
Jun-00	8.23	8.02	4.17	2.41	3.47	0.45	0.22	0.82	27.78
Sep-00	8.07	8.01	4.05	2.37	3.36	0.43	0.21	0.80	27.28
Dec-00	7.94	7.99	3.92	2.38	3.36	0.43	0.21	0.78	27.01
Mar-01	8.19	8.32	4.16	2.45	3.46	0.44	0.21	0.80	28.04
Jun-01	8.21	8.31	4.23	2.35	3.42	0.44	0.20	0.81	27.97
Sep-01	8.15	8.25	4.14	2.33	3.46	0.44	0.21	0.80	27.78
Dec-01	8.40	8.34	4.19	2.37	3.47	0.45	0.21	0.83	28.25
Mar-02	8.26	8.44	4.31	2.48	3.51	0.44	0.22	0.81	28.47
Jun-02	8.40	8.72	4.37	2.52	3.55	0.46	0.23	0.83	29.08
Sep-02	8.46	8.53	4.37	2.54	3.55	0.46	0.22	0.84	28.97
Dec-02	8.36	8.54	4.31	2.47	3.52	0.46	0.22	0.83	28.70
Mar-03	8.44	8.56	4.36	2.52	3.59	0.47	0.22	0.84	28.99
Jun-03	8.24	8.63	4.46	2.54	3.68	0.47	0.22	0.83	29.08
Sep-03	8.98	8.78	4.82	2.58	3.75	0.48	0.22	0.90	30.51
Dec-03	8.67	9.02	4.80	2.64	3.74	0.50	0.22	0.87	30.45
Mar-04	8.74	8.93	4.54	2.55	3.62	0.48	0.20	0.88	29.94
Jun-04	8.69	8.88	4.54	2.42	3.55	0.48	0.24	0.87	29.65
Sep-04	8.82	9.07	4.70	2.53	3.80	0.49	0.22	0.88	30.51
Dec-04	8.83	9.19	4.73	2.54	3.76	0.48	0.22	0.89	30.63
Mar-05	8.56	8.90	4.72	2.47	3.74	0.47	0.23	0.86	29.95
Jun-05	8.78	9.13	4.74	2.50	3.80	0.49	0.23	0.88	30.54
Sep-05	8.65	9.03	4.66	2.47	3.74	0.47	0.22	0.86	30.10
Dec-05	8.69	8.93	4.71	2.47	3.72	0.48	0.22	0.87	30.10

(Continued)

Table A4 Vehicle kilometres travelled (billion), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Mar-06	8.82	9.13	4.87	2.49	3.91	0.49	0.22	0.89	30.83
Jun-06	8.69	9.03	4.74	2.51	3.83	0.48	0.22	0.87	30.37
Sep-06	8.68	9.09	4.79	2.55	3.90	0.49	0.24	0.88	30.62
Dec-06	8.76	9.00	4.83	2.49	3.97	0.48	0.24	0.88	30.66
Mar-07	9.00	9.10	4.97	2.52	3.94	0.50	0.23	0.90	31.17
Jun-07	8.90	9.01	4.95	2.53	3.91	0.49	0.24	0.90	30.94
Sep-07	8.98	9.17	4.95	2.50	3.94	0.50	0.24	0.90	31.20
Dec-07	8.85	9.18	4.99	2.50	3.93	0.49	0.25	0.89	31.08
Mar-08	8.80	9.17	5.01	2.54	3.96	0.50	0.26	0.89	31.12
Jun-08	8.83	9.10	5.01	2.54	4.04	0.50	0.25	0.89	31.16
Sep-08	8.78	8.83	4.90	2.52	4.09	0.49	0.25	0.89	30.75
Dec-08	8.87	8.80	4.89	2.53	4.05	0.50	0.26	0.90	30.83
Mar-09	8.81	8.81	4.89	2.54	4.21	0.50	0.24	0.90	30.90
Jun-09	8.81	8.85	4.91	2.53	4.08	0.49	0.25	0.90	30.83
Sep-09	9.01	8.96	4.95	2.59	4.06	0.50	0.25	0.91	31.24
Dec-09	9.00	8.98	4.88	2.60	4.05	0.51	0.25	0.91	31.18
Mar-10	8.98	8.92	4.78	2.55	4.10	0.49	0.25	0.90	30.97
Jun-10	8.97	9.01	4.85	2.51	4.12	0.47	0.27	0.90	31.10
Sep-10	8.94	9.04	4.90	2.59	4.10	0.49	0.25	0.90	31.21
Dec-10	9.12	9.16	4.78	2.56	4.20	0.48	0.24	0.94	31.48
Mar-11	8.99	9.07	4.77	2.59	4.15	0.48	0.23	0.92	31.20
Jun-11	9.05	8.95	4.82	2.55	4.17	0.47	0.25	0.93	31.19
Sep-11	9.05	8.96	4.88	2.56	4.18	0.47	0.25	0.92	31.26
Dec-11	9.07	9.00	4.91	2.56	4.20	0.48	0.25	0.92	31.40
Mar-12	9.09	9.05	4.95	2.57	4.22	0.48	0.26	0.92	31.54
Jun-12	9.12	9.09	4.99	2.57	4.24	0.48	0.26	0.93	31.68
Sep-12	9.14	9.13	5.03	2.58	4.26	0.48	0.26	0.93	31.81
Dec-12	9.16	9.17	5.07	2.58	4.29	0.48	0.26	0.94	31.95
Mar-13	9.19	9.21	5.11	2.58	4.31	0.48	0.26	0.94	32.08
Jun-13	9.21	9.25	5.15	2.59	4.33	0.48	0.27	0.94	32.22
Sep-13	9.23	9.29	5.19	2.59	4.35	0.49	0.27	0.95	32.35
Dec-13	9.26	9.33	5.23	2.60	4.37	0.49	0.27	0.95	32.50
Mar-14	9.28	9.37	5.27	2.60	4.39	0.49	0.27	0.95	32.63
Jun-14	9.30	9.41	5.31	2.61	4.41	0.49	0.27	0.96	32.76
Sep-14	9.32	9.45	5.35	2.61	4.43	0.49	0.28	0.96	32.89
Dec-14	9.35	9.49	5.38	2.61	4.45	0.49	0.28	0.96	33.03
Mar-15	9.37	9.53	5.42	2.62	4.47	0.49	0.28	0.97	33.16
Jun-15	9.39	9.58	5.46	2.62	4.49	0.50	0.28	0.97	33.29
Sep-15	9.42	9.61	5.50	2.63	4.51	0.50	0.28	0.97	33.42
Dec-15	9.44	9.65	5.54	2.63	4.53	0.50	0.29	0.98	33.55
Mar-16	9.46	9.69	5.57	2.63	4.55	0.50	0.29	0.98	33.68

(Continued)

Table A4 Vehicle kilometres travelled (billion), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Jun-16	9.48	9.73	5.61	2.64	4.57	0.50	0.29	0.98	33.82
Sep-16	9.51	9.77	5.65	2.64	4.59	0.50	0.29	0.99	33.95
Dec-16	9.53	9.82	5.69	2.64	4.61	0.50	0.29	0.99	34.08
Mar-17	9.55	9.86	5.73	2.65	4.63	0.50	0.30	0.99	34.21
Jun-17	9.57	9.90	5.77	2.65	4.65	0.51	0.30	0.99	34.34
Sep-17	9.60	9.94	5.81	2.65	4.67	0.51	0.30	1.00	34.47
Dec-17	9.62	9.98	5.85	2.66	4.69	0.51	0.30	1.00	34.60
Mar-18	9.64	10.01	5.89	2.66	4.71	0.51	0.31	1.00	34.73
Jun-18	9.66	10.05	5.93	2.66	4.73	0.51	0.31	1.01	34.86
Sep-18	9.68	10.09	5.97	2.67	4.75	0.51	0.31	1.01	34.99
Dec-18	9.71	10.13	6.01	2.67	4.77	0.51	0.31	1.01	35.12
Mar-19	9.73	10.17	6.05	2.67	4.79	0.51	0.31	1.01	35.25
Jun-19	9.75	10.21	6.09	2.68	4.81	0.52	0.32	1.02	35.39
Sep-19	9.77	10.26	6.13	2.68	4.82	0.52	0.32	1.02	35.52
Dec-19	9.79	10.30	6.17	2.68	4.84	0.52	0.32	1.02	35.65
Mar-20	9.82	10.34	6.21	2.69	4.86	0.52	0.32	1.03	35.78
Jun-20	9.84	10.38	6.25	2.69	4.88	0.52	0.32	1.03	35.92

Table A5 Retail petrol prices (cents/litre), Australian capital cities

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	6 Capitals
Mar-55	7.14	7.52	7.69	7.14	7.14	7.32			7.32
Jun-55	7.23	7.52	7.69	7.14	7.32	7.32			7.37
Sep-55	7.32	7.52	7.69	7.14	7.32	7.32			7.40
Dec-55	7.32	7.52	7.69	7.14	7.32	7.32			7.40
Mar-56	7.87	8.07	8.24	7.69	7.87	7.87			7.95
Jun-56	7.87	8.07	8.24	7.69	7.87	7.98			7.95
Sep-56	8.15	8.33	8.53	7.69	8.15	8.33			8.21
Dec-56	8.15	8.33	8.53	8.07	8.15	8.33			8.24
Mar-57	8.42	8.42	8.53	8.15	8.24	8.42			8.39
Jun-57	8.24	8.24	8.42	7.98	8.07	8.24			8.22
Sep-57	8.24	8.24	8.42	7.98	8.07	8.24			8.22
Dec-57	8.07	8.07	8.33	7.78	7.87	8.07			8.05
Mar-58	8.07	8.07	8.33	7.78	7.87	8.07			8.05
Jun-58	7.87	7.87	8.24	7.60	7.69	7.87			7.87
Sep-58	7.87	7.87	8.24	7.60	7.69	7.87			7.87
Dec-58	7.87	7.87	8.24	7.60	7.69	7.87			7.87
Mar-59	7.87	7.87	8.24	7.60	7.69	7.87			7.87
Jun-59	7.87	7.87	8.24	7.60	7.69	7.87			7.87
Sep-59	7.78	7.78	8.24	7.52	7.60	7.78			7.79
Dec-59	7.78	7.78	8.24	7.52	7.60	7.78			7.79
Mar-60	7.78	7.78	8.24	7.52	7.78	7.78			7.80
Jun-60	7.78	7.78	8.24	7.52	7.78	7.87			7.80
Sep-60	7.78	7.78	8.24	7.52	7.78	7.87			7.80
Dec-60	7.69	7.69	8.15	7.43	7.69	7.87			7.72
Mar-61	7.69	7.69	8.15	7.43	7.69	7.87			7.72
Jun-61	7.60	7.60	8.07	7.32	7.60	7.78			7.63
Sep-61	7.43	7.43	7.98	7.14	7.43	7.60			7.46
Dec-61	7.43	7.43	7.98	7.14	7.43	7.60			7.46
Mar-62	7.43	7.43	7.98	7.14	7.43	7.60			7.46
Jun-62	7.43	7.60	7.98	7.14	7.43	7.60			7.52
Sep-62	7.43	7.60	7.98	7.14	7.43	7.60			7.52
Dec-62	7.43	7.60	7.98	7.23	7.43	7.60			7.53
Mar-63	7.43	7.60	7.98	7.23	7.43	7.60			7.53
Jun-63	7.43	7.60	7.98	7.23	7.43	7.60			7.53
Sep-63	7.32	7.52	7.87	7.14	7.32	7.69			7.43
Dec-63	7.32	7.52	7.87	7.14	7.32	7.69			7.43
Mar-64	7.32	7.52	7.87	7.14	7.32	7.69			7.43
Jun-64	7.32	7.52	7.78	7.14	7.32	7.69			7.42
Sep-64	7.32	7.52	7.78	7.14	7.52	7.69			7.44
Dec-64	7.32	7.52	7.78	7.14	7.52	7.69			7.44
Mar-65	7.23	7.52	7.78	7.05	7.52	7.69	7.69	7.69	7.40

(Continued)

Table A5 Retail petrol prices (cents/litre), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Jun-65	7.23	7.43	7.78	7.05	7.43	7.60	7.60	7.60	7.36
Sep-65	7.78	7.98	8.33	7.69	7.98	8.15	8.15	8.15	7.92
Dec-65	7.87	8.07	8.42	7.78	8.07	8.24	8.24	8.24	8.01
Mar-66	7.91	8.07	8.42	7.78	8.07	8.24	8.24	8.24	8.02
Jun-66	7.91	8.07	8.42	7.78	8.07	8.24	8.24	8.24	8.02
Sep-66	7.98	8.24	8.59	7.78	8.07	8.24	8.24	8.24	8.12
Dec-66	7.98	8.24	8.59	7.78	8.07	8.35	8.35	8.35	8.12
Mar-67	7.98	8.24	8.59	7.78	8.13	8.35	8.35	8.35	8.13
Jun-67	8.15	8.33	8.97	7.96	8.22	8.44	8.44	8.44	8.29
Sep-67	8.37	8.55	9.23	8.24	8.44	8.66	8.66	8.66	8.52
Dec-67	8.37	8.55	9.23	8.24	8.40	8.66	8.66	8.66	8.52
Mar-68	8.37	8.55	9.23	8.24	8.40	8.66	8.66	8.66	8.52
Jun-68	8.37	8.55	9.23	8.24	8.40	8.66	8.66	8.66	8.52
Sep-68	8.37	8.55	9.23	8.24	8.40	8.79	8.79	8.79	8.52
Dec-68	8.37	8.55	9.23	8.24	8.57	8.79	8.79	8.79	8.53
Mar-69	8.37	8.55	9.23	8.24	8.57	8.79	8.79	8.79	8.54
Jun-69	8.51	8.77	9.23	8.40	8.57	8.79	8.79	8.79	8.67
Sep-69	8.51	8.77	9.23	8.40	8.57	8.79	8.79	8.79	8.67
Dec-69	8.51	8.77	9.23	8.40	8.57	8.79	8.79	8.79	8.67
Mar-70	8.51	8.77	9.23	8.40	8.57	8.79	8.79	8.79	8.67
Jun-70	8.73	8.99	9.56	8.62	8.79	9.01	9.01	9.01	8.90
Sep-70	9.38	9.65	10.22	9.27	9.45	9.82	9.82	9.82	9.56
Dec-70	9.27	9.54	10.11	9.16	9.34	9.71	9.71	9.71	9.45
Mar-71	9.27	9.54	10.11	9.16	9.34	9.71	9.71	9.71	9.45
Jun-71	9.43	9.76	10.44	9.27	9.56	9.85	9.85	9.85	9.65
Sep-71	9.87	10.20	10.88	9.82	10.00	10.29	10.29	10.29	10.10
Dec-71	9.87	10.20	10.88	9.82	10.00	10.29	10.29	10.29	10.10
Mar-72	9.87	10.20	10.88	9.82	10.00	10.29	10.29	10.29	10.10
Jun-72	9.87	10.20	10.88	9.82	10.00	10.29	10.29	10.29	10.10
Sep-72	9.87	10.20	10.88	9.82	10.00	10.29	10.29	10.29	10.10
Dec-72	9.87	10.20	10.88	9.82	10.00	10.29	10.29	10.29	10.10
Mar-73	9.87	10.20	10.88	9.82	10.00	10.29	10.29	10.29	10.10
Jun-73	9.87	10.20	10.88	9.82	10.00	10.29	10.29	10.29	10.10
Sep-73	10.97	11.30	11.98	10.92	11.10	11.38	11.38	11.38	11.20
Dec-73	12.14	12.46	13.22	12.09	12.26	12.55	12.55	12.55	12.37
Mar-74	12.43	12.46	13.61	12.09	12.26	12.78	12.78	12.78	12.53
Jun-74	12.43	12.68	13.61	12.09	12.47	12.78	12.78	12.78	12.61
Sep-74	13.15	13.29	13.95	12.77	12.70	13.51	13.51	13.51	13.21
Dec-74	13.15	13.19	13.95	12.77	13.05	13.51	13.51	13.51	13.21
Mar-75	15.43	13.88	15.00	15.16	13.88	14.44	14.44	14.44	14.71
Jun-75	15.62	14.33	15.69	15.25	14.45	15.13	15.13	15.13	15.07

(Continued)

Table A5 Retail petrol prices (cents/litre), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Sep-75	15.60	13.98	15.77	14.61	14.59	15.21	15.21	15.21	14.91
Dec-75	17.44	15.21	17.65	15.12	16.23	17.15	17.15	17.15	16.41
Mar-76	18.57	15.17	18.13	15.25	16.45	17.46	17.46	17.46	16.90
Jun-76	16.80	15.27	18.52	15.22	16.78	17.77	17.77	17.77	16.37
Sep-76	17.10	15.50	18.93	15.26	17.13	18.34	18.34	18.34	16.65
Dec-76	17.13	15.50	18.52	15.71	16.85	18.40	18.40	18.40	16.63
Mar-77	17.82	16.38	18.87	16.47	16.96	19.30	19.30	19.30	17.30
Jun-77	17.32	16.38	18.71	16.09	16.44	19.41	19.41	19.41	17.01
Sep-77	17.05	16.95	19.08	16.82	16.79	20.16	20.16	20.16	17.26
Dec-77	18.99	18.53	19.86	18.19	18.50	22.16	22.16	22.16	18.88
Mar-78	18.57	18.53	19.72	17.84	18.43	22.16	22.16	22.16	18.66
Jun-78	18.55	18.72	19.85	17.48	18.44	22.49	22.49	22.49	18.70
Sep-78	19.07	18.31	19.76	17.94	18.27	19.57	19.57	19.57	18.73
Dec-78	22.69	22.56	24.12	21.69	22.21	21.58	21.58	21.58	22.64
Mar-79	23.99	22.92	24.57	21.85	22.29	23.21	23.21	23.21	23.33
Jun-79	25.22	25.89	27.60	24.78	24.76	26.21	26.21	26.21	25.63
Sep-79	26.64	29.24	28.77	25.94	27.06	29.76	29.76	29.76	27.71
Dec-79	30.09	31.15	31.52	30.50	30.05	30.91	30.91	30.91	30.63
Mar-80	28.81	30.66	30.79	30.10	29.76	30.80	30.80	30.80	29.87
Jun-80	33.96	34.78	34.80	33.27	33.89	34.37	34.37	34.37	34.24
Sep-80	32.51	33.42	33.29	31.41	32.23	35.53	35.53	35.53	32.79
Dec-80	32.00	30.90	30.60	30.50	31.80	33.70	33.70	35.10	31.36
Mar-81	33.20	34.80	31.30	35.30	34.20	34.80	34.80	35.80	33.81
Jun-81	35.10	38.00	37.30	39.40	38.00	38.10	38.10	37.60	37.03
Sep-81	33.20	34.70	35.50	35.90	37.80	38.10	38.10	37.60	34.76
Dec-81	36.00	36.10	36.30	36.20	38.50	38.10	38.10	37.90	36.38
Mar-82	35.50	33.40	39.00	36.50	37.90	40.00	40.00	37.30	35.72
Jun-82	36.60	36.50	35.80	37.50	38.60	39.70	40.00	40.20	36.93
Sep-82	42.30	41.50	40.50	39.40	41.50	44.40	42.30	42.80	41.54
Dec-82	43.00	40.00	41.00	40.50	41.50	46.90	44.00	45.50	41.63
Mar-83	43.90	42.10	42.20	43.90	42.90	48.10	44.50	46.30	43.22
Jun-83	40.70	39.90	40.30	43.70	42.90	47.50	44.50	45.20	41.20
Sep-83	43.80	44.60	42.10	44.60	44.70	49.60	46.50	46.70	44.20
Dec-83	45.40	46.50	46.10	47.90	45.80	51.10	48.00	48.20	46.28
Mar-84	45.60	45.70	45.50	47.70	45.80	51.90	48.40	48.10	46.04
Jun-84	48.70	47.60	47.40	47.10	45.70	50.60	49.20	47.90	47.78
Sep-84	49.40	47.70	47.30	47.70	46.90	51.00	49.40	48.40	48.24
Dec-84	48.90	47.20	46.70	47.80	47.70	51.80	49.70	48.90	47.98
Mar-85	50.10	48.30	47.80	47.80	48.50	53.00	50.70	50.20	48.98
Jun-85	54.60	54.40	50.80	51.50	53.00	55.90	55.30	55.00	53.67
Sep-85	54.50	56.00	53.30	52.90	55.10	59.60	56.40	56.40	54.85

(Continued)

Table A5 Retail petrol prices (cents/litre), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Dec-85	54.60	51.60	51.00	52.70	53.00	58.10	54.20	54.70	53.02
Mar-86	54.50	55.70	51.00	52.30	54.20	58.40	54.60	55.10	54.27
Jun-86	48.60	48.80	44.70	47.20	48.40	53.70	48.80	49.10	48.14
Sep-86	52.00	51.50	47.40	49.30	52.70	58.30	50.80	51.50	51.20
Dec-86	54.90	54.90	51.50	52.20	57.30	64.40	55.00	55.40	54.66
Mar-87	55.90	56.70	52.40	52.60	57.40	65.50	55.10	57.20	55.75
Jun-87	53.90	54.10	51.30	51.50	57.40	65.40	54.10	57.30	54.07
Sep-87	53.50	53.70	51.10	50.30	58.30	65.60	56.60	58.10	53.81
Dec-87	55.40	57.10	54.50	52.80	57.80	62.50	57.10	58.50	56.00
Mar-88	57.40	55.00	53.30	55.30	58.30	64.10	59.40	59.40	56.29
Jun-88	51.60	52.30	51.30	51.70	57.50	62.00	58.90	59.30	52.83
Sep-88	52.30	51.50	51.60	51.90	55.40	61.10	58.00	56.00	52.56
Dec-88	50.60	49.90	49.40	54.10	53.60	60.70	57.70	54.10	51.23
Mar-89	49.20	51.50	48.50	53.60	55.30	61.80	51.90	51.60	51.15
Jun-89	54.20	55.20	52.80	57.40	59.60	66.30	63.20	57.00	55.55
Sep-89	55.90	55.50	53.50	56.60	61.50	68.50	63.80	56.80	56.46
Dec-89	59.60	57.90	56.40	58.60	62.00	67.10	63.00	59.90	59.05
Mar-90	64.20	61.70	59.90	61.80	64.80	69.90	65.00	65.30	62.92
Jun-90	64.20	61.70	59.70	62.20	65.30	66.80	66.30	66.00	62.96
Sep-90	68.90	65.00	61.70	64.90	67.20	69.60	68.00	68.60	66.33
Dec-90	81.20	80.70	74.50	77.90	80.90	82.80	82.40	83.70	79.99
Mar-91	68.20	69.10	62.40	65.40	67.70	70.80	68.40	71.60	67.55
Jun-91	63.50	65.10	59.00	62.10	66.40	68.90	65.30	69.60	63.85
Sep-91	68.40	68.10	62.00	65.90	68.10	71.60	68.30	70.90	67.37
Dec-91	68.00	67.60	61.80	66.80	67.50	70.80	68.10	71.50	67.09
Mar-92	66.70	66.80	60.60	65.00	67.00	69.70	70.80	70.50	66.02
Jun-92	67.10	67.20	61.10	66.00	67.90	69.30	71.70	71.10	66.54
Sep-92	70.00	70.10	63.70	68.80	69.80	73.20	73.90	74.60	69.31
Dec-92	69.60	69.50	62.50	71.10	68.70	74.20	73.80	74.30	68.97
Mar-93	67.80	65.70	61.30	69.10	68.00	74.70	73.10	72.70	66.82
Jun-93	68.30	66.50	62.10	70.40	68.10	75.10	73.30	73.20	67.47
Sep-93	68.90	66.80	61.10	70.00	67.70	73.60	74.20	73.90	67.54
Dec-93	68.30	68.40	61.90	70.20	67.90	74.20	75.00	74.80	67.98
Mar-94	64.90	65.10	58.20	68.20	65.40	73.20	70.10	69.30	64.76
Jun-94	67.70	69.20	60.80	69.60	68.30	74.40	72.80	70.90	67.73
Sep-94	68.40	68.30	60.50	69.70	69.80	74.70	73.30	71.90	67.88
Dec-94	65.80	67.40	58.30	68.70	73.80	67.20	71.40	69.50	66.61
Mar-95	66.90	68.50	60.60	69.10	70.90	70.50	72.50	70.80	67.39
Jun-95	68.60	69.10	61.80	69.80	73.40	73.40	74.40	73.00	68.75
Sep-95	70.40	71.90	63.60	73.10	74.90	75.50	76.40	73.80	70.92
Dec-95	69.90	71.00	62.10	71.70	73.70	76.50	75.10	74.10	70.06

(Continued)

Table A5 Retail petrol prices (cents/litre), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Mar-96	70.50	69.80	62.10	71.30	73.10	74.00	74.90	73.50	69.74
Jun-96	73.00	71.90	64.10	73.60	74.30	75.40	77.40	76.50	71.90
Sep-96	70.70	71.50	62.20	71.30	72.50	74.10	77.40	74.00	70.27
Dec-96	73.40	72.20	64.50	73.70	75.10	76.20	78.30	75.60	72.26
Mar-97	74.90	73.00	66.00	75.20	75.20	77.90	80.00	78.10	73.44
Jun-97	73.70	71.40	64.90	73.00	74.80	77.90	80.50	77.40	72.18
Sep-97	72.40	72.30	63.60	72.20	72.50	77.70	78.90	75.10	71.43
Dec-97	73.20	72.80	65.90	72.60	73.70	79.30	80.60	73.40	72.30
Mar-98	71.00	68.00	61.70	69.20	72.00	78.00	80.40	73.10	69.13
Jun-98	71.30	68.70	62.10	70.70	72.40	75.50	79.50	73.80	69.63
Sep-98	70.30	67.60	59.20	68.60	69.40	75.40	77.20	72.70	68.03
Dec-98	68.80	66.10	59.50	67.20	68.60	72.80	75.20	71.70	66.84
Mar-99	66.40	64.60	57.90	65.90	66.70	72.10	73.70	69.70	65.00
Jun-99	70.10	67.80	60.90	68.80	70.70	75.90	76.70	72.30	68.40
Sep-99	75.80	74.00	67.50	75.60	76.00	80.80	81.00	78.20	74.39
Dec-99	76.90	73.80	67.30	75.80	76.40	82.70	84.50	80.50	74.86
Mar-00	82.60	79.90	72.30	81.00	82.50	88.10	89.80	86.20	80.56
Jun-00	85.80	82.00	76.30	83.40	84.10	91.60	92.90	87.80	83.27
Sep-00	93.00	92.00	84.60	92.60	94.00	99.90	100.90	95.60	91.93
Dec-00	95.50	93.60	83.40	93.50	94.10	95.10	103.20	97.10	93.12
Mar-01	91.30	90.60	80.20	90.40	89.90	94.10	98.60	94.30	89.57
Jun-01	94.30	91.70	84.00	95.00	93.90	97.40	103.50	97.80	92.43
Sep-01	86.90	83.50	78.00	86.40	86.10	87.80	95.20	88.00	84.74
Dec-01	82.40	81.60	75.80	82.50	82.50	85.80	90.30	85.20	81.51
Mar-02	82.20	82.10	75.20	81.40	82.70	85.70	89.20	84.70	81.40
Jun-02	88.60	88.00	79.80	88.60	89.00	95.60	96.10	91.80	87.55
Sep-02	87.30	86.10	79.50	87.60	90.10	93.10	94.10	90.00	86.48
Dec-02	88.90	87.80	81.10	88.10	90.60	95.30	95.60	93.50	87.94
Mar-03	97.40	94.80	88.30	96.90	97.70	100.60	99.80	98.70	95.53
Jun-03	88.30	86.30	76.80	86.20	88.40	92.40	98.80	89.80	86.18
Sep-03	90.70	88.40	82.00	90.40	91.30	96.40	97.70	93.10	89.11
Dec-03	90.50	86.90	80.30	88.80	89.70	95.30	97.00	94.10	88.06
Mar-04	92.10	91.40	84.20	92.90	92.30	97.40	99.90	93.10	91.08
Jun-04	97.70	97.20	89.90	98.60	96.00	103.60	103.70	99.50	96.55
Sep-04	102.10	98.90	93.20	101.20	98.90	107.40	106.80	102.90	99.66
Dec-04	104.30	100.70	94.00	102.80	102.00	110.00	110.80	104.20	101.60
Mar-05	101.50	98.30	91.80	101.30	98.50	107.20	107.70	101.80	99.03
Jun-05	108.90	105.90	99.00	107.70	104.40	113.80	114.30	108.60	106.17
Sep-05	120.40	120.10	111.50	120.80	118.40	126.00	122.60	122.10	119.03
Dec-05	118.80	117.40	110.20	119.10	116.60	126.80	129.50	123.40	117.31
Mar-06	118.60	119.10	113.50	121.20	117.90	126.50	127.60	122.20	118.46

(Continued)

Table A5 Retail petrol prices (cents/litre), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Jun-06	134.60	133.50	125.50	133.50	132.20	140.00	140.00	137.40	132.84
Sep-06	132.30	132.70	124.20	132.00	129.30	136.80	141.90	135.70	131.14
Dec-06	115.40	115.80	108.70	113.70	114.30	116.10	126.40	119.50	114.51
Mar-07	117.00	116.80	111.10	116.00	117.80	120.70	126.60	120.00	116.33
Jun-07	128.00	129.00	122.00	127.00	128.00	133.00	138.00	132.00	127.61
Sep-07	122.00	124.00	116.00	122.00	124.00	128.00	136.00	125.00	122.24
Dec-07	132.30	132.30	124.30	131.50	129.90	132.10	142.00	134.90	130.97
Mar-08	138.70	138.20	130.20	136.10	136.70	139.90	148.90	140.20	137.05
Jun-08	151.80	150.00	143.40	151.30	149.60	157.60	159.90	146.40	149.82
Sep-08	154.00	155.00	147.00	154.00	149.00	160.00	167.00	156.00	152.96
Dec-08	125.00	126.00	118.00	123.00	123.00	136.00	140.00	125.00	124.18
Mar-09	115.00	117.00	110.00	116.00	111.00	120.00	126.00	119.00	114.75
Jun-09	120.00	121.00	113.00	120.00	120.00	122.00	129.00	123.00	119.47
Sep-09	123.00	125.00	125.00	122.00	122.00	127.00	134.00	128.00	123.94
Dec-09	119.00	121.00	122.00	119.00	118.00	128.00	130.00	126.00	120.29
Mar-10	125.00	125.00	127.00	125.00	123.00	132.00	135.00	128.00	125.32
Jun-10	127.00	129.00	130.00	126.00	129.00	135.00	134.00	128.00	128.36
Sep-10	122.00	123.00	125.00	120.00	125.00	135.00	133.00	124.00	123.25
Dec-10	127.00	125.00	128.00	123.00	125.00	131.00	132.00	128.00	126.13
Mar-11	138.00	136.00	139.00	134.00	137.00	141.00	142.00	137.00	137.17
Jun-11	143.00	142.00	144.00	141.00	142.00	150.00	153.00	143.00	142.77
Sep-11	137.40	135.30	141.80	142.50	142.00	146.20	150.40	140.00	138.73

Table A6 Consumer price indices (1989/90=100), Australian capital cities

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Mar-65	14.9	15.5	15.7	15.5	15.2	15.9	16.5	16.1	15.3
Jun-65	15.1	15.7	15.8	15.6	15.4	16.1	16.7	16.3	15.5
Sep-65	15.2	15.8	16.1	15.7	15.5	16.3	16.9	16.4	15.6
Dec-65	15.4	16.0	16.3	16.0	15.6	16.5	17.1	16.6	15.8
Mar-66	15.4	16.0	16.4	16.0	15.8	16.4	17.0	16.6	15.9
Jun-66	15.5	16.1	16.5	16.2	16.1	16.5	17.1	16.6	16.0
Sep-66	15.6	16.2	16.6	16.2	16.2	16.5	17.1	16.7	16.0
Dec-66	15.7	16.3	16.7	16.4	16.3	16.6	17.2	16.8	16.2
Mar-67	15.8	16.4	16.9	16.5	16.4	16.8	17.5	16.9	16.3
Jun-67	15.9	16.7	17.0	16.7	16.6	17.1	17.7	17.1	16.4
Sep-67	16.2	16.9	17.3	16.9	16.7	17.5	18.1	17.2	16.7
Dec-67	16.3	16.9	17.3	16.8	16.8	17.7	18.3	17.3	16.7
Mar-68	16.4	17.0	17.4	16.9	16.9	17.6	18.2	17.3	16.8
Jun-68	16.5	17.2	17.4	17.1	17.0	17.6	18.2	17.4	16.9
Sep-68	16.5	17.2	17.6	17.1	17.1	17.7	18.3	17.4	17.0
Dec-68	16.8	17.4	17.7	17.2	17.1	17.8	18.4	17.6	17.1
Mar-69	16.9	17.5	17.8	17.4	17.3	17.9	18.5	17.8	17.3
Jun-69	17.0	17.6	17.9	17.5	17.6	18.0	18.6	17.8	17.4
Sep-69	17.1	17.7	18.0	17.6	17.7	18.0	18.6	17.9	17.5
Dec-69	17.3	17.8	18.1	17.7	17.9	18.2	18.8	18.1	17.6
Mar-70	17.6	17.9	18.3	17.8	18.0	18.3	18.9	18.3	17.8
Jun-70	17.8	18.1	18.4	18.1	18.3	18.4	19.1	18.4	18.1
Sep-70	17.8	18.2	18.6	18.1	18.3	18.5	19.2	18.6	18.2
Dec-70	18.3	18.5	19.0	18.4	18.6	18.9	19.6	19.1	18.5
Mar-71	18.5	18.7	19.3	18.6	18.8	19.0	19.7	19.2	18.7
Jun-71	18.9	18.9	19.6	19.0	19.0	19.3	20.0	19.5	19.0
Sep-71	19.4	19.1	20.0	19.1	19.2	19.6	20.3	19.8	19.4
Dec-71	20.0	19.6	20.4	19.6	19.7	20.3	21.0	20.1	19.8
Mar-72	20.2	19.8	20.6	19.7	19.9	20.4	21.1	20.2	20.0
Jun-72	20.4	20.0	20.8	19.9	20.1	20.5	21.2	20.4	20.2
Sep-72	20.6	20.2	20.9	20.2	20.4	20.8	21.5	20.8	20.5
Dec-72	20.8	20.5	21.2	20.4	20.5	21.0	21.7	21.1	20.7
Mar-73	21.3	21.0	21.7	20.9	21.0	21.4	22.2	21.5	21.1
Jun-73	21.9	21.7	22.4	21.7	21.5	22.0	22.8	22.1	21.9
Sep-73	22.7	22.5	23.4	22.4	22.0	22.7	23.6	22.9	22.6
Dec-73	23.7	23.2	24.2	23.3	22.7	23.7	24.5	23.8	23.4
Mar-74	24.1	23.9	24.8	24.0	23.2	24.2	25.1	24.5	24.0
Jun-74	25.1	24.9	25.6	25.0	24.1	25.2	26.1	25.3	25.1
Sep-74	26.4	26.1	27.1	26.2	25.2	26.5	27.4	26.6	26.3
Dec-74	27.4	27.0	27.9	27.4	26.7	27.8	28.8	27.5	27.2
Mar-75	28.2	28.1	28.6	28.6	27.8	28.4	29.4	28.1	28.3

(Continued)

Table A6 Consumer price indices (1989/90=100), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Jun-75	29.3	29.0	29.5	29.5	28.9	29.3	30.4	29.3	29.3
Sep-75	29.7	29.1	30.0	29.3	28.9	29.6	30.6	29.2	29.5
Dec-75	31.1	30.9	31.8	31.0	30.7	31.8	33.0	31.6	31.2
Mar-76	32.1	31.7	32.8	32.0	31.7	32.7	33.8	32.4	32.0
Jun-76	32.8	32.5	33.6	32.9	32.8	33.7	34.9	33.5	32.8
Sep-76	33.3	33.4	34.4	33.9	33.7	34.5	35.8	34.2	33.6
Dec-76	35.2	35.3	36.5	36.1	35.8	36.5	37.8	36.0	35.6
Mar-77	35.9	36.3	37.3	37.0	36.7	37.2	38.5	36.7	36.4
Jun-77	36.7	37.3	38.0	37.8	37.5	38.1	39.5	37.3	37.2
Sep-77	37.4	38.0	38.8	38.7	38.4	39.0	40.4	38.0	38.0
Dec-77	38.2	38.8	39.6	39.7	39.8	40.0	41.4	39.2	38.9
Mar-78	38.7	39.3	40.3	40.0	40.2	40.5	42.0	39.6	39.4
Jun-78	39.5	40.3	41.1	40.8	40.9	41.2	42.7	40.3	40.2
Sep-78	40.3	40.9	41.9	41.6	41.7	41.9	43.4	41.1	41.0
Dec-78	41.3	41.6	43.2	42.2	42.6	42.8	44.3	42.0	41.9
Mar-79	42.1	42.5	43.5	43.0	43.3	43.7	45.3	42.7	42.6
Jun-79	43.3	43.5	44.5	44.1	44.4	44.8	46.5	44.1	43.7
Sep-79	44.3	44.7	45.5	44.9	45.2	46.0	47.6	45.2	44.8
Dec-79	45.6	46.0	46.9	46.7	46.8	47.2	48.9	46.4	46.1
Mar-80	46.8	46.7	48.2	47.5	47.6	48.3	50.0	47.6	47.1
Jun-80	48.1	48.1	49.3	49.0	48.7	49.4	51.2	48.9	48.5
Sep-80	49.0	49.1	50.1	49.6	49.9	50.5	52.4	49.9	49.3
Dec-80	50.0	50.1	51.3	50.6	50.6	51.5	53.6	51.0	50.3
Mar-81	51.3	51.2	52.3	51.9	51.6	52.6	54.6	52.0	51.6
Jun-81	52.4	52.4	53.8	53.2	52.8	53.7	55.6	53.4	52.7
Sep-81	53.3	53.5	55.0	54.3	54.5	55.1	56.8	54.5	53.7
Dec-81	55.5	55.9	57.1	56.5	56.9	57.1	60.2	56.7	56.0
Mar-82	56.5	56.6	58.4	57.3	57.5	58.0	61.1	57.6	57.0
Jun-82	58.1	57.9	59.2	58.8	58.6	59.1	62.1	59.4	58.4
Sep-82	60.2	60.0	61.2	60.8	60.7	61.0	64.2	61.2	60.4
Dec-82	62.0	61.6	63.3	62.5	62.4	63.0	66.0	63.6	62.2
Mar-83	63.4	62.9	64.8	64.2	63.3	64.4	67.3	64.9	63.5
Jun-83	64.6	64.7	65.7	66.0	64.4	65.6	68.6	66.0	64.9
Sep-83	65.4	65.7	67.1	66.9	66.3	66.4	69.5	66.9	66.0
Dec-83	66.8	67.7	68.4	68.3	67.7	68.0	70.4	68.6	67.6
Mar-84	66.5	67.2	68.6	68.3	67.1	68.1	70.7	68.7	67.3
Jun-84	66.5	67.4	69.2	68.4	67.1	68.2	70.7	68.8	67.5
Sep-84	67.3	68.5	70.1	69.1	68.1	68.9	71.6	69.8	68.3
Dec-84	68.3	69.3	70.8	70.5	69.0	70.3	72.4	70.8	69.3
Mar-85	69.4	70.1	72.0	71.6	70.0	71.4	73.1	72.0	70.2
Jun-85	70.8	72.2	73.2	73.4	71.7	73.1	74.7	73.6	71.9

(Continued)

Table A6 Consumer price indices (1989/90=100), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Sep-85	72.3	73.7	75.1	75.0	73.1	74.9	77.4	75.4	73.5
Dec-85	74.0	75.0	76.5	76.5	74.8	76.5	78.2	77.0	75.0
Mar-86	75.7	77.1	78.4	77.7	76.0	77.6	79.7	78.7	76.7
Jun-86	77.1	78.2	79.2	79.2	77.2	79.4	80.7	80.0	78.0
Sep-86	78.9	80.3	81.2	81.6	79.8	81.4	82.8	81.7	80.0
Dec-86	81.2	82.6	83.3	83.7	82.3	84.1	85.7	83.7	82.3
Mar-87	82.8	84.2	85.1	85.1	83.8	85.9	87.1	85.2	84.0
Jun-87	84.2	85.5	86.1	86.4	85.3	87.2	88.6	86.5	85.2
Sep-87	85.6	87.1	87.4	87.5	86.5	88.8	90.0	87.7	86.6
Dec-87	87.1	88.5	89.0	89.2	88.0	90.1	91.6	89.2	88.2
Mar-88	89.0	89.9	90.6	90.5	89.4	91.7	92.8	91.0	89.7
Jun-88	90.3	91.5	92.3	92.0	91.0	93.0	94.2	92.6	91.3
Sep-88	92.7	92.9	93.7	93.8	92.8	94.1	94.8	93.7	93.0
Dec-88	95.1	94.5	95.3	95.3	94.8	95.6	95.8	95.4	94.9
Mar-89	95.2	95.8	96.7	97.3	95.7	97.3	97.2	96.5	95.8
Jun-89	97.5	98.3	99.0	99.1	97.8	99.2	98.8	98.8	98.2
Sep-89	100.2	100.5	100.9	100.9	100.1	100.9	100.2	100.4	100.5
Dec-89	102.1	102.5	102.7	102.5	102.1	102.7	102.0	102.5	102.3
Mar-90	103.8	104.0	104.2	103.9	104.5	104.4	103.3	104.5	104.1
Jun-90	105.5	106.1	105.7	105.9	106.2	105.3	105.1	105.6	105.7
Sep-90	106.1	106.9	106.3	107.2	107.1	106.4	106.2	106.4	106.6
Dec-90	108.6	110.1	109.0	110.4	109.7	109.0	109.2	109.4	109.3
Mar-91	108.8	109.6	109.3	110.2	108.6	108.7	108.9	108.9	109.1
Jun-91	108.5	110.3	109.3	110.8	108.5	109.3	109.4	109.0	109.3
Sep-91	109.1	111.1	109.7	111.5	109.1	110.3	109.7	110.5	110.0
Dec-91	110.2	112.0	110.9	112.4	109.6	111.0	111.1	111.4	111.0
Mar-92	110.1	111.9	111.1	113.1	109.6	111.0	111.2	111.7	111.0
Jun-92	109.6	111.8	110.6	113.0	109.0	110.6	111.3	111.4	110.7
Sep-92	110.0	111.5	110.5	113.7	108.9	111.2	111.8	112.1	110.8
Dec-92	110.5	111.8	111.8	114.3	109.6	111.6	112.1	112.5	111.3
Mar-93	111.3	113.1	112.8	115.3	109.9	112.7	112.7	113.7	112.3
Jun-93	111.5	113.7	113.4	116.0	110.3	113.1	112.9	113.9	112.7
Sep-93	111.8	114.1	113.6	116.4	111.4	114.7	113.5	114.6	113.3
Dec-93	112.0	114.4	113.9	116.5	112.0	115.3	114.7	114.9	113.5
Mar-94	112.3	114.9	114.6	117.3	112.1	115.6	114.3	115.0	113.9
Jun-94	113.2	115.7	115.3	118.2	112.6	116.2	115.4	115.6	114.7
Sep-94	114.2	115.9	116.3	118.7	113.7	117.1	116.0	116.2	115.4
Dec-94	115.0	116.8	117.6	119.8	114.6	118.0	116.7	117.5	116.4
Mar-95	117.0	118.8	119.7	121.7	116.7	120.0	118.4	120.1	118.3
Jun-95	118.7	120.0	120.9	122.7	118.6	121.0	119.9	121.4	119.9
Sep-95	120.7	121.5	121.9	124.0	119.4	122.4	121.1	123.0	121.3

(Continued)

Table A6 Consumer price indices (1989/90=100), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Dec-95	121.7	122.4	122.6	125.1	120.1	123.2	122.4	123.9	122.2
Mar-96	122.5	122.2	123.7	125.6	120.9	124.1	123.0	124.7	122.8
Jun-96	123.4	123.1	124.5	126.0	121.7	124.6	124.0	125.3	123.6
Sep-96	123.7	123.5	124.7	126.2	122.1	125.1	124.8	125.3	123.9
Dec-96	123.9	123.8	124.9	126.6	122.3	125.4	124.9	125.3	124.1
Mar-97	124.1	124.1	125.6	126.6	122.0	126.0	124.8	125.3	124.3
Jun-97	123.7	123.8	125.2	125.9	121.9	125.4	124.7	124.3	124.0
Sep-97	123.3	123.4	124.8	125.2	121.3	124.6	124.2	123.7	123.5
Dec-97	123.6	123.7	125.5	125.2	121.4	125.2	124.0	123.7	123.8
Mar-98	124.2	123.5	126.0	125.7	121.8	125.6	124.7	124.5	124.1
Jun-98	124.9	124.3	126.4	126.4	122.8	126.1	125.0	125.1	124.8
Sep-98	125.4	124.4	126.7	127.0	123.5	126.9	125.3	125.2	125.1
Dec-98	125.9	124.8	127.2	127.7	124.1	126.8	125.9	125.6	125.7
Mar-99	126.2	125.0	127.0	126.7	123.7	126.2	125.3	125.3	125.6
Jun-99	126.6	125.5	127.3	127.7	124.7	126.6	125.9	125.4	126.2
Sep-99	127.7	126.7	128.2	129.2	125.9	127.4	126.2	126.4	127.3
Dec-99	128.3	127.6	128.3	129.8	126.7	128.1	126.9	127.7	128.0
Mar-00	129.4	128.8	129.8	131.0	127.1	129.5	127.7	128.9	129.1
Jun-00	130.7	129.7	130.7	131.8	128.0	130.7	129.0	130.0	130.2
Sep-00	131.6	130.4	131.3	132.3	128.6	131.3	130	130.7	130.9
Dec-00	132.2	130.8	131.6	132.5	128.8	131.2	130.6	131.1	131.3
Mar-01	134	132.2	132.7	134.1	129.6	132.1	130.7	132.2	132.7
Jun-01	135	133	134	135.1	131.4	133.4	132.2	133.4	133.8
Sep-01	135.4	133.6	134.2	135.3	131.5	132.8	132.5	133.2	134.2
Dec-01	136.6	134.8	135.8	136.6	132.6	133.9	133.5	134.9	135.4
Mar-02	137.9	136	137.1	137.7	133.7	135.2	133.8	135.6	136.6
Jun-02	138.8	136.9	138.1	139.1	134.6	137	135	137.2	137.6
Sep-02	139.6	137.8	139.2	140.3	135.8	137.5	135.4	138.1	138.5
Dec-02	140.4	139	139.9	141.5	136.4	138	136.2	139.2	139.5
Mar-03	142.1	140.9	141.8	144.6	137.4	140	137.5	140.7	141.3
Jun-03	142.2	140.9	141.8	144.3	137.4	140.8	137.9	140.7	141.3
Sep-03	142.4	141.8	143.3	145.4	138.6	141.1	137.8	141.9	142.1
Dec-03	143.6	142.1	144.2	146.2	139.2	142	138.5	142.9	142.8
Mar-04	145	143.5	145.4	147.7	139.6	143	139	143.9	144.1
Jun-04	145.5	143.9	146.3	148.6	141	144.3	139.6	144.8	144.8
Sep-04	146.2	144.2	146.8	149	142	145	140.8	145.5	145.4
Dec-04	147.3	145.3	148	150	143.3	146.7	141.1	146.3	146.5
Mar-05	148.2	146.4	149.2	150.9	144.4	148	141.9	147	147.5
Jun-05	149	146.9	150	151.8	146.3	148.8	143.2	147.8	148.4
Sep-05	150.5	148.6	150.9	153.4	147.8	150.1	144.7	149.7	149.8
Dec-05	151	149.2	152.1	154.1	149	151	145.4	150.9	150.6

(Continued)

Table A6 Consumer price indices (1989/90=100), Australian capital cities (continued)

	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra	8 Capitals
Mar-06	152.2	150.5	153.5	155.6	150.5	152.2	146.7	152.2	151.9
Jun-06	154.7	152.6	156.2	157.6	153.2	154	149.2	154.9	154.3
Sep-06	156.1	153.7	157.5	159.3	154.9	155.1	151.8	156	155.7
Dec-06	155.8	153.5	157.3	158.8	155.5	154.7	152.6	155.6	155.5
Mar-07	155.6	153.8	158	158.4	155.8	155.4	152.6	155.9	155.6
Jun-07	157.4	155.6	160.2	160.3	158	157.4	154.7	158	157.5
Sep-07	158.1	156.9	161.7	161.5	158.9	157.9	156.6	159.2	158.6
Dec-07	159.5	158.5	163.4	163.1	160.2	159.2	157.1	160.8	160.1
Mar-08	161.7	160.6	165.6	165.5	162.5	161.3	158.5	163	162.2
Jun-08	164.1	162.5	168.4	167.6	165.1	162.9	160.8	165	164.6
Sep-08	165.9	164.4	170.8	169.8	166.7	164.7	163.6	167.5	166.5
Dec-08	165.5	163.5	170.4	169.3	166.2	164.4	162.9	166.8	166
Mar-09	165.6	163.9	170.8	169.3	166	164.8	163	167.4	166.2
Jun-09	166.3	164.4	171.8	170.3	167.4	165.7	164.8	168.4	167
Sep-09	168.1	165.4	174.1	172.1	168.7	167.7	168	169.9	168.6
Dec-09	169.1	166.4	174.7	172.7	169.7	168.7	167.8	170.6	169.5
Mar-10	170.5	168.5	176	173.7	171.6	170	168.7	171.7	171
Jun-10	171.1	169.5	177.3	175	173.2	170.7	170.1	172.3	172.1
Sep-10	172.5	170.5	179.1	176.6	174	172.4	171.9	173.4	173.3
Dec-10	173.1	171.5	180	177.1	174.1	172.6	171.8	174.2	174
Mar-11	175.9	174.4	182.3	180	176.1	174.9	173.7	176.8	176.7
Jun-11	177.6	175.6	184.1	181.8	178.4	176.5	175.4	178.7	178.3

Table A7 Unemployment rates (per cent), Australian states/territories

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Mar-65	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Jun-65	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Sep-65	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Dec-65	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Mar-66	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Jun-66	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Sep-66	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Dec-66	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Mar-67	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Jun-67	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Sep-67	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Dec-67	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Mar-68	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Jun-68	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Sep-68	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Dec-68	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Mar-69	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Jun-69	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Sep-69	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Dec-69	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Mar-70	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Jun-70	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Sep-70	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Dec-70	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Mar-71	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Jun-71	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Sep-71	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Dec-71	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Mar-72	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Jun-72	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Sep-72	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Dec-72	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Mar-73	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Jun-73	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Sep-73	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Dec-73	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Mar-74	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Jun-74	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Sep-74	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Dec-74	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Mar-75	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6

(Continued)

Table A7 Unemployment rates (per cent), Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Jun-75	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Sep-75	4.8	4.8	4.9	4.9	4.8	4.8	4.7	4.8	4.8
Dec-75	5.3	5.2	5.4	5.3	5.2	5.3	5.1	5.3	5.3
Mar-76	4.7	4.5	4.9	4.8	4.6	4.6	4.4	4.7	4.7
Jun-76	4.6	4.4	4.9	4.7	4.5	4.5	4.1	4.6	4.6
Sep-76	5.0	4.7	5.3	5.1	4.8	4.9	4.4	4.9	5.0
Dec-76	4.9	4.5	5.3	5.0	4.7	4.7	4.1	4.8	4.9
Mar-77	5.1	4.7	5.6	5.3	4.9	5.0	4.3	5.0	5.1
Jun-77	5.7	5.2	6.3	5.9	5.5	5.6	4.8	5.6	5.7
Sep-77	5.9	5.3	6.5	6.1	5.6	5.7	4.8	5.8	5.9
Dec-77	5.9	5.3	6.6	6.2	5.7	5.7	4.8	5.8	5.9
Mar-78	6.4	5.7	7.1	6.6	6.1	6.1	5.1	6.2	6.4
Jun-78	6.3	5.5	7.1	6.5	6.0	6.0	4.9	6.1	6.3
Sep-78	5.9	5.4	6.6	7.3	6.6	6.3	4.4	5.9	6.2
Dec-78	5.9	5.5	6.4	7.5	6.7	6.3	5.8	7.8	6.4
Mar-79	6.5	6.0	7.9	7.9	7.8	6.9	5.1	8.8	6.4
Jun-79	6.2	5.4	6.7	7.3	6.9	5.2	5.1	7.5	6.3
Sep-79	5.6	5.6	5.9	7.3	7.2	6.4	5.5	6.1	6.3
Dec-79	5.5	5.7	6.1	7.1	7.5	6.3	5.8	6.0	6.1
Mar-80	6.1	6.0	7.3	7.8	7.5	7.2	4.2	7.3	6.0
Jun-80	5.6	5.9	7.0	8.1	6.2	6.4	2.8	6.0	6.3
Sep-80	5.4	5.8	6.1	7.9	6.0	5.3	3.9	5.7	6.2
Dec-80	5.3	5.9	5.8	7.5	5.9	6.4	4.2	4.9	6.0
Mar-81	5.8	6.2	6.6	7.8	6.4	6.9	4.2	7.0	5.8
Jun-81	4.8	5.5	5.6	7.6	5.4	5.8	5.7	5.7	5.4
Sep-81	4.9	5.6	5.6	7.9	6.0	7.2	3.8	5.9	5.8
Dec-81	5.3	5.4	5.6	7.9	6.3	7.5	5.0	5.1	6.0
Mar-82	6.4	6.3	6.6	8.0	7.6	9.3	6.6	7.3	6.3
Jun-82	6.3	6.3	6.2	7.6	7.0	9.1	6.3	7.1	6.8
Sep-82	6.8	6.4	6.4	8.2	7.6	9.3	5.8	6.5	7.5
Dec-82	9.1	7.6	8.1	9.2	8.4	11.0	7.1	7.4	9.4
Mar-83	11.1	9.0	11.1	11.1	10.1	11.4	7.5	9.1	9.9
Jun-83	10.7	9.4	10.4	11.0	9.5	10.6	6.4	7.8	10.2
Sep-83	10.7	9.1	10.0	10.7	9.8	10.1	8.7	6.3	10.4
Dec-83	10.0	8.4	8.9	10.0	9.8	10.2	5.6	6.1	9.5
Mar-84	10.8	9.1	10.3	10.5	10.6	10.7	8.1	7.7	9.2
Jun-84	9.6	7.9	9.6	9.3	9.6	10.3	8.7	5.8	9.1
Sep-84	8.7	7.1	9.4	9.5	9.3	10.9	7.7	4.7	8.8
Dec-84	8.6	6.9	9.5	9.3	8.3	9.3	6.3	4.5	8.5
Mar-85	9.6	7.9	11.1	9.6	9.0	9.4	7.3	5.6	8.7
Jun-85	9.0	7.1	10.0	8.5	8.3	8.8	6.7	4.7	8.6

(Continued)

Table A7 Unemployment rates (per cent), Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Sep-85	8.5	6.4	9.0	8.6	7.7	9.0	7.2	4.5	8.1
Dec-85	7.8	6.3	8.5	8.3	7.3	8.9	7.3	4.7	7.8
Mar-86	9.1	7.1	9.9	8.9	8.6	10.0	8.2	6.3	7.9
Jun-86	8.0	6.1	9.1	7.8	7.7	8.2	6.4	4.4	7.5
Sep-86	8.2	6.5	9.2	8.7	7.6	7.6	7.2	3.9	8.1
Dec-86	8.1	6.5	9.1	8.7	7.3	9.0	6.0	4.4	8.2
Mar-87	9.3	7.0	10.5	9.2	8.3	9.8	6.0	7.1	8.2
Jun-87	8.5	6.1	9.7	8.5	7.7	9.0	5.8	6.0	7.8
Sep-87	8.2	5.6	9.0	8.6	7.2	8.7	8.4	5.1	7.6
Dec-87	7.7	5.7	8.8	8.5	7.0	8.5	11.1	4.4	7.5
Mar-88	7.7	6.4	9.9	9.1	8.1	9.7	11.0	5.5	7.3
Jun-88	7.4	6.1	8.2	8.3	7.7	8.2	8.6	5.1	7.2
Sep-88	6.8	5.2	7.1	8.2	6.3	8.6	7.2	4.4	6.7
Dec-88	6.5	5.0	6.9	7.5	6.2	9.5	6.2	4.7	6.6
Mar-89	7.1	5.6	7.8	7.9	6.3	10.8	7.6	5.4	6.1
Jun-89	6.2	4.7	6.7	7.1	5.4	8.5	5.2	5.1	5.9
Sep-89	5.9	4.3	6.3	6.6	5.6	8.2	6.6	4.8	5.8
Dec-89	5.3	4.3	6.2	6.7	5.6	8.2	6.1	4.8	5.6
Mar-90	6.6	5.0	7.4	7.2	7.4	8.6	7.8	6.3	5.9
Jun-90	5.9	4.9	7.6	6.6	7.3	8.0	5.7	4.9	6.5
Sep-90	6.3	6.0	7.7	7.5	7.5	8.7	7.3	4.4	7.2
Dec-90	6.5	7.2	8.3	7.9	8.0	8.7	7.3	5.5	7.7
Mar-91	8.3	9.0	10.2	9.4	10.1	9.7	9.4	7.0	8.9
Jun-91	8.0	9.7	9.9	9.1	10.4	10.0	8.1	5.8	9.0
Sep-91	8.8	9.6	9.2	10.1	10.4	10.4	8.8	5.9	9.8
Dec-91	9.3	10.1	9.0	10.4	10.2	10.7	10.1	6.1	10.1
Mar-92	10.2	11.6	10.7	11.4	11.9	11.2	9.7	8.1	10.2
Jun-92	9.6	11.3	10.2	11.5	10.4	10.5	5.9	7.1	10.7
Sep-92	10.1	10.8	9.8	11.0	10.4	11.1	7.2	7.9	10.4
Dec-92	10.4	11.0	9.8	11.3	10.1	11.6	8.3	6.6	10.9
Mar-93	11.6	12.1	11.2	11.8	10.2	12.4	9.6	8.2	10.6
Jun-93	10.3	11.7	10.1	10.4	9.2	11.6	7.1	6.6	10.7
Sep-93	10.1	11.7	10.1	10.0	8.6	12.4	7.1	6.9	10.5
Dec-93	10.1	11.5	9.6	10.6	8.5	12.0	6.7	6.6	10.3
Mar-94	10.7	12.2	10.5	11.3	9.1	12.0	8.3	8.3	10.0
Jun-94	9.5	10.4	9.2	10.1	8.1	10.3	6.4	6.4	9.7
Sep-94	8.7	9.8	8.4	9.9	7.6	10.3	7.3	6.5	9.1
Dec-94	8.2	9.3	7.9	9.9	7.0	10.7	7.2	6.8	8.8
Mar-95	9.0	9.8	9.2	10.2	8.0	11.1	8.4	7.8	8.4
Jun-95	7.3	8.3	8.7	9.5	6.9	9.4	6.4	6.7	8.1
Sep-95	7.1	8.3	8.3	9.1	6.8	9.0	7.5	6.2	8.1

(Continued)

Table A7 Unemployment rates (per cent), Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Dec-95	7.1	8.2	8.8	8.9	6.9	9.4	6.9	6.3	7.9
Mar-96	8.2	9.1	9.6	9.8	8.2	10.1	7.4	8.5	8.2
Jun-96	7.4	8.1	9.1	8.7	7.2	9.6	6.0	7.6	8.0
Sep-96	7.5	8.3	8.7	8.9	7.1	10.0	5.6	7.8	8.3
Dec-96	7.3	8.7	8.7	9.1	7.1	10.2	4.6	7.9	8.4
Mar-97	8.4	9.3	10.4	9.6	7.9	10.7	6.5	8.3	8.4
Jun-97	7.4	8.7	9.1	9.3	6.8	9.8	5.6	6.7	8.2
Sep-97	7.4	8.4	8.8	9.1	6.6	10.6	5.2	7.2	8.1
Dec-97	7.2	7.7	8.5	9.4	6.3	11.1	3.8	7.4	7.9
Mar-98	7.9	8.7	9.1	10.3	7.4	10.7	6.1	8.1	7.9
Jun-98	6.9	7.9	8.3	9.4	6.7	9.5	4.5	6.3	7.9
Sep-98	6.9	7.6	8.2	9.6	6.5	10.4	4.3	6.3	7.6
Dec-98	6.6	7.2	7.9	8.9	6.6	10.1	3.5	5.7	7.3
Mar-99	7.2	7.7	8.3	9.4	7.5	10.7	4.5	6.6	7.1
Jun-99	6.1	7.3	7.7	8.0	6.5	9.0	3.6	5.3	6.7
Sep-99	6.1	6.9	7.4	7.7	6.0	8.5	3.6	5.1	7.0
Dec-99	5.5	6.4	7.7	7.8	6.0	8.9	3.8	5.2	6.7
Mar-00	6.1	6.9	8.3	8.4	6.8	8.8	5.2	5.6	6.6
Jun-00	5.4	6.3	7.5	7.9	5.9	8.6	5.1	5.0	6.2
Sep-00	5.0	5.8	6.9	7.1	5.5	8.9	4.5	3.9	6.0
Dec-00	5.3	5.6	7.3	7.0	5.7	8.5	5.0	4.0	6.3
Mar-01	6.1	6.4	8.8	7.4	7.1	9.0	6.0	5.2	6.5
Jun-01	5.7	6.3	8.7	7.5	7.3	8.6	7.0	5.7	6.9
Sep-01	5.9	6.3	7.7	7.2	6.8	9.5	6.4	4.8	6.9
Dec-01	6.1	6.5	7.8	7.0	6.3	8.5	7.2	3.9	6.8
Mar-02	6.6	6.7	8.6	7.7	7.1	9.4	7.7	4.9	6.5
Jun-02	6.0	5.8	7.6	6.7	6.0	8.1	5.4	4.5	6.5
Sep-02	5.6	5.7	6.9	6.6	5.9	9.0	4.5	4.1	6.4
Dec-02	5.6	5.5	6.8	6.0	5.7	8.3	5.0	3.7	6.3
Mar-03	6.4	5.8	8.0	6.6	6.4	9.5	5.9	5.2	6.3
Jun-03	5.8	5.8	6.9	6.1	5.6	7.8	6.5	4.1	6.2
Sep-03	5.5	5.4	6.2	5.8	5.9	7.3	5.2	4.1	5.9
Dec-03	5.3	5.2	5.7	6.0	5.7	6.9	5.0	3.6	5.7
Mar-04	5.7	5.9	6.8	6.6	6.1	6.8	5.1	4.1	5.6
Jun-04	5.4	5.3	5.7	6.0	5.2	6.1	5.4	3.6	5.6
Sep-04	5.1	5.6	5.0	5.9	4.8	6.9	6.4	3.8	5.4
Dec-04	4.9	5.4	4.4	5.1	4.2	6.0	5.0	3.4	5.1
Mar-05	5.8	5.9	5.2	6.0	5.1	6.1	6.2	3.7	5.2
Jun-05	5.0	5.4	5.1	5.3	4.6	5.7	5.0	3.1	5.0
Sep-05	4.8	5.2	4.6	4.6	4.2	6.2	4.7	3.0	5.0
Dec-05	5.0	5.0	4.4	4.6	3.8	6.9	5.2	3.2	5.0

(Continued)

Table A7 Unemployment rates (per cent), Australian states/territories (continued)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
Mar-06	5.7	5.6	5.6	5.4	4.5	7.0	6.8	3.7	4.9
Jun-06	5.3	5.1	4.6	4.9	3.4	6.1	5.3	3.2	4.8
Sep-06	4.9	4.6	4.2	4.6	3.2	6.4	3.9	2.7	4.7
Dec-06	4.7	4.6	3.7	4.9	3.2	6.1	2.8	2.7	4.5
Mar-07	5.5	5.2	4.6	5.6	3.3	5.7	3.7	3.3	4.5
Jun-07	4.8	4.7	3.5	4.9	3.2	4.5	4.8	3.1	4.3
Sep-07	4.5	4.3	3.5	4.6	3.2	5.2	3.9	2.4	4.2
Dec-07	4.5	4.5	3.4	4.9	3.2	5.6	4.8	2.3	4.2
Mar-08	4.7	4.6	4.1	4.9	3.4	5.1	5.1	3.1	4.0
Jun-08	4.6	4.5	3.8	4.9	3.4	3.7	3.8	2.6	4.3
Sep-08	4.6	4.3	3.4	4.7	2.8	4.1	2.4	2.9	4.3
Dec-08	5.1	4.3	3.5	5.2	2.6	4.6	3.6	2.3	4.6
Mar-09	6.6	5.9	5.3	6.4	4.6	4.7	4.6	3.0	5.8
Jun-09	6.4	6.0	5.3	5.4	5.1	4.9	4.0	3.5	5.7
Sep-09	5.6	5.7	5.5	5.4	5.5	4.9	3.8	3.3	5.5
Dec-09	5.8	5.1	5.5	5.2	4.6	5.7	3.0	3.4	5.3
Mar-10	5.9	5.8	6.3	5.3	5.5	6.1	4.0	4.0	5.8
Jun-10	5.4	5.5	5.5	5.4	4.3	5.7	3.0	3.4	5.3
Sep-10	4.9	5.3	5.1	5.1	4.4	5.8	2.6	2.8	5.0
Dec-10	4.9	4.9	5.2	5.5	4.0	5.5	2.4	3.1	4.9
Mar-11	5.3	5.3	6.3	6.1	4.6	6.3	3.0	3.7	5.4
Jun-11	5.1	4.8	5.3	5.2	4.2	5.1	3.5	4.3	5.0

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ISBN 978-1-921769-54-2